Network of Collaborating Centres
Work Plan 2001-2005

15 Task Forces

Protection of the Human Environment
Occupational and Environmental Health Programme

December 2003
It is clear that interdependence and the effort one has to make to collaborate are much more challenging than independence, but in occupational health (and most other fields of endeavour) it is the only viable long-term solution for effective action to the benefit of workers worldwide.

anonymous
TABLE OF CONTENTS

Preface ......................................................................................... 4
Messages from the Chairmen .................................................. 5
Background ................................................................................ 7
Introduction ................................................................................ 8
Network meetings ....................................................................... 9

PROJECTS

Task Force 1: Guidelines .......................................................... 10
Task Force 2: Intensive partnership in Africa ............................. 17
Task Force 3: Child labour/adolescent workers ..................... 21
Task Force 4: Elimination of silicosis ....................................... 27
Task Force 5: Health care workers .......................................... 41
Task Force 6: Health promotion activity ................................. 50
Task Force 7: Psychosocial factors at work ............................ 57
Task Force 8: Promotion of OSH in small enterprises and in the informal sector .............................................................. 64
Task Force 9: Prevention of musculo-skeletal disorders .......... 72
Task Force 10: Preventive technology ...................................... 77
Task Force 11: Training programmes and modules ............... 84
Task Force 12: Internet resources and networks .................. 100
Task Force 13: National and local profiles and indicators ........ 105
Task Force 14: Economic evaluation of interventions ............ 115
Task Force 15: Global burden of disease ............................... 118

Annexes

Annex I: Directory of Occupational Health Collaborating Centres and WHO Offices .................................................. 122
Annex II: Summary Report of the Sixth Network Meeting of the WHO Collaborating Centres in Occupational Health .................. 136
Annex III: Report of the Meeting of the Planning Committee of the Network of WHO Collaborating Centres in Occupational Health .... 166
Dr Margaret Chan, Director, Department of Protection of the Human Environment

The workplace has been established as one of the priority settings for public health action into the 21st century, as it directly influences the physical, mental, economic and social well-being of workers and in turn the health of their families, communities and society. The workplace plays a crucial role in achieving poverty elimination, and it offers an ideal setting and infrastructure to support the promotion of health of a large audience.

The rapidly changing global economy provides both new challenges and opportunities. The advance of globalization has deeply affected the balance of relationships between the State, labor and business, resulting in new opportunities for wealth creation and prosperity, as well as in new insecurities and rising inequality. Many large enterprises have restructured themselves to achieve a more flexible response to market changes by downsizing their workforce, outsourcing many functions, and replacing traditional employment practices and contracts by hire of temporary workers and contract labor. In many countries there has been a steady increase of small-scale enterprises, self-employed and the rise of a parallel economy, with increasing precariousness of work and unemployment.

The Network of WHO Collaborating Centres in Occupational Health carries out its activities in all regions of the globe. The focus of the occupational health programme in WHO has been on the transfer and translation of current knowledge and capacity to the developing countries, to make the current state of knowledge available to those that have currently no access to occupational health services, and to reduce inequities and poverty. This Compendium illustrates how the Network members play a key role as “on the ground” actors, and documents their important contribution to our goal of “occupational health for all”.

[Signature]
Our Global Work Plan was formulated in Chiangmai, Thailand, in 2001. This Compendium provides us with an opportunity to review our progress and experiences, and to reflect on the challenges facing occupational health programmes everywhere in the world. I would like to raise 4 issues, or lines of action that I believe are of fundamental importance:

1. **Strengthening basic occupational health.** This issue is of critical importance for developing and industrializing countries, many of which face a situation of occupational health risks comparable to what was the situation in western nations in the ’50s and ’60s. They need basic assistance to establish occupational health protection in many sectors and could greatly benefit from the western experience. This line of action can be developed from the evidence and planning framework provided by the country profiles on occupational health.

2. **Rural health and health in agriculture.** This focus is of great importance in all regions where most people still live on agriculture, with emerging issues on accidents, pesticide use, limited access to health services, basic water and food quality concerns, and social inequality. Enhanced efforts in this area could advance regional programmes integrating occupational and environmental health, food and water safety, and chemical safety.

3. **Integrated workplace health management and response to ageing of the workforce.** This line of action addresses broadly the health needs of workers and the wider community, and the management challenges these present, such as the adaptation of older workers to the changing workplace. Indeed, there are important issues to be tackled throughout the entire working life, from youth to old age. We used to think this issue was of primary interest for the industrialized countries, but it now seems clear, that action on this issue could greatly benefit a majority of countries.

4. **New economy, stress, ergonomics.** This part of the programme again is vital for rapidly industrializing countries, but necessarily involves all countries. The changes introduced by globalisation of the economy are enormous and new responses are urgently needed to new problems. The Network is actively engaged in some of these aspects, and it is anticipated that it would be possible to build a permanent set of activities on them.

It is clear that the above points do not necessarily encompass all the current occupational health issues but merely illustrate some of the important challenges we all face.

This Compendium contains the WHO Global Network Work Plan as agreed to in Chiangmai. The progress since then has been impressive, and I must congratulate all the Network members on the achievements that are spread over these pages. The challenges are immense, but it is my great pleasure to document in this Compendium the start that has been made.
A WORD FROM THE NEW CHAIRMAN

Dr John Howard, Chairman, 2003, Planning Committee of the WHO Network of Collaborating Centers in Occupational Health

The WHO Network of 70 Collaborating Centers in Occupational Health is strong and vibrant. Therefore, at the Sixth Network Meeting in Iguassu Falls, I was pleased to accept the WHO invitation that NIOSH assume leadership of the Network, that I serve as the Chairman of the Planning Committee, and that Marilyn Fingerhut continue as Coordinator of the Collaborating Centers. On behalf of all of us, I would like to thank Dr. Marco Maroni for his excellent leadership of the Network for the past 4 years.

The strength of the Network was visible in the Iguassu Falls meeting, attended by 93 participants representing 45 Collaborating Centers, ILO (SafeWork and the International Program to Eliminate Child Labor), ICOH, ILO, IEA, WHO headquarters and regional offices. Enthusiastic meetings of the 15 Task Forces, as described in Annex II of this document, led to our impressive Compendium of Activities of the WHO Collaborating Centers in Occupational Health, which contains more than 300 funded projects, contributed by 70 Collaborating Centers, ILO SafeWork and IPEC, the NGOs and the WHO regions.

At the Iguassu Falls meeting, we agreed unanimously to make two structural changes to ensure successful progress on the 2001–2005 Work Plan. We created a new Advisory Committee, composed of NIOSH, USA, FIOH, Finland, NIWL, Sweden and ICPS, Italy, to meet periodically to advise WHO how to further develop the Network activities. We also changed the membership of the Planning Committee. The Co-Chairs of each of the 15 Task Forces constitute the new Planning Committee, along with our WHO Regional Advisors in Occupational Health, ILO SafeWork and IPEC, ICOH, IOHA and IEA. The members and their roles are described in Annex III of this document.

Recently, ILO reminded us that 2 million workers die each year from work-related injury and illness. In the 2002 World Health Report, WHO tells us that workplace hazards are responsible for 37% of back pain, 16% of hearing loss, 13% of COPD, 11% of asthma, 10% of injuries, 10% of lung cancer, and 2% of leukemia. We have much work to do to reduce the terrible toll of illness and injury of workers globally. Our dynamic Network gives us a strong foundation. I look forward to working with all of our collaborators toward our common goal.
BACKGROUND

The need for a global strategy on occupational health was recognized at the beginning of the 1990s. The perceived need was based both on a low coverage of workers by basic occupational health and safety provisions around the world (estimates are around 10-20 percent of workers covered), and measurements of the burden of mortality and morbidity of occupational diseases and injuries that indicate alarming workplace hazards. Discussions took place among the WHO regions, headquarters, the Network of Collaborating Centres and collaborating institutions in occupational health, and a planning group of the Network of Collaborating Centres identified 8 priority areas for a Global Strategy on Occupational Health for All:

Priorities for the Global Strategy:
1. strengthening of international and national policies for health at work
2. promotion of a healthy work environment, healthy work practices, and health at work
3. strengthening of occupational health services
4. establishment of appropriate support services for occupational health
5. development of occupational health standards based on scientific risk assessment
6. development of human resources
7. establishment of registration and data systems; and
8. strengthening of research.

In 1996, the World Health Assembly, the governing body of WHO, endorsed the recommendations of the Network and a Global Strategy on Occupational Health for All, and it made some interesting recommendations about:

- Special attention to full occupational health services for the working population, including migrant workers, workers in small industries and in the informal sector
- Focus on occupational groups at high risk and with special needs, including child workers
- United Nations system organizations, (including the International Labour Organisation, intergovernmental bodies such as the European Commission, non-governmental and national organizations) to strengthen their action in this field and their co-operation and co-ordination with the WHO
- Improved training
- And last but not least, a stronger role was proposed for the Network of presently 70 WHO Collaborating Centres in occupational health situated in 32 countries. 15 centres are in the process of designation, and also three NGOs actively participate in the Network.

The text of the Global Strategy, and the accompanying workplan to implement the strategy are available on the WHO website (http://www.who.int/oeh). Implementation of the strategy has been undertaken by the Occupational Health Programme in the WHO Headquarters, the six WHO Regional offices, and the Network of WHO Collaborating Centres in Occupational Health. A major feature of the WHO programme is the contribution of the Collaborating Centres in Occupational Health and Safety.
The spots on the map indicate the locations of the WHO Collaborating Centres in Occupational Health (see Annex I for details). Collaborating Centres are occupational health institutes or departments affiliated with WHO that are making a substantive contribution to the implementation of the strategy with a wide range of activities. In addition to traditional hazards of primary importance to developing nations such as, for example, noise, dust, biological and chemical substances, the centres are also addressing new and emerging problems of occupational health such as stress at work, computerised work, and violence at work.

The Work Plan 2001-2005 of the Network of the WHO Collaborating Centres in Occupational Health was developed over the period 2000 - 2001, and was reviewed during the Fifth Network Meeting in Chiangmai by the participating Collaborating Centres in November 2001. The Work Plan incorporates the commitments of WHO headquarters, the Regional offices, the WHO Collaborating Centres in Occupational Health, and the affiliated NGOs, for the implementation of the Global Strategy on Occupational Health for All.

The centres focused on priority areas in occupational health and safety and created 15 Task Forces addressing 15 priority areas. They committed themselves to carry out a five-year Work Plan 2001-2005 consisting of 130 funded project commitments at the time of the meeting in Chiangmai. Projects have resulted, and will still so for the duration of the Work Plan period, in products which range from documents and brochures to training courses for occupational health personnel and/or students, from translation of occupational health materials to the establishment of questionnaires, guidelines and increased international collaboration. The 15 Task Forces comprise the following areas:
15 Task Forces of the Network of WHO Collaborating Centres:

1. guidelines  
2. intensive partnership in Africa  
3. child labour/adolescent workers  
4. elimination of silicosis  
5. health care workers  
6. health promotion activity  
7. psychosocial factors at work  
8. promotion of OSH in small enterprises and in the informal sector  
9. prevention of musculo-skeletal disorders  
10. preventive technology  
11. training programmes and modules  
12. internet resources and networks  
13. national profiles and indicators  
14. economic evaluation of interventions  
15. global burden of disease

It has previously been noted that important contributions of the Collaborating Centres and other organizations are most likely when their choice of commitment refers to the current work plan of the centre. Thereby it is ensured that project goals and scope lie within its expertise and planning and can be modified to be of value globally. It is intended, that the products of the Network Work Plan 2001–2005 will be of particular value for developing and industrializing countries. A way to facilitate this process, is that the centres from industrialized nations will partner with centres from developing or industrializing countries in the development or the review of documents prepared under this Work Plan. It is understood that all projects listed in their respective Task Forces follow the priorities set out in the Global Strategy on Occupational Health for All, which represents the framework for the Work Plan 2001-2005.

In this Compendium particular efforts have been made to identify potential links among projects that relate to more than one Task Force. These links can be found at the end of each Task Force description as an indication to cross references.

For each Task Force, a Co-Chair from the WHO Secretariat was nominated, and a minimum of one Co-Chair from the Collaborating Centres have volunteered to co-ordinate the work of each Task Force. The Collaborating Centre Co-Chair is responsible for the smooth progress of any joint efforts agreed upon in the Task Force. The WHO Co-Chair is responsible for periodically tracking progress of the projects included in the Task Force.

At the Sixth Network Meeting in February 2003 in Brazil, progress reports for projects were delivered by each Centre represented and new goals were set. The current version of the Compendium is based on those updates. However, as this is a rapidly evolving process, updates will be published periodically in hard copy and continually on the Occupational Health Programme website (www.who.int/oeh).

NETWORK MEETINGS

We invite you to read the Report of the Sixth Network Meeting of the Collaborating Centres in Iguassu Falls (Appendix II) and the report of the first meeting of the new Planning Committee of the Network (Appendix III). The next meeting of the Network will be in Milan in 2006, in conjunction with the International Commission on Occupational Health meeting. The next Planning Committee meeting will be in September 2005 in South Africa, in conjunction with the International Occupational Hygiene Association meeting.
TASK FORCE 1: GUIDELINES

Co-Chairs: Andrew Curran (andrew.curran@hsl.gov.uk); Evelyn Kortum, WHO (kortummargote@who.int)

The aim of this element in the Work Plan of the Network of WHO Collaborating Centres in Occupational Health is to ensure at least the minimum levels of health and safety at work. Existing standards that define the safe levels of various exposures and other conditions of work need to be identified. The standards can also serve as references for assessment of the results of monitoring and provide guidelines for planners and for safety experts in the countries. The Fifth Meeting of the Network recommended that an inventory of the existing publications and guidelines be made in order to facilitate the full utilization of the existing good-quality documents and to avoid duplication of work.

WHO Guidance for Health Care Workers

Gerry Eijkemans, WHO (eijkemansg@who.int); George Delclos, University of Texas, USA (gdelclos@sph.uth.tmc.edu); Gustav Wickström, Finnish Institute of Occupational Health (gustav.wickstrom@occuphealth.fi)

It is intended that in the year 2004, WHO would hold an international review meeting to renew a proposed set of guidelines for health care workers. The approach to preparing these international guidelines is to gather existing guidelines from national and international organizations. During 2002 draft guidelines on violence at work in health care settings produced by WHO and ILO have been distributed widely for testing. During 2003 a broad effort to collect national guidelines will be undertaken. Funding is in place. The project is scheduled to be completed by 2004.

Organization of an international meeting on the prevention of new health risks of isocyanates

Alexandra Preisser, Central Institute of Occupational Medicine, Hamburg, Germany (apreisser@uke.uni-hamburg.de)

Keywords: Isocyanates, health risks, bronchial asthma, allergy, prevention

Target group: Governmental Public Health Care, Employers, employees, unions

The objective of this project is the promotion of primary and secondary prevention on the health risks of Isocyanates, which are one of the predominating causes of occupational asthma. Further diseases caused by isocyanates include COPD, non-obstructive bronchitis, rhinitis, conjunctivitis, dermatitis, extrinsic allergic alveolitis. This necessitates reinforcement of effective preventive measures. Present knowledge of the health risks will be summarized and corresponding preventive strategies will be developed on this basis. The project has begun. Networking is on to find collaborators.

Quantitative risk assessments for occupational cancer: international comparisons

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Keywords: occupational cancer, quantitative risk assessment

Target group: occupational health professionals, regulatory authorities, trades unions

The objective of this project is to enable predictions to be made in different countries on the likely impact of exposure to occupational carcinogens. It aims to make available a computer program which uses summary data from occupational cohort studies to estimate the effects of lifetime working at various exposure levels. The program incorporates national data on background mortality rates from all causes and for the cancer under investigation so that the predictions are specific to the country under consideration. The predictions are in the form of absolute risks so that the public health impact of large relative risks acting on rare cancers and small relative risks acting on common cancers can be assessed. A computer program has been written to perform these calculations. Examples of UK data have been processed.

Development of comprehensive systems for monitoring young people at risk of occupational hazard

Susan Gunn, ILO (gunn@ilo.org)

Keywords: working conditions, training, identification of occupational hazards

This global project is exploring effective ways of identifying young people working in situations of risk, verifying that either the child or the risk has been removed and ensuring that the young person has an acceptable alternative. Outputs of the project include:

- Guidelines and training for Safety and Labour Inspectors on occupational risks of young people
- Formation of multi-disciplinary monitoring teams to extend surveillance into formal, informal, and agricultural sectors
- Pilot projects to demonstrate credible, cost-effective systems

Two year project (2003-2005), with partial funding

Guidelines for indoor air in office and commercial buildings

Marco Maroni, ICPS, International Centre for Pesticide and Health Risk Prevention, Unit of Occupational Medicine, Hospital L. Sacco, University of Milano, Italy

Keywords: Indoor air quality, guidelines, offices
Target group: building owners and managers, office building occupants, occupational health physician, public health operators

The aim of the project is to provide guidelines for risk assessment of indoor air pollution.

Air pollution is a major environmental health problem affecting developed and developing countries around the world. Increasing amounts of potentially harmful pollutants may result in damage to human health and the environment. Indoor sources of pollution are one of the most important determinants of air quality. Since most people spend a majority of their lives indoors, the quality of indoor air is a major area of concern. Sources of indoor air pollution include oil, gas, kerosene, coal, wood, and tobacco products, building materials and furnishings, carpets, household cleaning products, and lead-based paints. A particular area of concern is represented by occupational activities carried out in offices and commercial buildings. Therefore, guidelines to set out prevention strategies are needed, aimed at protecting human health from air pollution and based on national air quality standards.

The general layout should take into account the following areas:
- Indoor air as a risk factor – Health effects
- Methods and systems for the assessment of ambient air quality
- Air quality standards and reference values
- Policy and strategy development, priority setting, prevention

Claude-Alain Bernhard, Institute of Occupational Health Sciences, Switzerland (Claude-Alain.Bernhard@inst.hospvd.ch) and Kerry Gardiner, University of Birmingham, UK (gardinerk@ioh.bham.ac.uk) are collaborating on the project.

Dissemination of scientific information in Spanish

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Keywords: information dissemination, peer-review, scientific information

Target group: Occupational health professionals and researchers in the developing countries of Latin America.

The purpose of the project is to contribute to the dissemination of peer-reviewed scientific information, including guidelines and standards, in Spanish to the developing countries of Latin America, and to contribute to reciprocal communication among Spanish-speaking occupational health professionals in the world.

There are exceedingly few peer-reviewed occupational health scientific journals in Spanish. Communication and dissemination of new findings, proven preventive measures, guidelines and standards among Spanish-speaking occupational health professionals is essential for effective information-sharing and networking. The proposed WHO Collaborating Centre in Barcelona houses the editorial staff of such a journal, Archivos de Prevencion de los Riesgos Laborales, which is published quarterly, and includes a section on occupational health issues in Latin America. The journal is being disseminated to key libraries, universities and occupational health programs in Latin America, an activity that is being conducted in collaboration with the WHO Collaborating Centre at the University of Texas in Houston since 2000.

Funding has been secured through the Fogarty Center training grant at The University of Texas WHO Collaborating Centre. The Southwest Center for Occupational and Environmental Health at The University of Texas School of Public Health in Houston, Texas, is collaborating on this project.

A Spanish language, peer-reviewed occupational health scientific journal, Archivos de Prevencion de los Riesgos Laborales has been issued.

Inventory of the existing international guidelines for monitoring working conditions

Evelyn Kortum, WHO (kortummargote@who.int)

Keywords: inventory, international guidelines, working conditions, workers

Target group: occupational health professionals and planners, trade unions, firm proprietors and managers

The objective of this project is to facilitate the full utilization of the existing good-quality documents and to avoid duplication of work. The main task is to identify and compile various scientifically-based international occupational health and safety guidelines in order to avoid duplication when preparing new guidelines. Collection of information on existing guidelines is ongoing.

Occupational health and safety training documents in Spanish

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Keywords: worker safety, health, educational materials, Spanish

Target group: Spanish-speaking workers in the US and Latin America, labor unions, community-based organizations, academia, health professionals.

The purpose of the project is to provide Spanish-speaking workers in the US and Latin America with educational materials concerning workplace safety and health (e.g., agriculture, pesticides, noise, metals, construction, ergonomics, women workers, mining, biological hazards, hazardous waste, forestry, toxic substances, etc.).
This project focuses on updating an existing Spanish language bibliography, which was initially compiled through funding from PAHO and the COEH and published in 1990 and 1999 under the title "La Fuente Obrera – A Worker's Sourcebook". New educational materials (e.g., fact sheets) are being developed in Spanish for workers on the topic of safety and health. The bibliography and educational materials will be posted on the Labor Occupational Safety and Health website (www.losh.ucla.edu), so that workers from throughout the Americas can have access to the information. These materials are being collected from different institutions in the US, Latin America and Europe.

Funding to update the bibliography has been secured through the National Institute of Environmental Health Sciences for this one-year project.

Preparation and implementation of National Guideline on Occupational Health Management System

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Target Group: All industries in China

The purpose of this project is to prepare a National Guideline on Occupational Health Management System following the ILO Guidelines on Occupational Health Management System (ILO OSH-2001) for improving the occupational health in industries in China.

The first draft has been completed and is being circulated for comments. Funds are provided by the Ministry of Health.

Updating and establishing guidelines and regulation for the protection of health at work and its application in the work place

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Keywords: guidelines, norms and regulations for the protection of health at work

Target group: construction, electrical sector, mining, telecommunications, asbestos, banana tree and sugar-basins.

The purpose of this project is to update and establish guidelines, norms and regulations for the protection of health at work, as well as to define the main needs in occupational health according to the different economical sectors, based on national diagnosis, and create a work plan with the help of a International advisory.

Progress: A Project of technical regulation in electrical sector has been developed and guidelines for the mining sector.

Preparation of a guideline for prevention of occupational asthma

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Keywords: occupational asthma, obstructive airway diseases, prevention, guidelines, inventory of good medical practice

Target group: In the first step primarily European (and maybe Canadian and the US-American) stakeholders: Scientists in occupational health, State authorities for worker protection, with a focus on medical doctors in occupational health, existing working groups on the prevention of occupational asthma.

The objective is to prepare a guideline for the prevention of occupational asthma. The motivation for the guideline is the consistently large number of work-related asthma. It is suspected that 5 to 10% of all cases of adult-onset asthma are caused by work factors. Asthma currently represents the most frequent respiratory occupational disorder. The guideline will first cover a summary of the current medical and epidemiological knowledge on causes, prevalence/incidence, dose-response relations, and risk factors of work-related occupational asthma. Secondly, established pathogenic and salutogenic approaches of prevention will be reviewed involving prevention of disease and promotion of health, respectively. Thirdly, the relevant legal framework conditions, regulations of work and health protection in the different countries will be described. Fourth, a code of good medical practice will be proposed that may cover risk assessment in the workplace, elimination of health risks by technical and/or organizational measures, personal protective equipment, surveillance, health promotion and risk communication. Additionally, examples may illustrate the concrete corresponding steps to prevent occupational asthma.

A German draft version of a guideline was prepared together with scientists and medical doctors in occupational health within a working group of the German Association for Occupational and Environmental Health (Deutsche Gesellschaft für Arbeits- und Umweltmedizin e.V., DGAUM). The German draft is currently discussed within the DGAUM.

A proposal of a guideline in German and in English is already available.

Other German centres are collaborating on the project. Other interested centres or already existing workgroups are encouraged to contact the project team. National institutes of occupational medicine, working groups in relevant professional organizations, and known scientists will be approached when the final German version is available.

Guidelines on essential equipment for occupational hygiene laboratories

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Keywords: laboratory, instrumentation, exposure
Target group: decision-makers, planners and managers, occupational health staff, occupational hygiene personnel in various institutions dealing with occupational health such as work inspections, health services, social security institutions, public and private companies.

The objective of this project is to recommend types of essential equipments for an occupational hygiene laboratory in order to assist in the measurement of chemical, biological, ergonomic and physical hazards at the workplace. The aim is to propose a document containing recommended generic instrumentation for occupational hygiene assessments that would be useful both in the planning and in the continuous development of laboratories. The project will consider not only chemical hazards (gas/vapours/aerosols) but also physical hazards (noise, vibration, microclimate, ionizing and non-ionizing radiation), ergonomic hazards (lighting, posture, lifting) and microbiological agents (pathogens and non-pathogens). Proposals will be made considering different degrees of development of occupational health services in the countries.

The project has not yet started as no funding is available for the moment. It is expected that most of the work will be done by mail exchanges between the different partners. At least one or two meetings (2 days) will be required in the project. The completion date is dependant on availability of funding.

Guidelines for categorization of work activities on basis of health risk assessment
Jaroslav Baumruk, Centre of Industrial Hygiene and Occupational Diseases, National Institute of Public Health, Czech Republic (jbaum@szu.cz)

Keywords: risk assessment, categorization of work activity, exposition, rate hazard
Target group: All employees who are exposed in certain amount by factors of workplace conditions and belong to categories II, III and IV; other employees belong to category I.

The purpose of the project is to build a list of exposition of the entire working population working in a wide scale of risk factors. Guidelines will describe project solving categorization of work activities in group of category II–IV. It is based on application of risk assessment worked out by employer itself. The Public Health Authority will verify this application and constitute an authoritative statement about definitive categories of presented work activities, their scale and eventually periodicity of preventive check ups.

The project is being undertaken in close collaboration between the National Institute of Public Health and Ministry of Health as well as all Public Health Authorities nationwide (regional and district). The nation-wide project has already begun. In 2003 the registration of all work activities with exposure to risk factors above PEL (work categories 3 and 4) is scheduled to be completed. In the year 2003, the proportions of people working in categories 1-4 were 72.7 %, 21.9 %, 5.3 %, and 0.1 %, respectively.

Funding of the project is guaranteed and the main planned output of the project is a nationwide survey of working activities with regard to health risk factors. Completion by 2005.

Guidance on prevention and control of occupational hazards in specific sectors
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Target Group: steel industry; adhesives industry; car production industry; coal industry.

The purpose of the project is to analyze the occupational hazards and critical control points of the specific industrial sector and to improve the control and prevention. The planning and preparatory work has been initiated.

Funds have been secured by the Ministry of Sciences and Technology for 2003-2005

Preparation of guidelines for non-manufacturing sectors
Hisashi Ogawa, WPRO (ogawah@wpro.who.int)
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Preparation of guidelines for occupational health and safety for non-manufacturing sectors has been initiated with the Ministry of Health in China, and plans are developed to initiate this activity for the medical-pharmaceutical community sector in China. The project is funded by the Ministry of Science and Technology, China. It will be completed by 2005.

Guidelines for surveillance of workers in specific sectors - e.g. agriculture, chemicals
Marco Maroni, International Centre for Pesticides and Health Risk Prevention, Unit of Occupational Medicine, Hospital L. Sacco, University of Milano, Italy (mail@icps.it)

Keywords: Agriculture, chemicals, health surveillance, biological monitoring
Target group: Occupational Health Physician, workers

The project is aimed at the development of guidelines for the health surveillance of pesticide workers in agriculture.

Pesticide use may represent a risk to human health. Therefore, pesticide workers need health surveillance at the workplace. Health surveillance is aimed at detecting early biological and functional adverse effects that may have been caused by a specific exposure to a risk factor, or any significant health change which may increase workers' susceptibility to work-related exposure conditions. The contents of health surveillance are related to identified hazards and to the characteristics of exposure.
Performing health surveillance activities in agriculture is a difficult task: uncertainty about early effects from low dose chronic exposures makes periodical examinations sometimes inconclusive; the number of available biomarkers is small, if compared to the number of active ingredients currently on the market; reference values are available only for few active ingredients; the complexity of analytical methods and the lack of standardisation among laboratories are major limits to the realisation of biomonitoring activities on a large scale. The contents of the programme need to be periodically updated according to marketing and scientific changes. University of Cape Town, South Africa is collaborating on the project.

### Gender-based health standards for maquila and flower cultivation workers in Central America

**Timo Partanen, IRET-UNA, Costa Rica (timo_partanen@yahoo.com)**

Other centres involved in the project: Centre d’étude des interactions biologiques entre la santé et l’environnement (CINBIOSE) of the University in Québec in Montréal (UQAM); National Autonomous University of Nicaragua at Léon (UNAN-LEON); University of San Carlos, Guatemala City, Guatemala, PAHO.

**Keywords:** Central America, Standards, Maquila, Flower cultivation, Gender

**Target group:** The target groups are all parties involved in the health of maquila and flower culture workers in Central America: governments; ministries; industries; workers; trade unions; communities; community NGOs; women’s organizations; and other NGOs. Data collection and analysis is being conducted in Nicaragua (maquilas) and Guatemala (flower cultivation).

The project began in 2002. Its objective is to identify priorities for gender-based health standards for maquila and flower cultivation workers in Central America. The first phase (2002) will identify the feasible methods and groups and individual key informants for the collection of existing and ad hoc data required for the identification of priorities. Five themes (organization of work; health; gender; infrastructure and environment; legislation), subdivided into over 40 sub-themes, are involved. The second phase (2002-2004) will identify the priorities.

A Task Force for the project has been nominated. Phase 1 is in progress in Nicaragua and Guatemala, supported by Interamerican Development Bank, and coordinated by IRET and UCAM. The Protocol for the first phase is available.

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### Estándares de salud basados en género: trabajadores de la maquila y floricultura en América Central

**Timo Partanen, IRET-UNA, Costa Rica (timo_partanen@yahoo.com)**

**Centros incluidos en el proyecto:** IRET-UNA; Centre d’étude des interactions biologiques entre la santé et l’environnement (CINBIOSE) de la Universidad de Québec en Montréal (UQAM); Universidad Nacional Autónoma de Nicaragua en León (UNAN-LEON); Universidad de San Carlos, Ciudad de Guatemala, Guatemala, PAHO.

**Palabras claves:** América Central, Estándares, Maquila, Floricultura, Género

**Grupos meta:** Los grupos meta incluyen todos los actores responsables de la fuerza laboral centroamericana en las maquilas y la floricultura: ministerios, industrias, trabajadores, sindicatos, comunidades y organizaciones no gubernamentales en comunidades y de mujeres.

El objetivo del proyecto: Identificación de las prioridades de los estándares basados en género de salud para los trabajadores de la maquila y floricultura en América Central

La primera fase (2002) identificará métodos factibles y grupos e individuos claves para la colección de datos existentes y ad hoc que son necesarias para la identificación de las prioridades. Se ha identificado cinco temas (organización de trabajo, salud, género, infraestructura y ambiente, legislación), subdivididos en 40 subtemas. La segunda fase identificará las prioridades.

Se ha nominado un grupo coordinador. La fase I se está llevando a cabo en Nicaragua y Guatemala, con apoyo del Banco Interamericano de Desarrollo y coordinada por IRET y UQAM. Productos: El protocolo para la Fase I.

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### Guidelines for indoor air in office and commercial buildings

**Marco Maroni, ICPS, Italy (mail@icps.it)**

Claude-Alain Bernhard, Institute of Occupational Health Sciences, Switzerland (Claude-Alain.Bernhard@inst.hospvd.ch)

K.K. Cheng, University of Birmingham, UK (k.k.cheng@bham.ac.uk)

An application for funds has been submitted to the European Commission. The project will be completed by the end of 2003.

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### Guidelines for self-surveillance of agricultural workers

**Somkiat Siriruttanapruk, Ministry of Public Health, Thailand (somkiatk@health.moph.go.th)**

**Keywords:** agricultural workers, self-surveillance, health book

**Target group:** The project has been conducted in 20 provinces of the country. It will be expanded throughout the country next year.

The objective of this project is to develop guidelines (a health book) for self-surveillance in Thai farmers.

A book has been developed which provides guidelines to Thai farmers to assess their health, working conditions and working environment in agriculture. The book consists of 3 main parts: self-administered questionnaires, instruction and guidelines, and medical record. It covers an introduction of occupational health and safety in agriculture, health and working history of a farmer, checklists of working conditions and working environment, and checklists of symptoms related to occupational diseases.
The book will be used as a tool in the development of occupational health service and occupational health surveillance system in agriculture in Thailand.

The first edition of health book (in Thai) has already finished and used in the field. The results of the study have been written up. The second edition of the book has been developed.

**Workplace monitoring guidelines and industrial hygiene practice**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)
Claude-Alain Bernhard, Institute of Occupational Health Sciences, Switzerland (Claude-Alain.Bernhard@inst.hospvd.ch)
K.K. Cheng, University of Birmingham, UK (k.k.cheng@bham.ac.uk)
Nikolai Izmerov, RAMS Institute of Occupational Health, Russia (izmerov@rinet.ru)

This project is funded by the Ministry of Health, China. It will be completed by 2003.

**Guidelines for healthcare for employees (including farmers) in the agricultural sector in Vietnam**

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

*Keywords:* health care, occupational health, agriculture, farmers, employees

*Target group:* decision-makers at Ministries, politicians, Farmer Union, employers' organizations, academic institutions

Development of guidelines for health care of agriculture employees including farmers is being taken in close collaboration between the Ministry of Health and National Institute of Occupational and Environmental Health as well as Hanoi Medical College in Viet Nam. Funds have been secured by WHO, Vietnam Government.

**National guidelines for healthcare for workers in various sectors in Vietnam**

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

*Keywords:* health care, occupational health, workers, employees, health promotion, workplaces

*Target group:* decision-makers at Ministries, politicians, Farmer Union, employers' organizations, academic institutions

Development of national guidelines for health care of workers in various sectors (including formal and informal sector, agriculture sector and industrial and export processing zones) in Viet Nam is being taken in close collaboration between the Ministry of Health and National Institute of Occupational and Environmental Health as well as Hanoi Medical College in Viet Nam. Funds have been secured by WHO, Vietnam Government.

**National Standards of Occupational Health and Hygiene in Vietnam**

Nguyen Ngoc Nga, National Institute of Occupational and Environmental Health, Vietnam (n.n nga@fpt.vn)

*Keywords:* occupational health, hygiene, standards, guidelines

*Target group:* academic institutions, decision-makers at Ministries, politicians

The National Standards were promulgated by the Decision of the Minister of Health No 3733/2002/QS-BYT dated 10/10/2002. The Standards include 21 standards, 5 principles and 7 parameters of occupational health and hygiene.

The project is funded by WHO, Vietnam Government.

**Adapting methodologies and developing guidelines for rapid assessment of occupational problems and response capacity of cities/provinces.**

Nguyen Khac Hai, National Institute of Occupational and Environmental Health, Viet Nam (haink@hn.vnn.vn)

*Keywords:* rapid assessment, occupational health, capacity, guidelines.

*Target group:* academic institutions, decision-makers at Ministries, medical university.

The purpose is to provide aspects of OSH in agriculture and informal sector. The workshop will be held in 2005.

Funds have been secured by WHO, Vietnam Government.

**Contribution to the guidelines for indoor air in office and commercial buildings**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

This project is being funded by the Ministry of Science and Technology, China. A survey will be conducted in 2003 in collaboration with the Beijing Institute of Labour Protection. The project will be completed by 2005.

**To review guidelines for their usefulness and how Colombia can cooperate - Updating and establishing of norms and regulations for the protection of workers' health and their practical application to the workplace**

Juan Carlos Llano (jillano@minproteccionsocial.gov.co), Ana Pilar Pereira (apereira@minproteccionsocial.gov.co), Ministry for Social Protection, Colombia

Consolidation of a nation-wide diagnosis
Priority needs according to the sectorial economic commissions
Establishment of a plan of work
International needs assessment

Funding is still required.

Revisar cuales guias son de utilidad y en cuales se puede cooperar desde colombia - Actualizar y establecer las normas y reglamentos tecnicos para la proteccion de la salud de los trabajadores y su aplicacion en los centros de trabajo.
Juan Carlos Llano (jllano@minproteccionsocial.gov.co) y Ana Pilar Pereira (apereira@minproteccionsocial.gov.co), Ministerio de la Proteccion Social de Colombia
Consolidar un diagnostico nacional
Priorizar las necesidades de acuerdo a las comisiones sectoriales de la economia
Construccion de un plan de trabajo
Asesoria internacional precisa
Financiamiento: requerido

For cross references see also:
TF 3 : Guidelines on the integration of occupational safety and health into education; Guidelines for occupational exposures and adolescent workers
TF 4 : Updating WHO guidelines on health surveillance of silica-exposed workers
TF 5 : Various guidelines for health care workers
TF 6 : Guidance on Workplace Health Promotion: Principles and Practices
TF 7 : Preparation of guidelines for occupational health services on prevention of stress at work; Preparation of guidelines on prevention of stress at work for management; Preparation of guidelines for training the trainers on prevention of stress at work
TF 8 : Ergonomics guidelines for occupational health practice in industrially developing countries; Collecting and sharing products (general and industry-specific guidelines, training packages, etc.); Activities to improve small business access to OHS information; Establishment of gender-based standards in the floriculture and maquila industries; Collecting and sharing success stories for legislation, strategies and implementation methods; Collecting and sharing products (general and industry-specific guidelines, training packages, etc.); Development of a health book and guideline on health promotion to small enterprises (agriculture, ceramic workers, mental workers and mechanists); Guidelines for self-surveillance of agricultural workers; Guidelines for surveillance of workers in specific sectors - e.g. agriculture, chemicals; Development of a health book and guideline on health promotion to small enterprises (agriculture, ceramic workers, mental workers and mechanists)
TF 9 : Completing guidelines for the prevention of MSD as a basis for questionnaires to interested CCs to assess the load of the musculoskeletal system and to prevent MSD; Preparation of teacher’s guide and fact sheet within the area of occupational exposure to vibration
TF 10 : Workplace monitoring guidelines and industrial hygiene practice
TF 12 : Guidelines for occupational exposures and adolescent workers
TF 15 : Piloting the guideline for calculating the burden of disease in Bulgaria
**TASK FORCE 2: INTENSIVE PARTNERSHIP IN AFRICA**

Co-chairs: David Rees, NCOH, South Africa (reesd@health.gov.za); Gerry Eijkemans, WHO (eijkemansg@who.int); Jukka Takala, ILO (takala@ilo.org)

The taskforce was created to organize the work and activities of the WHO collaborating Centers in accordance to the WHO/ILO Joint Effort on Occupational Health and Safety in Africa (AJE). The objective of this task force is to improve conditions and environment of work in Africa, thus reducing the burden of occupational disease and injuries through intensified co-ordination of occupational health and safety activities.

Substantial progress has been made in extending partnerships, in information sharing and capacity building, which are two of the four cooperative areas of the Joint Effort. More than 100 institutions or individuals in more than 20 countries consider themselves partners in the African Joint Effort. Funding for this on-going project is in place. The activities of taskforce 2 have significantly contributed to the success of the AJE.

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**University of Michigan/Fogarty International Centre programme to support training and research in occupational and environmental health in Southern Africa**

Mohamed Jeebhay, Occupational and Environmental Health Research Unit, University of Cape Town, South Africa (mjeebhay@cormack.uct.ac.za); Tom Robins, University of Michigan trobins@umich.edu

*Keywords:* training, research, occupational health, Southern Africa

*Target group:* Southern African Countries (doctors, nurses, environmental health officers, industrial hygienists, toxicologists, inspectorate, academics, trade union organisers)

- The specific objectives of this five year programme (2001-2006) to promote occupational and environmental health in the Southern African region are to recruit, select, and enroll, with full funding, three citizens of Southern Africa Development Community (SADC) nations in University of Michigan PhD or Masters degree programs in EOH.
- To recruit, select, and fund nine citizens of SADC nations to complete one to six month programs of study or collaboration at University of Michigan in laboratory or research methodologies in EOH.
- To deliver a series of 13 one-week short courses taught by University of Michigan faculty and local experts to EOH professionals in Southern Africa.

To recruit and select up to 54 citizens of SADC nations into University of Michigan or other EOH programs in Southern Africa.

- To assist in the development and delivery of two advanced level occupational hygiene courses offered as part of a Masters degree program in occupational hygiene at the National Centre for Occupational Health in Johannesburg.
- To assist in the development and delivery of two to three web-based diploma or degree programs in EOH to be offered in the SADC region by South African academic institutions.
- To directly support the in-country EOH research of up to 38 junior to mid level researchers from SADC nations.
- To sponsor three biennial conferences to review regional developments in EOH, assist in setting of regional research priorities, review the activities conducted under this grant, and develop consensus around planned future actions.

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**Biregional Programme on Work and Health; Southern Africa – Sweden**

Kaj Elgstrand, National Institute for Working Life, Sweden (kaj.elgstrand@arbetslivsinstitutet.se)

Funding for this project is still to be obtained. A budget is being negotiated with a potential donor. The first four-year phase of this project will begin in 2003.

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**ISPESL international network for providing assistance and training in OSH for African countries**

Carlo Grandi (carlograndi@libero.it) and Sergio Iavicoli (seriav@iol.it), ISPESL, Italy

*Keywords:* training, occupational health, African countries, expertise

*Target group:* Northern African Countries (people who, in each single African country, represent institutions and professions concerned with OSH (executives of national bodies, University professors and researchers, physicians, experts in occupational safety and health topics etc.).

ISPESL, together with French partners (INRS) is available on the basis of some specific request of North african countries, Headquarters and /or EMRO-AFRO to provide assistance in Africa with a special focus on child labor and rural health.

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**Training of occupational health specialists in French-speaking Africa**

Mohammed Mokrane, Institute of Occupational Health Sciences, Switzerland (Mohammed.Mokrane@inst.hospvd.ch)

This is an on-going project. Funding for the project is partially in place.
Elaboration of a module for initiation to health and safety at work

Souissi Rachida (Rachidaisst@yahoo.fr) and Smaoui Emna, Institute of Health and Safety at Work, Tunisia

Keywords: initiation to health and safety at work, organisation of prevention in Tunisia, general risks, communication, rescue work.

Target group: newly-appointed safety personnel in organisations, instructors in professional training centres, nurses.

The objective of this project is to provide participants with basic training in Health and Safety at Work.

The initiation module comprises 6 sessions of a day each (6 hours per session) on the following topics:

2. General risks in the occupational environment: physical environment.
3. Chemical environment.
4. The risks of accidents.
5. Communication on Health and Safety at Work.

Training sessions have been conducted in 2000, 2001 and 2002. The project is currently being programmed for 2003, 2004 and 2005. An average of 13 participants is trained every year.

Réalisation d'un module d'initiation à la Santé et la Sécurité au Travail (SST)

Souissi Rachida (Rachidaisst@yahoo.fr) et Smaoui Emna, Institut de Santé et de Sécurité au Travail, Tunisie

Mots clés: initiation à la SST, organisation de la prévention en Tunisie, les risques généraux, la communication, le secourisme.

Cible: chargés de sécurité nouvellement nommés dans l’entreprise, enseignants des centres de formation professionnelle, infirmiers du travail.

L’objectif de ce projet est de fournir aux participants une formation de base en SST.

Le module de perfectionnement comprend 6 séances d’un jour chacune (6h par séance) sur les thèmes suivants :

1. Organisation de la prévention des risques professionnels en Tunisie.
2. Les risques généraux en milieu professionnel : ambiances physiques.
3. Ambiances chimiques.
4. Les risques d’accidents.
5. La communication en SST.


Elaboration of a module of improvement in health and safety at work

Souissi Rachida (Rachidaisst@yahoo.fr) and Abdelfatteh Karoiai, Institute of Health and Safety at Work, Tunisia

Keywords: improvement of health and safety at work, preliminary analysis, ergonomic approach, management systems.

Target group: engineers and safety technicians at work in the private sector, public organisations and occupational safety working groups.

The objective of this project is to develop the capacities of safety personnel to analyze professional risks using appropriate methods and to follow a rational approach to risk management in the organisation.

The improvement module comprises 5 sessions of 2 days each (12h per session) on the following themes :

1. Techniques in communication on health and safety at work.
2. Preliminary analysis of risks.
3. An ergonomic approach.
4. Mandatory technical control of unit.
5. Safety management systems and practical projects on the field.

Training sessions were conducted in 2000, 2001 and 2002. The project is currently being programmed for 2003, 2004 and 2005. An average of 20 participants is trained every year.

Réalisation d’un module de perfectionnement en Santé Sécurité au Travail

Souissi Rachida (Rachidaisst@yahoo.fr) et Abdelfatteh Karoiai, Institut de Santé et de Sécurité au Travail, Tunisie

Mots clés: perfectionnement en SST, analyse à priori, démarche ergonomique, système de management.
Cible: ingénieurs et techniciens de sécurité en exercice dans les entreprises, les structures nationales et les groupements de médecine du travail

L'objectif de ce projet est de développer chez le chargé de sécurité en exercice les compétences pour analyser les risques professionnels selon des méthodes appropriées et suivre une démarche rationnelle quant à la gestion des risques dans l'entreprise.

Le module de perfectionnement comprend 5 séances de 2 jours chacune (12h par séance) sur les thèmes suivants :
(1) Techniques de communication en SST
(2) Analyse à priori des risques
(3) Démarche ergonomique
(4) Contrôle technique réglementaire des installations
(5) Système de gestion de la sécurité, et projets pratiques sur le terrain


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Training Course on Pesticide Risk Management – From Use and Exposure to Control Measures
National Centre on Occupational Health, South Africa
Jyrki Liesivuori, Finnish Institute of Occupational Health, Finland (jyrki.liesivuori@occuphealth.fi)
The project was completed in February 2002.

Training in an ergonomics approach by safety experts in African countries
Pat Scott (p.a.scott@ru.ac.za), IEA IDC Committee, with IEA PSE Committee
Keywords: Training, occupational safety and health, ergonomics, African countries, expertise
Target group: occupational safety and health professionals in industrial organizations and educational institutions
The objective of this project is to develop training capacities of leading occupational safety and health professionals in applying ergonomics to the prevention of work-related injuries and diseases in African countries. Pilot training seminars are organized in selected African countries in cooperation with safety experts and ergonomists in each country. The training module comprises the following themes: (a) roles of an ergonomics approach in occupational safety and health; (b) identifying ergonomics-related risks; (c) cost-effective methods of solving ergonomics problems; (d) useful ergonomics checkpoints; and (e) incorporating ergonomics in safety management systems and practical training sessions.
Training seminars have been conducted in 2000, 2001 and 2002. The project aims to test the training module in 2003-2006. Group work methods will be used in training of trainers for the selected professionals.

Training of occupational health and safety experts in Africa
David Rees, National Centre for Occupational Health, South Africa (reesd@health.gov.za)
Jonny Myers, University of Cape Town, South Africa (jmyers@iafrica.com)
Tom Robins, University of Michigan, USA (trobins@umich.edu)

Preparation of community profiles on OH&S in Africa
WHO HQ, AFRO
David Rees, NCOH, South Africa (reesd@health.gov.za)
Kari Kurppa, Finnish Institute of Occupational Health, Finland (kari.kurppa@occuphealth.fi)
Funding for this project is still to be obtained. If funded the project will profile OSH in three communities at district level in southern African countries. The project should be completed by 2005.

African Joint Effort Newsletter on the web (www.sheafrica.info)
WHO HQ and AFRO (focal points: Gerry Eijkemans, WHO HQ (eijkemansg@who.int), K. Novikov, ILO, HQ (novikov@ilo.org), AFRO, EMRO and ILO Regional Office Africa
This is the official website for the World Health Organization (WHO) and International Labour Organization (ILO) Joint Effort on Occupational Health and Safety in Africa. The areas of collaboration include Human Resource development focused on capacity building, national policies, programmes and legislation, information, research and awareness raising, promotion of occupational health and safety in particularly hazardous occupations, vulnerable groups (including informal sector workers and children) and in newly transferred technologies.
This functioning website promotes the Joint Effort and develops the electronic information network for occupational health and safety in Africa.
African Newsletter on Occupational Health and Safety
Suvi Lehtinen, Finnish Institute of Occupational Health, Finland (suvi.lehtinen@occuphealth.fi) and the ILO
Funding is in place for this on-going project. The website for the newsletter is:
www.ttl.fi/Internet/English/Information/Electronic+journals/African+Newsletter/

Clearing house
Nelson Sesoko, National Centre for Occupational Health, South Africa (sesokn@health.gov.za)
Funding is in place for this on-going project on southern African countries. A physical space has been established and electronic and hard copy materials are being collected on (1) policy, legislation and regulations; (2) OSH professionals in the region; (3) training and professional qualifications in OSH in the region; (4) OSH research projects and (5) practical solutions to common problems.

Webpages
Shobna Chauhan, National Centre for Occupational Health, South Africa (sesokn@health.gov.za)
Funding is in place for this on-going project. A model country page has been designed and data on South Africa has been entered. This project is being done with David Stanton and Sheafafrica.

E-journal in French
Michel P. Guillemin and Mohammed Mokrane (Mohammed.Mokrane@inst.hospvd.ch), Institute of Occupational Health Sciences, Switzerland
Keywords: journal, information, experiments, transfer of knowledge
Target group: African professionals of occupational health, competent authorities (Ministries of Health, Labour, Environment et others concerned), employers and workers representatives, social security, University, Institutes and others technical and professional organisms and schools.
The objective of this programme is to create a space open to all those for whom the promotion and practice of occupational safety and health is an essential dimension of sustained development. The website is a platform of dissemination of information, transfer of technical and scientific knowledge as well as new occupational health practices, in the respect of international health standards and of the general environment. The E-journal in French is on the web at http://www.iurst.ch/cooperation. The last bulletin (No.10) was released in November 2003.
Funding is in place for this on-going project. Some French speaking African countries, particularly Benin, Burkina Faso and Morocco, with which the Institute of Lausanne has initiated conventions of co-operation, are collaborating on the project.

For cross references see also:
TF 3 : Training the trainers involved in the elimination of the worst forms of child labour; Children’s work in agriculture in Benin
TF 4 : The WHO/ILO Joint Effort in Occupational Health in Africa and practical steps towards the elimination of silicosis; TF 4 : Contribution to the national programme on elimination of silicosis in South Africa and silicosis in Southern Africa
TF 6 : Biregional Programme on Work and Health; Southern Africa – Sweden
TF 8 : Application of Preventative Technologies to focus especially in small enterprises
TF 10 : Translation of Toolkit; Assistance in adaptation of various materials to local conditions; Further development of PACE; Piloting PACE in South Africa; Dust control course (PACE-initiated) in South Africa;
TF 11 : Formation with Specialization and Research in Health at the Work and Environment in Africa; Assistance to occupational hygiene graduate programmes in developing countries and countries in transition; Development of evidence-based occupational health (medicine) training course and material; International two-year training course: Occupational Safety and Health & Development for participants from northern Africa, Middle East and Iran; Training of occupational health and safety personnel
TF 12 : Inventory of available training materials on the web; Contributing to the inventory of training materials; Creating a Southern Africa OH&S Clearing House in Pretoria
TF 13 : Tracking of the WHO and EU efforts in profiles and indicators; Establishing a website for the developments in indicators and profiles; Extension of the profiles to the regional (provincial) in the countries
The ILO Convention No. 182 on Elimination of the Worst Forms of Child Labour was unanimously approved in June 1999. The worst forms of child work are slavery, forced labour, use of children in illegal activities, and children working in hazardous activities. The countries ratifying the Convention No. 182 need to agree in tripartite discussion upon the hazardous work that they have in their countries. It is also possible to improve the working conditions as the first immediate action on the way to eliminating the worst forms of child labour. Networks should be utilized to disseminate information and to work together to achieve these objectives.

The process of this Taskforce is led by IPEC/ILO Geneva, in close coordination with the Occupational Health Office in WHO and SafeWork in ILO. That process will allow all WHO Collaborating Centres to play a less or more active role. The members that have expressed interest in the Taskforce in the Chiang Mai meeting in November 2001 will be kept up to date of all activities. The centres that have expressed interest in adolescent workers will be invited to participate in the taskforce.

Additionally, the individual members will be asked to produce papers, respond to questions etc., depending on their involvement and interest in the issue.

The following conferences have taken place at which many completed and ongoing activities were reported, and new action plans developed:

- National Institute of Occupational Health, India (H.N. Saiyed, saiyedhn@yahoo.com) participated in the meeting on gem stones (on the topic of child labour) in Bangkok in Nov. 2001.
- A regional meeting was held in Zimbabwe, Jan 02, on Networking on HCL. Participants from 10 Anglophone African countries participated. Links were established with the WHO-ILO Joint Effort.
- A regional meeting on networking on HCL was organized in March 2002 in Costa Rica. PlagSalud participated, as well as the PAHO consultant for the “flower project” in Central America. OHS centres and experts from all Central American countries were present, and all countries are preparing research and action proposals, in the field of agriculture, garbage collection and fireworks.
- A regional meeting in South America was held on HCL in March 2002 in Lima. OHS specialists from 7 countries participated. A list server was established (RED-TIP), closely linked to the list server previously established by PAHO on OHS in Latin America. Projects on the identification of HCL and interventions are prepared in several countries.
- A tri-country meeting (Egypt, Jordan and Lebanon) on the role of OHS in the implementation of C.182 was held in July 2002. WHO EMRO has participated in the meeting and will be active in the follow-up.
- Meeting Baru on Rural Health (incl. Child and labour in rural areas) organized by ICPS, Italy in Nov. 2002 in coordination with ISPESL.
- An ICOH Conference was held in Brazil in 2003; a mini symposium was held, and ICOH has created a working group on child labour.

The project will be completed by December 2003.

Elimination of the worst forms of child labour

Marta Petyx, ISPESL, Italy (martapetyx@tiscalinet.it or martapetyx@tiscali.it)

Keywords: child labour, workshop, Convention 182, child work

Target group: Bearing in mind the priorities identified by the ILO within the sphere of the IPEC programme, attention will be focused on the countries which, on the basis of their socio-economic characteristics, are more affected by the problem and to which the programme of interventions can make a useful contribution in applying the 182 Convention principles.

The objective of this project is to monitor and implement the ILO 182 Convention, in particular in developing countries, through the constitution of a work group to find possible solutions to the problems. This action is in line with the ILO international programme for the elimination of child labour (IPEC). The proposed activities include a Workshop to discuss the difficulties, limits and strategies for the correct application of Convention 182 in developing countries and to identify an effective contribution that advanced countries can make to the problem.

A Mini-symposium on "Child labour in rural areas" was organized by ICPS and ISPESL in the "International Conference on Rural Health in Mediterranean and Balkan countries" in Bari, Italy on November 13-16, 2002.

A paper has also been published: "Child labour: the Italian perspective and the contribution of ISPESL" by A. Pera, M. Petyx, C. Grandi, S. Iavicoli, S. Palmi in proceedings of "International conference on rural health in Mediterranean and Balkan countries", Bari, Italy, November 13-16, 2002.

Funding for the project is in place. It will be completed by 15 April 2005.
Validation of the pedagogic model for training and risk prevention in medial education — technical industrial schools in Colombia

Julietta Rodríguez Guzmán (jrodriguezg@fiso-web.org), FISO, Colombia

Keywords: Risk Prevention, technical industrial schools.

Target group: Teachers and students of technical secondary education (10th and 11th grade).

The purpose of the project is to raise awareness and induce a preventive culture among educators and students of technical secondary education schools in 10th and 11th grade, concerning the importance of ensuring the health of workers, and the necessity of recognition of OH promotion and prevention programs in the young population’s education programs.

With the aim to strengthen the preventive culture of professional risks in Colombia, the Ministry of Labor and Social Security promoted the development of educational projects and models since early school, with sponsorship of the Professional Risk Fund. Thanks to this initiative, FISO designed an educational model that gives technical and educational tools for teachers and students, to be trained on prevention of school risks in 11th and 12th grades in the technical industrial schools.

The model was designed in three steps. First it is based on a bibliographic search, data collection and statistical analysis, the characterization of medial education and the target population. Secondly, a risk diagnosis was carried out to prioritize actions in the technical industrial schools, with international assessment and the design of the model. Thirdly, the model was validated and adjusted, to finally develop the educational instruments. For the diagnostic analysis and the risk characterization the Auxiliary Center for Teaching Services CASD, was the chosen center. Its student population rises to 6,800 students in universities and technical high schools, and 70 teachers of different specialties. A training and diagnostic workshop was done with them, to consider the most frequent occupational risks in school and the educational strategies that were consider most adequate to train the students in prevention. The study guidelines were used to facilitate the analysis and the proposals of the group of teachers. It was concluded that training for such schools must be done under the frame of each technical specialty given by the institutions, and with educational tools that orient both teachers and students.

The educational model starts with a central module of basic preventive fundamentals and principles, and 11 collateral modules that deal with occupational risks and technical specialties in the institutions. It is understood that each module must be developed by each teacher, following the teacher’s guide and by means of study guides for student participation. The following is the content of each educational tool developed for teacher and student orientation: orientation for management of technical concepts; a methodological guide that orients the content development; a series of slides with a simple language to present the contents; and, work guidelines to help students to build and understand the concepts.

All 12 educational modules are available in Spanish, to be disseminated to all schools in the country.

Completion date: December 2003. Funding is to be placed in 2003.

Identification of hazardous occupations

Susan Gunn, ILO/IPEC (gunn@ilo.org)

Keywords: child labour, occupational hazards of youth, working conditions of young workers

The objective of this project is to develop a tool, with enough flexibility and specificity for countries to use to identify and prioritize hazardous child labour (HCL), and produce a national action plan to effectively address the issue. Activities:

b. An expert meeting on Hazardous child labour was held in October 2002 in ILO Geneva. Selected WHO Collaborating Centres, ICOH and IOHA participated in the discussion on the definition of hazardous child labour. The expert committee will keep functioning until the product (publication on the definition on Hazardous Child Labour) has been finished.
c. Preparation of a draft of the publication. A consultant will be identified through the WHO Collaborating Centres Network. Document expected end of May 2003.
d. Review of the draft document by members of the expert committee.
f. Design and maintenance of a database on hazardous child labour: through the WHO Collaborating Centres, an institution that can take on this task will be identified.

Additionally, IPEC is in the process of constructing national, (sub) regional and global networks of institutions willing to undertake short, focused studies on hazardous child labour that will contribute to policies and action in this area. WHO Collaborating Centres will be approached to participate and support the networks in their regions and areas of interest. Funding for the project is in place. Studies currently underway:

- High risk tasks and conditions in various agricultural sectors (Central America, Indonesia)
- Small-scale manufacturing (e.g. fireworks, shoe-making)
International Symposium on Youth and Work (http://www.ttl.fi/e/project/youthwork/index.htm)
Jorma Rantanen (jorma.rantanen@occuphealth.fi), Kirsti Tuominen (Kirsti.Tuominen@ttl.fi),
Finnish Institute of Occupational Health, Finland
20–22 November 2002, Helsinki, Finland (Participants: WHO/HQ, ILO, IPEC, ICOH)
The three-day Symposium was organized by the Finnish Institute of Occupational Health in close collaboration with the Finnish Ministry of Education, WHO and ILO. It was attended by almost 110 participants from 27 different countries from all over the world. The idea to organize the Symposium rose from several studies demonstrating that successful integration to work life is an important factor in overall management of life, health and well-being and that the integration has psychological, social and economic consequences. Ensuring decent work and safe and healthy working conditions for young people on the labour market is an important objective which will benefit not only the young people themselves, but also the enterprises and the society as a whole.
The Symposium analyzed the critical steps towards successful work life during three distinct periods in the life of young people: at school (vocational and secondary school), during the transition from school to work, and a few years after entering work life (as a young worker). Also, strategies, measures and actions for ensuring successful preparation for work life were discussed in the course of the Symposium days.

Work and working conditions of adolescent workers
Emilia Ivanovich (e.ivanovich@nchmen.government.bg) and Stefka Spangenberg, National Centre of Hygiene, Medical Ecology and Nutrition, Bulgaria
Keywords: risk groups, information, training, global programme
Target group: decision-makers, planners and managers, and occupational health staff in Departments of Health, Departments of Labour, Trade Unions and companies and enterprises management.
The objective of this project is to raise awareness among decision-makers in Departments of Health, Departments of Labour, Trade Unions and companies and enterprises of the existing risks for adolescents, the magnitude of the problem and necessity of preventive measures. The project aims the identification of contingents at risk due to hazardous working conditions (physical factors, chemicals, dust, psycho-social factors), prioritization of risks and preventive measures.
The design of the project is under preparation, contacts with representatives of Ministry of Labour have been established, cooperation has been planned, funds are being sought. The ILO is collaborating on this project. The target date for completion is 2005.

Working conditions and health of rural adolescents in Ukraine
L.A. Dobrovolsky, Institute of Occupational Health, Ukraine (yik@nanu.kiev.ua)
Keywords: report, adolescent girls, agriculture, chemical pollution, health
The objective is to raise awareness among decision-makers in Departments of Health, Labour, Ecology, Agriculture, Trade Unions, managers of agricultural enterprises and farmers about chemical pollution associated with agricultural production, and rural areas generally, and its effect on the vulnerable rural population of adolescent girls. Complex measures for health protection are envisaged. The report will cover physical development and puberty, chronic somatic and gynaecological morbidity, content of organochlorine pesticides in blood and hairs (14-17 years old), residence in rural areas with elevated content of pesticides, fertilizers and some heavy metals in the environment.
The University of Illinois Collaborating Centre in Chicago, USA (Dan Hryhorczuk) is collaboarting on this project. A draft outline proposed report has been prepared. Funds are not yet in place. The project is to be completed by 2005.

Training needs and a health and safety curriculum for young workers
Carol Stephenson (CStephenson@cdc.gov) and John Palassis (JPallasis@cdc.gov), NIOSH, USA
The aim of this project is to develop and disseminate occupational safety and health curriculum materials for high school and post high school youth who are just entering the workplace. Using information gathered under contract with the the National Safety Council, NIOSH is partnering with OSHA, State Directors of Career and Technical Education, several academic institutions, and other interested entities to assess the occupational safety and health training needs of new/young workers and to develop a core health and safety curriculum for adolescent workers. The working group for this project will next meet in March 2003. The goal is to have a draft list of OSH objectives ready by June 2003 so that it can be peer reviewed and discussed with regard to curriculum implementation at a national meeting of state educators. Funds are in place. The project is scheduled to be completed by December 2005.

Guidelines on the integration of occupational safety and health into education
Tom Cox, (tom.cox@nottingham.ac.uk) and Stavroula Leka (stavroula.leka@nottingham.ac.uk),
Institute of Work, Health and Organizations, UK (in consultation with the European Agency for Safety and Health at Work Topic Centres)
Keywords: brochure, guidelines, health and safety, education
Target group: decision-makers, educators, governmental education agencies, occupational health and safety professionals.
The aim of the project is to raise awareness on the importance of occupational health and safety issues through the provision of guidelines focusing on their integration into the educational system. The outcome of the project will be a brochure that will cover an introduction to basic health and safety principles, a discussion of the importance of their introduction to all levels of the educational system and the presentation of a comprehensive framework for achieving this. A draft outline of the proposed brochure has been prepared and is now under review. The project will be completed by December 2004.

Guidelines for occupational exposures and adolescent workers

David Zalk, International Occupational Hygiene Association (IOHA), California, USA (zalk1@llnl.gov)

Keywords: prevention, IOHA, occupational hygiene, occupational exposure limit values, ACGIH

Target group: cooperation with ILO, IPEC, WHO and bodies deemed appropriate as described within IOHA articles of association.

The aim of this project is to utilise IOHA expertise and member organisation support to deliver guidelines for occupational exposures and occupational exposures as they may apply to adolescent worker issues.

Tore J Larsson (tore.larsson@general.monash.edu.au) and David Wegman (David_Wegman@uml.edu) of the University of Massachusetts Collaborating Centre and ICOH are also contributing to this project.

SOLAR – Study on Occupational Asthma Risks in adolescent workers

Dr. Katja.Radon, Institute and Outpatient Clinic for Occupational and Environmental Medicine, University of Munich, Germany (katja.radon@arbeits.med.uni-muenchen.de)

Keywords : occupational asthma, ISAAC follow up

Target group: Adolescents entering working life

The purpose of the project is to conduct a prospective cohort study on occupational asthma and allergies in adolescent workers.

About 10 % of all asthmatic disease is attributed to occupational factors. Due to the cross-sectional character of most studies performed in this field, no prospective data have been collected. We have initiated a follow-up survey of the ISAAC (International Study on Asthma and Allergies in Childhood) II cohort in Munich and Dresden in order to conduct a prospective cohort study on occupational asthma and allergies that starts in early childhood until well beyond the age of working life. For further information please visit our website (www.solar-deutschland.de). We are planning to perform the investigation also in other countries where the ISAAC protocol has been followed.

The project has been funded by Bundesministerium für Arbeit und Wirtschaft, Berlin for the period of 2002-2004.

Names of other Centres collaborating on the project: University Children’s Hospital, Dresden. Other centres are currently joining the project.

Products: health-based recommendations to adolescents regarding choice of job

Child labour/adolescent workers – Occupational health problems, evaluation and control

H.N. Saiyed, National Institute of Occupational Health, Ahmedabad, India (saiyedhn@yahoo.com)

Keywords : gem polishing industry, match industry, agate industry, occupational health problems, worst form of child labour.

Target groups: Policy makers, owners, child workers, parents, trade unions, NGOs.

The purpose of the project is to produce scientific evidence of occupational health hazards in various industries with child labour as major problem. This evidence could be used by the policy makers to classify the said industry as worst form of child labour.

The environmental epidemiological studies have been initiated in following three hazardous industries with child labour problem.

1. Agate industry, at Kambhhat. 2. Match Industry, Sivakasi and 3 Gem polishing workers at Jaipur,

Agate industry: A survey of 227 children (below 18 years) working and/or living around the agate industry showed 29 (12.8%) children showed evidence of silicosis and 13 (6.7%) children showed evidence of tuberculosis. Ministry of Labour, Government of India has been requested to declare agate industry as worst form of child labour. Dust control device has been developed and installed to reduce dust levels in agate industry.

Match Industry: A total of 1191 study subjects (257 males and 934 Females) and 515 control subjects (139 males and 376 females) in the age groups of ≤14, 15-18, 19-30 and 31+ yrs were included for medical examination including occupational history, pulmonary function test (PFT), Hb%, urine examination, chest X-ray of respiratory symptoms. The results of the study show statistically higher prevalence of low body weight, anemia and poor PFT in children working in match industry as compared to control children. The environmental study has shown ergonomic problems, high levels of siliceous dust, heat stress and noise problems. The high morbidity is attributed to the factors such as poor nutritional status and personal hygiene, unsuitable postures during work, non-use of personal protective equipment, lack of awareness about the possible impact of physical and chemical pollutants on health at work place and multiple and psycho social stresses.

Gem Polishing Industry: Industrial hygiene study showed high levels of noise, silica dust, chemicals and ergonomic problems. The most important occupational health problem is the potential exposure to free silica dust during cutting of chalcedony group of gemstone containing free silica during polishing gemstones using quartz powder as polishing material. The use of chemicals...
(e.g. chromium salts) for polishing is another potential risk. Work of medical examination including chest x ray (for diagnosis of silicosis and tuberculosis) and PFT of 581 children has been completed recently. Reports will be written on the projects which will provide scientific evidence for inclusion of the above industry as worst forms of child labour on the basis of serious occupational hazards. Funding for this project is in place. It will be completed by 2005.

**Children’s work in agriculture in Benin**

Professor Benjamin Fayomi, University Laboratory of Health at the Work and Environment (LUSTE)  
Keywords: pesticides, child, agriculture, Africa  
**Target**: Children implied in pre- and post- pulverization activities.

The goal of the project is to detect the clinical and biological disorders in children who have been pulverizing for at least 5 years. In Benin, the children work in agriculture either at their parents' sides or serving as agricultural hands. This study aims to determine the proportion of children subjected to plant health treatment, identify the pesticides to which the children are exposed, analyze their working conditions, and to evaluate their state of health. We will carry out a descriptive cross-sectional study in one of the sub-prefectures of the country. With this intention, we listed village groupings in which children take part in plant health treatment. We then will lead an investigation with a questionnaire with children chosen randomly. Among these, some will benefit from the proportioning of the rate of haemoglobin and acetylcholinesterase. We collaborate on this project with the National Institute of Research the agronomic project (INRA) in Benin.

**Travail des enfants en agriculture au Bénin**

Professeur Benjamin Fayomi, Laboratoire Universitaire de Santé au Travail et Environnement (LUSTE)  
**Mots clés** : Pesticide, enfant, agriculture, Afrique  
**Cible** : Ce sont les enfants impliqués dans les activités pré et post pulvérisation.


Sur ce projet on collabore avec l'Institut National de Recherche le projet agronomique (INRA) Bénin.

**NIOSH safety checklist program for schools -- OSH CD-ROM with a safety program and resources for schools (high schools to graduate schools)**

John Palassis NIOSH, USA, (JPalassis@cdc.gov)  
**Keywords**: safety, program, checklists, high schools, students, construction, curricula, young workers, CD-ROM  
**Target Group**: High school administrators and principals, school supervisors, teachers, professors, safety committees, students, small business owners, young workers

The aim of this project is to contribute and disseminate occupational safety and health information in a CD-ROM format to high schools, technical schools, and community colleges, undergraduate and graduate schools, to inform the school administrators and principals, school supervisors and teachers, professors, safety committees, and ultimately the students during school and after school as they enter in workplaces as young workers. The CD-ROM provides information on how to establish a safety and health checklist program based on 82 safety checklists, to increase awareness of workplace hazards, and ways to control the hazards. Included in the CD-ROM are numerous safety and health and environmental resources and hundreds of links to helpful organizations and government agencies, safety curricula, including young workers' resources.

The information in the CD-ROM went through extensive internal and external review, focus-group testing, and beta-testing (public review) on the NIOSH Website. The CD-ROM was approved by the Director of NIOSH with small revisions in September 2003 and was sent to the printer for duplication of 60,000 copies at the end of October 2003. Funding for the project is in place.

**Work and working conditions of children/adolescent workers**

Nguyen Ngoc Nga, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (n.n.nga@fpt.vn)  
**Keywords**: risk group, information, adolescent, working condition, global program  
**Target group**: Policy-makers, managers, Occupational Health staff, local authorities, employer, MOH, MOLISA
The objective of this project is to identify risks at work and determine the health status of working children, to raise awareness among employers, managers, policy-makers, MIOH, MOLISA to the existing risks for working children, the magnitude of the problem and the necessity of preventive measures. Funds have been secured by WHO.

**Translation of the ILO Brochure on the elimination of the worst forms of child labour into Italian language**
Irene Hawkins, Istituto dell’Approccio Centrato sulla Persona (IACP), Italy (Ihawkins@iacp.it)

**Model development of occupational health management in child labour in the informal sector**
Saijai Pinichvechakarn and Rachanekon Chomsuan, Ministry of Public Health, Thailand
WR Thailand will be contacted for funds. The project will be completed between 2003–2005.

**Contribution to the identification of hazardous occupations in Latin American countries**
Julietta Rodríguez Guzmán, FISO Colombia (jrodriguezg@fiso-web.org)
Funding for the project is in place. The completion date is yet to be agreed on.

For cross references see also:
TF 2 : African Joint Effort Newsletter on the web (www.sheafrica.info)
TF 4 : Network on mining and child labour
**TASK FORCE 4: ELIMINATION OF SILICOSIS**

Co-Chairs: Igor Fedotov, ILO (fedotov@ilo.org) and Gregory Goldstein, WHO (goldsteing@who.int)

The ILO/WHO Joint Committee on Occupational Health launched in 1995 a Global Programme on the Elimination of Silicosis from the world by 2030. The objective of this Task Force is to further develop and implement this programme, to encourage every country to develop its own national silicosis elimination programme, and to provide a knowledge base for countries that wish to launch a national programme. Prevention of pneumoconioses other than silicosis may be included as a part of the programmes at the regional and country levels, because occupational exposures to different kinds of dusts are widespread and the prevention and control activities for various pneumoconioses are to some extent related.

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**Preparation of a brochure to publicize the global programme on elimination of silicosis for mobilizing the international donor communities**

Igor Fedotov, ILO (fedotov@ilo.org) and Greg Goldstein, WHO (goldsteing@who.int)

**Keywords:** brochure, disease elimination, silicosis, global programme

**Target group:** decision-makers, planners and managers, and occupational health staff in Departments of Health, Departments of Labour, and Trade Unions in all countries with a known or suspected silicosis risk. Directors, managers, team leaders and occupational health staff of companies and enterprises associated with a risk of silicosis.

The objective of this project is to raise awareness among decision-makers in Departments of Health, Departments of Labour, Trade Unions, companies and enterprises associated with a risk of silicosis on the magnitude of the silicosis problem, and to demonstrate that the elimination of silicosis is a worthwhile and feasible objective, now being pursued by a global coalition, that they should support. A brochure will be prepared which will cover an introduction to silicosis, the global silicosis situation in developed and developing countries, a brief review of the established approaches to prevention, and a brief history of the global programme to eliminate silicosis with a list of programme elements.

A draft outline of the proposed brochure has already been prepared, with content and format defined, and is now under review. Suitable photographs to illustrate the text are being sought. Funding for the project is in place. It is scheduled to be completed by December 2003.

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**Development of simple dust control technologies widely applicable to various industries, in developing countries in particular**

Berenece Goelzer, International Occupational Hygiene Association (IOHA), Brazil (berenece@goelzer.net), David Zalk, IOHA, USA (zalk1@llnl.gov), Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

**Keywords:** Preventative Technologies Toolbox pneumoconioses, occupational hygiene, work-related illness, Dust Control Toolkit, training, technologies.

**Target group:** All interested CCs over and beyond those who have currently expressed interest, managers, team leaders and miners, and occupational health and safety staff in two coal enterprises associated with a risk of silicosis and coal miners’ pneumoconiosis.

The objective of this project is to disseminate knowledge on the principles and prevention of dust generation and control, and to promote the application of this knowledge into practical control solutions, by trade and occupational sector, applicable in developing countries and countries in transition. The dissemination is to include managers, technical teams and miners in two coal mines aiming at elimination of silicosis and coal miners’ pneumoconiosis. The aim is to develop these technologies to be included as a Dust Control Toolkit in the Preventative Technologies Toolbox. This process will include control banding principles, substitution, clean technologies, and other practical solutions.

The progress so far has been the coordination of two-day symposia on silicosis to focus on practical solutions and dust control principles, to be presented in association with the ICOH Congress in February 2003. The culmination of the information associated with this symposium will be a starting point for ongoing collaboration between IOHA and WHO in the collecting of practical solutions and case studies. This process will enrich the WHO document through practical experience acquired through the IOHA and the expertise found within.

A pamphlet of practical control technologies, by trade and occupational sector, for use in developing countries and countries in transition, has been prepared. Training courses on the application of simple dust control technologies in two coalmines are planned. A project proposal has just been approved by the funding body.

The centres collaborating on this project are: Japan (NIIH), China (Dept OH + IOM), Viet Nam (NIOEH), Chile (ACHS), Thailand (NICE + Dept. of PH), Russia (SCIOH), Bulgaria (NCHM), Serbia and Montenegro (IOPH), South Africa (NCOH) and India (NIOH).
Development of conventional technologies of dust measurement and control and training occupational hygienists in developing countries

Yasushi Shinohara (shinohara@niih.go.jp) and Norihiko Kohyama (kohyama@niih.go.jp), National Institute of Industrial Health, Kawasaki, Japan

**Keywords:** X-ray diffraction method (XRD), work environment, silica dust, occupational hygienists, developing countries

**Target group:** 1) National Institute for the Improvement of Working Conditions and Environment (NICE) that is an agency under the Department of Labour Protection and Welfare, Ministry of Labour and Social Welfare, Thailand. 2) National Institute of Occupational Safety and Health (NIOSH) in Malaysia.

The purpose of the project is the development of conventional methods of silica measurement that can be used for the control of work environment in developing countries. 2) Introducing the methods to occupational hygienists in developing countries.

Crystalline silica dust is a main causative material for silicosis of miners, tunnel and construction workers, etc. Measurement of silica dust in work place is the first step to control silicosis. XRD and IR methods are most effective for evaluation of silica dust, but the techniques are sometimes difficult and expensive for beginners. The first objective of this project is to develop some cheap and convenient techniques of XRD and Infrared (IR) method which are required in many countries, especially in developing countries.

The second objective of this project is to teach the developed methods to occupational hygienists and environmental measurement experts in developing countries.

The developed XRD method was tested for three forms of crystalline silica; quartz, cristobalite and tridymite, and confirmed for the availability. The types of crystalline silica formed from rice husk ash, a major residue of rice production in South Asian countries, were identified and quantified using the XRD and other methods. Final evaluation is in progress.

Under the joint project supported by JICA (Japan International Cooperation Agency), an instrument of XRD was introduced in NICE and NIOSH, 2000 and 2001, respectively, and we have conducted the training courses. Technical support has been continued via Internet communication with a trained hygienist in NIOSH since 2002. By sharing information obtained by XRD analysis, it becomes easy to advise the definite analytical method that can be used for the control of work environment.

### Contributing information on interventions to reduce silica exposure

Charles Levenstein, University of Massachusetts at Lowell (chucklev@aol.com)

Substantial progress has been reported in relation to 3 initiatives:

1. **Development of Measures of Silica Exposure in Construction**

   Dr. Susan Woskie, Associate Professor of Industrial Hygiene in the Work Environment Department is undertaking a continued study of silica exposure of construction workers on the “Big Dig” in Boston, Massachusetts.

2. **Policy Approaches to Silicosis Prevention**

   This initiative is led by Dr. Beth Rosenberg, Assistant Professor of Occupational Health at Tufts University School of Medicine (in collaboration with Prof. Charles Levenstein). Dr. Rosenberg’s petition to the Massachusetts Toxins Use Reduction Institute to list crystalline silica as a toxic substance has been successful. The effort has been aimed at reducing substantially, if not totally eliminating, the use of silica in abrasive blasting in private sector manufacturing in Massachusetts. In addition, all firms producing substantial amounts of hazardous waste in the state will be required to report data on use of crystalline silica. The Tufts-Lowell Silicosis Prevention Advisory Board, composed of public health officials, academic researchers and trade union representatives will be discussing next steps.

   Dr Rosenberg is examining economic and ergonomic aspects of using alternatives to silica in abrasive blasting. This project, now in progress, focuses on case studies of economic aspects of replacement of silica with substitutes in abrasive blasting, as well as changes in ergonomic stressors in using alternative technologies. The target audience is abrasive blasters.

3. **Cost Effectiveness of Silicosis Prevention Initiatives**

   Dr Supriya Lahiri, Professor of Economics at University of Massachusetts Lowell (in collaboration with Dr.Rosenberg and Professor Levenstein; and Dr. Marilyn Fingerhut, WHO, Geneva) is conducting a review of available data on effectiveness of silicosis prevention interventions, including substitution, engineering and administrative controls, use of personal protective equipment, training, and policy approaches. The project also includes estimations of costs of various programmes, and extrapolation of available data to make national and global estimates of cost effectiveness.

### Pilot introduction of the Programme “Good Practice in health, environment and social capital management in enterprises” (GP HESME) in the Republic of Bashkortostan

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**Keywords:** occupational health, workplace, health promotion and management


The purpose of the project is the adaptation of the European model of health, environment and social capital management in enterprises tested in an oil-gas extracting enterprise to make a decision on the possibility of the model use in enterprises of various economic branches.
The main distinguishing feature of the management model is an integrated approach to health promotion of the working population with the active participation of an employee, employer, as well as different state, public and scientific structures associated with this problem. The major condition of the model introduction is participation of the employer in promotion of health, life style, favourable work conditions and healthy environment including policy that is being implemented by the top manager and his colleagues. The aim is to change traditional ideas about determinants of the working population health. The project consists of analysis and evaluation not only of factors of work environment and work process but socioeconomic, sociopsychologic and sociohygienic factors determining life quality and human health.

Pilot investigations into the introduction of the European model of health, environment and safety management in enterprises, applied in the “Yuzharlanneft” oil extracting enterprise affiliated to the "Bashneft” joint stock company, have been carried out. The results obtained have been discussed at the International working meeting with the participation of the WHO Regional Adviser in Occupational Health Mr.Baranski, Director of the Moscow Institute of Occupational Health academician N.Izmerov as well as representatives of the republic of Belarusia, Kazakhstan and various regions of Russia. The Meeting has adopted the resolution approving results of the investigation and experience of the “Yuzharlanneft” enterprise introducing the European model.

The proceedings of the International working meeting dedicated to the problem of health, environment and social capital management in enterprises have been published. The Moscow Institute of Occupational Health affiliated to RAMS is collaborating on the project.

Facilitating interaction between Collaborating Centres and providing information on dust control technologies
Paul Schulte, NIOSH, USA (pschulte@cdc.gov)

The objective of this project is to facilitate interaction between Collaborating Centre, NIOSH divisions and the United States Silicosis Prevention Initiative partners (OSHA, MSHA, National Industrial Sand Association) to provide information on simple and effective dust control technologies, including best practices, and to contribute materials from the silicosis prevention initiative, such as educational materials and dust sampling strategies. Funding for this on-going project is in place.
Updating WHO guidelines on health surveillance of silica-exposed workers

Gregory Wagner, NIOSH, USA (GWagner@cdc.gov)

Keywords: silicosis; screening; secondary prevention; surveillance; pneumoconiosis

Target group: physicians, public health workers, ministries of health, employers, employee organizations, trade associations

The objective of this project is to assist in updating the WHO guidelines on health surveillance of silica-exposed workers. It aims to continue to assist WHO and ILO in training occupational health physicians to recognize silicosis.

In 1996, the WHO published a monograph providing guidance on “Screening and Surveillance of Workers Exposed to Mineral Dusts.” The monograph was the result of an extensive, extended collaborative process reflecting a high level of cooperation between the WHO and the ILO and of involving experts from over a dozen countries. One of the primary goals of the current task is to update the guidelines laid out in the monograph to reflect experience using the guidelines and scientific developments since its production. In addition, there is a continuing effort to train physicians and other public health workers in approaches and techniques, reflecting current guidance, that will improve screening and surveillance of workers exposed to crystalline silica as part of the overall effort to develop and implement national programmes for silicosis elimination.

Scientific research likely to lead to improved recommendations is continuing. The revision of the ILO system for classification of radiographs for pneumoconiosis, a central part of the guidelines, has been completed and is publicly available. There is continuing participation in national Training Courses in silicosis prevention sponsored by the ILO and WHO, most recently in Viet Nam in April 2002.

Funding is in place. The project will be completed by December 2005.

A hazard review document on silica

Faye Rice, NIOSH, USA (FRice@cdc.gov)

Target Group: workers, occupational health and safety scientists, physicians, epidemiologists, regulators, policy makers, industrial hygienists, analytical chemists, and all who need knowledge of the adverse health effects of respirable crystalline silica.

The aim of this project is to contribute a hazard review document on silica and perform a number of quantitative risk assessments. The NIOSH Hazard Review examines the health risks and diseases associated with occupational exposure to respirable crystalline silica, discusses findings from recent epidemiological studies, and suggests areas for further research to help answer ongoing questions about the hazards of exposure. Quantitative risk assessments will examine excess lifetime risks of lung cancer and lung disease other than cancer in a cohort of U.S. diatomaceous earth workers.

The NIOSH Hazard Review was published May 2002, the Risk Assessment for lung diseases other than cancer in January 2002 and the Lung Cancer Risk assessment in January 2001. The two quantitative risk assessments were published in *Occupational and Environmental Medicine* Volumes 58 (lung cancer) & 59 (lung disease other than cancer). The risk assessment of radiographic silicosis in three pooled cohorts is in progress. The foreseen date for completion and publication of that risk assessment is December 2004. Funding for this project is in place.

The Evaluation of Silica Exposure in the Foundry

Youngman Roh, Catholic Industrial Medical Centre, Korea (ymroh@catholic.ac.kr)

Keywords: silica, foundry, exposure, pneumoconiosis, silicosis

The objective of this project is to evaluate the silica exposure level for foundry workers and to provide the appropriate control strategy. The project will cover the 30 foundries located in Incheon Area, Korea. The airborne silica levels are evaluated for the process of melting, coremaking, moulding, and finishing. The appropriate control strategy will be provided for the high-risk group.

The first survey was started jointly with the Korean Occupational Safety and Health Agency (KOSHA) and is now undertaking a first report.

Research on silica dust, lung function and silicosis, and a model programme for integrated prevention of dust exposure and surveillance of respiratory health

Jonny Myers, University of Cape Town, South Africa (jmyers@iafrica.com or Myers@cormack.uct.ac.za)

Keywords: lung function, silicosis, surveillance, longitudinal tracking

Target group: occupational health practitioners on the mines including medical, nursing, occupational hygiene and environmental engineering personnel. Also personnel in the public sector inspectorates and compensation authorities.

The purpose of this project to develop longitudinal lung function tracking software for surveillance programmes on mines that is more sensitive for prevention of silicosis and other lung diseases among mineworkers, and to evaluate current respiratory and dust surveillance programmes on the mines with a view to optimising their functioning in the service of prevention.

Surveillance systems will be studied for dust and respiratory disease. Cross-sectional data for lung function will be analysed with respect to exposures in the gold and platinum sectors. Longitudinal data for lung function will be analysed against dust exposures for same. Data sources will be routine surveillance and also special surveys set up to investigate exposure response.
relationships. Software tracking lung function changes over time in miners based on longitudinal data generated by unexposed workers will be used to develop adaptive reference ranges making best use of repeat longitudinal surveillance data to detect abnormal deterioration in lung function as early as possible.

Currently data available from routine and special survey sources is being analysed with a view to establishing exposure response relationships in the gold and platinum sectors. Information about surveillance systems for dust and respiratory health is being sought internationally in order to identify effective and efficient systems that integrate the two components in a meaningful manner.

**Provision of a model national programme with indicators addressing the size of the silicosis problem and progress of the national programme**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

**Keywords:** dust monitoring, health surveillance, diagnosis of silicosis, control technologies, training

**Target group:** decision-makers, planners and managers, occupational health personnel

The objective of this project is to provide a model national programme which aims at the elimination of silicosis and coal miners’ pneumoconiosis. Based on the magnitude of the silicosis problem and given that the elimination of silicosis is a worthwhile and feasible objective, now being pursued by a global coalition, a model national programme aiming at elimination of silicosis is being developed. The important indicators of a model national programme will be selected to address the magnitude of the problem of silicosis and coal miners’ pneumoconiosis, and the progress of dust control. A project proposal has been approved by the funding bodies, the Chinese Ministry of Health and the Chinese Ministry of Science and Technology. The ILO and the Chinese Ministries of Health and of Science and Technology are collaborating on the project. It is scheduled to be completed by 2005.

**Training in respiratory dust monitoring at workplace**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

**Keywords:** dust, training, monitoring

**Target Group:** Occupational hygienists in mineral dust exposed industries

The purpose is to train in application of personal sampling technique for respiratory dust monitoring

This is an on-going project for the period 2002-2003. Two training courses have been held. The third training course is in the planning stage. Funding from WPRO/WHO is in place.

**Contribution to the organizing activities for hosting 'The Tenth International Conference on Occupational Respiratory Diseases' to be held in Beijing in 2005**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

**Target Group:** Occupational health professionals

The purpose is help ILO and the Chinese Ministry of Health in organizing the Congress. The ILO and the Chinese Ministry of Health are responsible for the organizing activities. This Centre is involved in some preparatory work for scientific committee. Announcement: www.who.int/oeh/OCHweb/OCHweb/OSHpages/Welcome/Conference_China.pdf

**Inquiry on silicosis in Tunisia**

Habib Nouaigui and Leila Daly, Institute of Health and Security at Work, Tunisia

**Keywords:** silicosis, mines.

**Target group:** miners (of lead, zinc and iron mines)

The objective of this project is to determine the prevalence of silicosis in Tunisia. It is a comprehensive and exhaustive epidemiological study aiming to determine the prevalence of silicosis in iron, lead and zinc mines in the North West of Tunisia. Tracking was done by first taking X-rays of the thorax (10 X 10). Standard X-rays were then asked for in cases of suspected silicosis, with spirometrics, questionnaire and clinical checkup for respiratory reasons. The inquiry was made in collaboration with the pneumology services of the Ariana Hospital of Tunis, during the period 2001/2002. The X-ray tracking involved 79% of the 571 workers of the mining society.

In 99 cases, a standard X-ray of the thorax was requested. It identified 11 cases of silicosis (prevalence = 2.4%). The characteristics of the touched population are: average age = 56 yrs; average exposure time = 23 years in depth; 8/11 occupied a job in drilling. The X-ray image observed was very advanced in one case (3/3 pp UML), advanced in 7 cases (1/2, 2/1, 2/2 ppUML) and just beginning in 3 cases (1/1 pp). In two cases, effects of tuberculosis were present. The silicotics were banished from exposure.

This inquiry, which is registered in the framework of tracking silicosis undertaken regularly at national level since the 1970s, shows a definite regression of this pathology in the mines of the North West with a prevalence which decreased from 7% in 1984 to 2.4% in 2002.
Establishment of a national silicosis elimination programme in countries with silicosis exposure with the help of a model programme
Igor Fedotov, ILO and Greg Goldstein, WHO

A national action programme involves governmental agencies, industry and trade unions in collaborative action and establishes a sound infrastructure to combat silicosis. It provides a knowledge base and support to ensure systematic programme development for surveillance and preventive activities. A feasible prevention strategy requires a thorough knowledge of local conditions and the national situation, proven safety measures, and opportunities for innovations. The elements of a national programme include: laws and regulations, enforcement of occupational exposures and technical standards, governmental advisory services, an effective system of inspection, and a well-organized reporting system.

Establishment of a national elimination programme in countries with silicosis exposure with the help of model programme
M Giraldo (mgiraldo@minproteccionsocial.gov.co), Ministry of Health, Group for the Promotion of Workers’ Health, Colombia

Keywords: silicosis, elimination, pneumoconiosis

Target Group: coalminers, quarry workers

The objective of this project is to identify and characterize exposure, and intervene to implement control strategies. A detailed characterization of the insurance status of workers will be formalized initially, as well as the characteristics of processes of risks that generate fibrogenic pneumoconiosis silicosis. Additionally the implantation of specific programmes like epidemiological surveillance of the environmental and biological behaviour of the exposition will be encouraged. The Ministry will lead the drawing up of these models. Program design is underway. The project is in search of funds. It is scheduled to be completed between 2002 and 2005.

Development of a comprehensive training package addressing the whole procedure of silicosis elimination, emphasizing the use of simple dust control methods and extension of protection to many workplaces
Berenice Goelzer, IOHA, USA (berenice@goelzer.net), David Zalk, IOHA, USA (zalk1@llnl.gov), Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Keywords: Preventative Technologies Toolbox pneumoconioses, occupational hygiene, work-related illness, Dust Control Toolkit, training package, dust control, silicosis elimination

Target group: all interested CCs over and beyond those who have currently expressed interest, decision-makers, planners and managers, officers in the Ministries of Health, Labour, and trade unions in China; directors, managers, team leaders, workers and occupational health staff of companies and enterprises associated with a risk of silicosis.

The objective of this project is to develop a comprehensive training package, in the form of a Dust Control Toolkit for the Preventative Technologies Toolbox. The goal of this is to disseminate knowledge and raise awareness on the principles and prevention of dust generation and control, and to promote the application of this knowledge into practical control solutions, by trade and occupational sector, applicable in developing countries and countries in transition. This process includes control banding principles, substitution, clean technologies, and other practical solutions. A pamphlet of practical control technologies, by trade and occupational sector, for adaptation into a Dust Control Toolkit for use in developing countries and countries in transition, is being prepared. The objective of this project is to raise the awareness of dust control and silicosis elimination. It consists of a training package addressing the whole procedure of silicosis elimination, emphasizing the use of simple dust control methods and extension of protection to many workplaces. The package will cover an introduction to silicosis, the global silicosis situation in developed and developing countries, a brief review of the established approaches to prevention (dust...
control, health surveillance), and a brief history of the global programme to eliminate silicosis with a list of programme elements.

The achievements so far have been the coordination of two-day symposia on silicosis to focus on practical solutions and dust control principles, to be presented in association with the ICOH Congress in February 2003. The culmination of the information associated with this symposium will be a starting point for ongoing collaboration between IOHA and WHO in the collecting of practical solutions and case studies. This process will enrich the WHO document through practical experience acquired through the IOHA and the expertise found within. In addition, the necessary first steps to move ahead the training package process were presented in a two day workshop on Control Banding hosted in London, UK on the 4th and 5th of November, 2002. At this workshop, the basic principles for developing an appropriate training strategy for developing countries, and those in transition, was presented.

A draft outline of the proposed brochure is being prepared, with content and format defined. Suitable photographs to illustrate the text are being sought. The project is funded in part by the Chinese Ministry of Health and the National Safety Council. WHO, ILO and the National Safety Council are collaborating on this project. It will be completed by 2005. Other centres collaborating on the project are Japan (NIIH), China (Dept OH + IOM), Viet Nam (NIOEH), Chile (ACS), Thailand (NICE + Dept. of PH), Russia (SCIOH), Bulgaria (NCHM), Serbia and Montenegro (IOPH), South Africa (NCOH) and India (NIOH).

Preparation of a guideline on health surveillance of dust exposed workers
Dehong Li, National Institutes in Occupational Health and Poison Control, China (Dehong@263.net)

Keywords: health surveillance, dust exposure

Target Group: mineral dust exposed workers

The purpose of this project is to clarify the requirements and methods of health surveillance for workers with dust exposure. A survey on the health surveillance practice in workers exposed to various kinds of mineral dust is on-going. Funds have been provided by the Ministry of Sciences and Technology for 2003-2005.

Organization of an international meeting to review the relationship between TB and silicosis
David Rees, National Centre for Occupational Health, South Africa (reesd@health.gov.za)
Matti Huuskonen, Finnish Institute of Occupational Health, Finland (matti.huuskonen@occuphealth.fi)
H.N. Saiyed, National Institute of Occupational Health, India (saiyedhn@yahoo.com)
The National Institute of Occupational Health and Poison Control, Chinese Centres for Disease Prevention and Control, Beijing, is also interested in this activity.

Funds are only partially in place. The project is scheduled to be completed by 2003.

Publication in the peer reviewed scientific literature of detailed and accurate exposure-response information for risks of silicosis, on which workplace standards can be based
Colin Soutar, Institute of Occupational Medicine, UK (Colin.Soutar@IOMHQ.org.uk)

Keywords: silica, risks, silicosis

The objective of this project is to disseminate exposure-response information. It includes the publication in the peer review scientific literature of detailed and accurate exposure-response information for risks of silicosis, on which workplace standards can be based.

Funding is in place for this on-going project.

International training workshops on the prevention of pneumoconioses
Rachaneekorn Chomsuan, Ministry of Public Health, Thailand

Funding is in place except for expenses of international experts. The project is scheduled to be completed by November 2003.

Training for physicians in interpreting B reader X-rays
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Four training courses have been completed in 2002, with more than 200 participants. The project is funded by the Ministry of Health, China. It will be completed by 2005.

Spanish-language ILO radiology course
Gustavo Contreras, Asociación Chilena de Seguridad, (ACHS) Chile (fctgct@gw.achs.cl)

The course is complete and ready to be used for teaching professionals in the region. All the training material is ready and has been used several times.
The host country or Institution is required to provide the funds to support local arrangements and provide the facilities for the teaching. The Occupational Society of Argentina had requested for the course to be conducted. However the current situation in Argentina led to a postponement of the course. It is planned to provide the course in Chile. This event could be financed by a copper company. Other countries and institutions are invited to contact the project team for new courses.

The WHO/ILO Joint Effort in Occupational Health in Africa and practical steps towards the elimination of silicosis

Sophia Kisting, Occupational and Environmental Health Research Unit, School of Public Health and Primary Health Care, South Africa (skisting@cormack.uct.ac.za)

**Keywords:** African Joint Effort, disease elimination, silicosis, airborne dust

**Target group:** Policy makers, occupational health and safety staff in different government departments, Trade Unions, training and research institutions, representatives from industries where there is a risk of exposure to silica dust.

South Africa is one of the countries that are fortunately well placed to embark on a realistic national programme to eliminate silicosis. Challenges include:

- high prevalence of dust related lung diseases among miners, ex-miners and workers in non-mining silica dust industries
- known link between silica dust exposure and tuberculosis (TB)
- high prevalence of TB in South Africa as well as the increasing risk of TB because of the HIV/AIDS pandemic
- link between silica dust exposure and cancer as confirmed by the International Agency for Research on Cancer (IARC)
- ongoing exposure to silica dust and efforts to control this
- the need for one standard with regards to silica exposure limits
- gender concerns in silicosis
- collaboration among role-players on preventive measures

Strengths include:

- an enabling constitution
- host to the October 2002 World Summit on Sustainable Development (WSSD)
- the existence, since 1994, of a strengthened occupational and environmental health and safety legislative framework
- rich experience of trade unions working towards better occupational and environmental health and safety
- participation of government in multi-stakeholder projects to reduce occupational and environment risks (e.g. Asbestos Summit 1998)
- capacity and willingness within industry to reduce dust levels and implement medical surveillance programmes
- academic institutions with sound experience in teaching as well as participatory and intervention research

The purpose of the project is to raise awareness among health service providers concerning the important relationship between silica dust exposure and the development of Tuberculosis; to assist with the co-ordination of multi-stakeholder workshops to share information and experience with regards to the elimination of silicosis; to assist with the co-ordination of the training of health service providers in the use of the ILO Standard X-rays for the diagnosis of pneumoconiosis.

The following progress has been made:

- The Advisory Council for Occupational Health (ACOHS) discussed the elimination South Africa in its 2002 meetings.
- A multi-stakeholder planning meeting to discuss the elimination of silicosis took place on 22 January 2003. Information was exchanged and plans made to take the process forward in a participatory way.
- At the International Union Against Tuberculosis and Lung Diseases (IUATLD) Africa Region conference in Durban in June 2002, a paper presented on the elimination of silicosis in the prevention of TB resulted in nurses in some TB clinics asking about silica dust exposure among their TB patients
- Greater awareness about the ILO/WHO Global Elimination of silicosis
- Meetings with members of the National Institute of Working Life (NIWL) in Sweden concerning a pilot course they designed on airborne dust control resulted in the hosting of 2 pilot workshops on airborne dust for participants from Southern Africa.
- At the October 2002 meeting of the Global Health Research Forum of WHO, a paper was presented on the role of the WHO/ILO Joint Effort in OHS in Africa with a focus on silica dust elimination
- In August 2001, Dr Greg Goldstein of the WHO and Dr Kisting raised with each one of the Joint Effort partners the possibility of collaboration on silicosis elimination programmes.

In collaboration with the National Institute of Working Life (NIWL), UCT and NCOH are conducting two pilot workshops in March 2003 on airborne dust control. A meeting of South African stakeholders is planned to discuss elimination of silicosis with participation of all role-players.

**Prevention of asbestos-related disorders in Asia**

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**Keywords:** asbestos, Asia, global asbestos epidemic, descriptive statistics, country reports
Despite being mostly formulated by the scientific community, the message needs to be directed to administration, politicians, employers, and employees as well as society at large.

The objective of this project is to assess the overall situation of each country and region regarding asbestos issues using descriptive status on exposure and disease status. Macro-indicators considered allow comparison within the region as well as with Western countries. The goal is first to collect information, summarize in a comparable form, and then share it globally. The synopsis of the results foreseen will be presented in variable forms. There is a possibility that a follow-up meeting will be organized.

An "Asbestos Symposium for the Asian Countries" was organized with support from WHO-WPRO and ILO, which brought together over 25 delegates from 11 countries from the Asian region and 5 delegates from Europe. This was a joint effort by UOEH and FIOH, co-sponsored by ICOH-SC on Respiratory Disorders and supported by WHO and ILO. In this Symposium, in addition to the keynote lecturers from Finland, Sweden, and Japan, there were Country Reporters (at least two from each country) to discuss the relevant country situations of China, East Timor, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Thailand, and Viet Nam. An international delegate participated via an Internet video conference. Through the exchange of experiences in both developed and developing countries, an initiative was developed to "map" the overall situation in the region as well as to formulate possible solutions to cope with the health hazards of asbestos. Country reports were produced for 11 countries. Printing of Proceedings has now been completed. The conference was co-organized by the Finnish Institute of Occupational Health, and supported by WHO-WPRO, ILO, and ICOH-SC on Respiratory Disorders.

A speech was delivered by Takahashi at the Asian Conference of Occupational Health in Taiwan, Nov 1-4 2002.

### Monitoring of respiratory effects in workers occupationally exposed to asbestos

**Jindřiška Lebedová, National Institute of Public Health, Czech Republic (jindra.lebedova@lf1.cuni.cz)**

**Keywords:** asbestos exposure, respiratory impairment, chest X-ray

**Target group:** Persons occupationally exposed to asbestos in refining plants in the Czech Republic 1950 – 2002. The group mainly comprises ex-employees who were mostly exposed to chryzotil and, to a lesser extent, krocidolit.

The purpose of the project is to establish a proposal for recommendations for indication of a detailed radiological examination of persons occupationally exposed to asbestos with minimal changes visible on a frontal chest x-ray. This includes monitoring of the relationship between exposure, latency, subjective complaints and pulmonary dysfunction in persons occupationally exposed to asbestos. Data analysed in relation to findings on a frontal chest x-ray or HRCT. Results are to be used for writing recommendations for indication of a detailed radiological examination of these persons, with a view to health and economic aspects.

So far, a group of 112 people with previous occupational exposure to asbestos and without any parenchymal changes on the chest X-ray was examined. The preliminary results show that people with pleural or parenchymal changes on the HRCT had a decrease in total lung capacity (TLC), slow vital capacity (VC) and forced vital capacity (FVC), forced expiratory flow from 25-75% of the FVC (FEF25-75%), forced expiratory flow from 75% of the FVC (FEF75%), and diffusing capacity of carbon monoxide (DLCO). This effect was observed also when chest X-ray was without any pathological changes. During the period between 2003 and 2004 we will continue with accumulating data, continuous analysis and evaluation.

The project is funded by the Ministry of Health of the Czech Republic. The Department of Occupational Medicine of the 1st Faculty of Medicine, Charles University and General Teaching Hospital, Prague, as well as the Department of Biostatistics and Informatics of the National Institute of Public Health, Prague, are collaborating on the project.

The planned outcome of the project is a publication of recommendations for the indication of a detailed radiological examination of these persons, who have only minimal changes on a frontal chest X-ray.

The final analysis and evaluation will be conducted in 2005.

### Intervention study to reducing risk of respiratory diseases among foundry workers

**Nguyen Khac Hai, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (haink@hn.vnn.vn)**

**Keywords:** respirator, foundry, silicosis, respiratory, worker education, standard, intervention

**Target group:** academic institutions, Agency for standard and qualitative measurement, Occupational medicine center for industry

The main objective of this project is to reduce the risk of respiratory diseases among foundry workers. Funds have been secured by WHO.

### Network on mining and child labour

**Susan Gunn, ILO/IPEC (gunn@ilo.org)**

Funding for this on-going project is partially in place. WHO Collaborating Centres will be approached to participate and support the networks in their regions and areas of interest.

### Other projects related to pneumoconioses and asbestosis

**Yuri I. Kundiev Institute of Occupational Health, Ukraine (basanets@ioh-ams.kiev.ua)**
Robert Cohen, Great Lakes Centres for Global Environmental and Occupational Health, University of Illinois in Chicago, USA (bobcohen@uic.edu)

**Keywords:** Respiratory disease, coal miners, Ukraine, occupational respirable dust exposure.

**Target group:** decision-makers and occupational health staff in the Ministry of Health, Fund of Social Insurance from Work Accidents and Occupational Diseases, directors and managers of mines, mining union safety officials.

The objective of this project is a) to raise awareness among decision-makers and occupational health staff in the Ministry of Health, Fund of Social Insurance from Work Accidents and Occupational Diseases, directors and managers of mines associated with a risk of pneumoconiosis; b) to reduce high dust exposure in underground coal mines and c) to decrease prevalence of pneumoconioses in coal miners.

The project includes the following elements:

- To develop a surveillance programme to determine the prevalence of occupational lung diseases in a random sample of 700 coal miners taken from a cohort of 7000 active coal miners in three coal mines.
- Gather occupational, smoking and clinical history, demographic and diagnostic information for miners.
- Evaluate the prevalence and severity of lung diseases in miners:
  - determine the prevalence and severity of lung function impairment using standardized spirometry testing;
  - determine the prevalence of respiratory symptoms using a standardized questionnaire;
  - determine the prevalence of chest radiograph positive pneumoconiosis;
  - evaluate the use of spirometry as a medical tool;
  - gather baseline data that could be used in a longitudinal study of lung function to determine incidence of accelerated decline of lung function in the population.
- Obtain coal mine dust sampling data.
- Make recommendation to improve current surveillance programmes for occupational lung diseases and assist the appropriate agencies/programmes in the implementing these recommendations.

The following observations have been made so far:

- Rates of radiologic pneumoconiosis, ILO category 1/0 or greater, were found to be 1.32 to 2.75 times the U.S. levels of 2.8%. Seven percent of miners had significant impairment of FEV1 and 13% had obstructive impairment defined as a low FEV1/FVC ratio. Ten percent of miners reported symptoms or shortness of breath and chronic bronchitis. Rates of pneumoconiosis, lung function impairment, and respiratory symptoms appear to be relatively low compared to levels of dust exposure documented in Ukrainian coalmines. This may be the result of a significant healthy worker effect. Further analysis of the relationship between coal mine dust exposure and smoking history to outcome measures is being performed.
- Dust sampling revealed levels of respirable dust collected during mining with a geometric mean of 5.27 mg/m³ (GSD 2.6). The geometric mean for all samples of respirable quartz collected during mining was 75.7 µg/m³ (GSD 3.1). Seventy-five percent of all personal samples exceeded the U.S. occupational exposure limit. Coalmine dust levels in Ukrainian coal mines are significantly higher than the US PEL. High concentrations of quartz were found in these mines. Prolonged exposure at these levels could cause significant rates of pneumoconiosis and respiratory impairment.

2 presentations at ATS, published in the American Journal of Respiratory and Critical Care Medicine in April 2002. The pilot stage was initiated in September 2000, and finished in September 2002. The new foreseen completion date of main stage is 2006. The Scientific Research Institute of Medico-Ecological Problems of Donbass and Coal Mining Industry, Donetsk, Ukraine, (Director: Vladimir Mukhin) is collaborating on the project.

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**Provision of a model national programme with indicators addressing the size of the silicosis problem and progress of the national programme**

Le Van Trung, National Institute of Occupational and Environmental Health, Viet Nam (letrung@hn.vnn.vn)

This on-going project is in search of funds.

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**Health risk assessment and development of intervention programme in cottage industries with high risk of silicosis**

H.N. Saiyed (saiyedhn@yahoo.com), National Institute of Occupational Health, Ahmedabad, India.

**Keywords:** Agate industry, quartz grinding industry, stone quarries, dust control system.

**Target groups:** Policy makers, owners, workers, medical officers working in the industry, trade unions, health personnel particularly those connected with tuberculosis programmes, general public with emphasis on people living in the surrounding of the high risk industry.

The purpose of the project is to generate data on silica exposure related morbidity and mortality in cottage industries with high risk of silicosis and to develop intervention programme. This project is the part of National Silicosis Elimination Programme which has following components:

- Identification of industries with high risk of silicosis through literature survey, and field surveys.
Develop strategy for prevention and control of silicosis and other silica exposure related health problems which will consist of (a) Generation of awareness; (b) Development of dust control system (c). Development of trained man power.

So far, data has been generated on environmental conditions and morbidity due to silica exposure in (a) agate industry (b) quartz grinding industry (c) stone quarries. Dust control systems have been developed and successfully installed for the agate industry. For two other industries namely stone crushing and stone mining it is on the way. Several awareness programmes have been completed for various target groups. Brochures and video films for various target groups have been prepared and distributed. Training programmes for medical personnel and other target group have also been organized.

Other Centres that collaborate on the project are the Director General Mines Safety, Government of India; Desert Medicine Research Centre, Jodhpur, India; Chief Inspectors of Factories Gujarat and Rajasthan State; Director General, Labour Institute, Mumbai.

Training of occupational health physicians and other experts working in industries with the risk of silicosis

H.N. Saiyed (saiyedhn@yahoo.com), National Institute of Occupational Health, Ahmedabad, India

Target groups: Medical officers working in mining and surface industries with risk of silicosis and other dust related occupational lung diseases. Medical officers practicing near the high risk industry.

The purpose of the project is to develop man power for the diagnosis of silicosis and dust related occupational diseases. This project is the part of National Silicosis Elimination Programme which has following components.

- Identification of industries with high risk of silicosis through literature survey, and field survey.
- Develop strategy for prevention and control of silicosis and other silica exposure related health problems which will consist of (a) Generation of awareness; (b) Development of dust control system (c). Development of trained man power.

So far a training programme has been organized for the medical officers at Ahemdabad (NIOH), Jodhpur (DMRC) and Dhanbad (for medical officers working in mines by Director general mines safety in collaboration with ILO and Indian Association of Occupational Health).

Other Centres collaborating on the project are the Director General Mines Safety, Government of India; Desert Medicine Research Centre (DMRC), Jodhpur, India; Chief Inspectors of Factories Gujarat and Rajasthan State.

Documentation of methodologies and iconographical materials related to Phase contrast light microscopy and powder diffractometry

Vito Foà, Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza negli Ambienti di Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del lavoro e l’Igiene Industriale (omscons@unimi.it)

Keywords: asbestos, silica, X-ray diffraction (XRD), Phase Contrast Optical Microscopy (PCOM).

Target group: occupational Health Physicians, industrial hygiene professionals, researchers, laboratory technicians.

An atlas and a CD-Rom have been published in Italian with legends translated in English (La Medicina del Lavoro 2001; vol. 92 (suppl), Casa Editrice Mattioli, Fidenza).

The Atlas presents the evolution of research activity in the last 50 years on solid airborne contaminants originating mainly from the industrial treatment of silica, silicate and asbestos materials, and the methodologies adopted in the Toxicology and Industrial Hygiene Laboratory (Clinica del Lavoro “L. Devoto”) for the characterization of crystalline free silica, asbestos and substitutive fibres. It offers a wide documentation of technical schedules, diffractograms and microphotographs (using Phase Contrast Optical Microscopy with the Dispersion Staining Method). It mostly covers the results of scientific studies made in the last 60 years at the Institute of Occupational Health, now Department of Occupational Health, of the Clinica del Lavoro “Luigi Devoto” of the University of Milan, although ample space is also given to the results of studies performed by well known research workers in Italy and from all over the world.

The first chapter concerns sampling, measurement and analysis of various types of silica and silicate materials, either raw or in the form of airborne dusts in the working environment, with special attention to determination via chemical, diffractometric and microscopic techniques of free crystalline silica in its various allotrop forms, according to the methods used in the Laboratory of Industrial Hygiene and Toxicology of the Clinica del Lavoro of Milano.

Chapter 2 describes the evolution of sampling and counting methods of airborne fibres of various types of asbestos, and also the methods of identification and qualitative discrimination of fibres used as a substitute for asbestos which were developed in the mentioned Laboratory.

Chapter 3 consists of a photomicrographic and diffractometric atlas illustrating the results of analyses of materials and dusts containing silica, asbestos and asbestos substitute fibres.

Caratterizzazione di polveri e fibre aerodisperse con particolare riguardo alla silice ed agli amianti

Vito Foà, Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza negli Ambienti di Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del lavoro e l’Igiene Industriale (omscons@unimi.it)

Parole chiave: silice, amianti, diffrattometria per polveri, microscopia ottica a contrasto di fase, fotomicrografia

Utenza destinatane: Medici del Lavoro, Igiene Industriali, Ricercatori e Tecnici di Laboratorio.
La pubblicazione presenta in sintesi l’evoluzione dell’attività di ricerca sulle polveri minerali aerodisperse in quest’ultimo mezzo secolo di lavoro e illustra nel dettaglio le metodiche analitiche attualmente adottate nel Laboratorio della Sezione di Igiene e Tossicologia Industriale della Clinica del Lavoro “Luigi Devoto” di Milano per la caratterizzazione della silice libera cristallina, degli amianti e delle fibre sostitutive.
È presentata un’ampia documentazione di schede tecniche, spettri da diffrazione di polveri e fotomicrografia al microscopio ottico a contrasto di fase in dispersione cromatica.
Il lavoro riporta l’evoluzione dell’attività di ricerca svoltasi nell’ambito dello studio dei contaminanti solidi aerodispersi, originati principalmente dal trattamento industriale dei materiali silicei, silicatici ed amiantiferi.
Sono essenzialmente considerati i risultati dei lavori scientifici conseguiti negli ultimi 60 anni nell’Istituto di Medicina del Lavoro, ora Dipartimento di Medicina del Lavoro Clinica “L. Devoto”, dell’Università degli Studi di Milano, senza peraltro trascurare quelli raggiunti dai più noti studiosi italiani e stranieri nell’ambito specifico.
Il primo capitolo riguarda il prelievo, la misura e l’analisi di vari tipi di materiali silicei e silicatici, grezzi o in polveri aerodisperse negli ambienti di lavoro, con particolare riguardo alla determinazione per via chimica, diffrattometrica e microscopica della silice libera cristallina nelle sue varie forme allotropiche, secondo le metodiche adottate dal Laboratorio di Igiene e Tossicologia Industriale della Clinica del Lavoro di Milano.
Il secondo capitolo fa riferimento all’evoluzione dei metodi di prelievo e di conteggio delle fibre aerodisperse dei vari tipi di amianto, nonché ai metodi di individuazione e discriminazione qualitativa delle fibre sostitutive dell’amianto, messi a punto nel predetto Laboratorio.
Nel terzo capitolo è riportato un atlante fotomicrografico e diffrattometrico illustrativo dei risultati analitici su materiali e polveri contenenti silice, amianto e fibre alternative.

Silicosi Elimination Programme in Thailand
Ministry of Public Health, Thailand (person responsible is to be appointed)
This project is funded by the Government of Thailand. It will be completed before 2005.

A National action plan on silicosis prevention and elimination in Vietnam
Nguyen Thi Hong Tu, Ministry of Health, Vietnam (hongtu@netnam.vn)
Keywords: Silicosis, prevention, elimination, workers, silica dust, medical surveillance, detection, training
Target group: decision-makers at Ministries, employers’ organizations, academic institutions
The objective is to reduce annual incidence of silicosis and eliminate silicosis in Viet Nam by the year 2020.
The programme was started in 1999 at ministry level. With the multi-sectoral implementation mechanism, the programme has achieved the response and active participation of employers, employees, as well as support from governmental and international organizations (ILO, WHO, SIDA-Sweden, Washington University). In 2002, the programme was recognized as a National Programme of Silicosis Elimination.
A mechanism for the elimination of silicosis at the enterprise level will be institutionalized in the legislation. This will require that employers increase their investment in reducing dust in the work environment and take care of workers’ health.
Fund have been secured by ILO, Vietnam Government, but the programme on silicosis prevention needs further support from international organization and industries in order to reach the new goals of the programme in the coming years.

Assessment of actual situation of silicosis diagnosis by X-ray film1980 in Vietnam
Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)
Keywords: Silicosis, diagnosis, workers, silica dust, detection, X-ray film
Target group: decision-makers at Ministries, employers’ organizations, academic institutions
The objective of this project is to identify capacity of national and provincial occupational health workers in diagnosis of silicosis using X-ray film 1980. The project will start in 2004 and funds have been secured by WHO, Vietnam Government, ILO.

Training workshop on interpreting radiographs of pneumoconiosis using ILO classification 2000
Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)
Keywords: silicosis, diagnosis, workers, silica dust, detection, X-ray film
Target group: decision-makers at ministries, academic institutions
The objective of this project is to provide and improve knowledge and capacity of national and provincial occupational health workers in diagnosis of silicosis using ILO international classification of radiographs of pneumoconiosis 2000.
The project will start in 2004 and funds have been secured by WHO, Vietnam government, ILO.
Contribution to the national programme on elimination of silicosis in South Africa and silicosis in Southern Africa
David Rees, Occupational Medicine Section, National Centre on Occupational Health, South Africa (reesd@health.gov.za)
Funds have been applied for. The first stage of the project will be completed in 2003.

Training for physicians in interpreting X-ray film reading
Le Van Trung, Institute of Occupational and Environmental Health, Viet Nam (letrung@hn.vnn.vn)
This project is in search of funds.

Coal workers pneumoconiosis in Russia
Nikolai Izmerov, RAMS Institute of Occupational Health, Russian Federation (izmerov@rinet.ru)
In collaboration with the Novokuznetsk Institute of Occupational Health
The project is in search of funds. It is scheduled to be completed by June 2003.

Asbestos related disorders in Serbia and Montenegro
Bogoljub Perunicic, Institute of Occupational and Radiological Health, Serbia and Montenegro (perunb@Eunet.yu)
The project is in search of funds. It is scheduled to be completed by December 2004.

Occupational lung disease in Japan, Korea and China
Yasuo Morimoto, University of Occupational and Environmental Health, Japan (yasuom@med.uoeh-u.ac.jp)
Completion date is December 2004
Funding has been secured and the project is proceeding as planned. The project will be scientifically supported by Korea-Japan-China joint conference on occupational health.

Evaluation of health effects due to occupational and environmental exposure to asbestos
Neonila Szeszenia-Dabrowska (neonila@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

Keywords: asbestos, cancer risk, environmental exposure, occupational exposure, epidemiology
The aim of the study is to assess the risk of asbestos-related malignancies among persons with diagnosed asbestosis. According to the Act of Parliament passed in 1997, manufacture and sale of asbestos-containing materials is prohibited in Poland since 1998. Thus, problems of asbestos dust level assessment and monitoring of health condition of people employed in the majority of asbestos-processing plants shall become irrelevant. However, the problems of delayed health effects attributable to the past occupational exposures shall continue. Environmental pollution from asbestos waste landfills in the vicinity of asbestos plants and asbestos-cement plants, where considerable concentrations of asbestos fibres in the ambient air are recorded will also continue to be a serious problem.

The project consists of the following tasks:
1. monitoring of incidence of asbestos-related occupational diseases using the National Registry of Occupational Diseases as the basis: the incidence of asbestos-related occupational diseases in Poland has been monitored since 1972. In 2002, 111 cases of asbestosis, 28 cases of lung cancer and 10 cases of pleural mesothelioma were recorded.
2. observation of the cohort composed of workers compensated for asbestosis: the study covered a cohort composed of 907 men and 490 women afflicted by asbestosis, diagnosed in 1970-1997. In all, 421 deaths were registered and causes of death were retrieved for 93.3% of the deceased. Taking into account a cumulative dose of fibers, it was found that a significantly increased mortality from lung cancer and pleural mesothelioma applied to persons exposed to a dose above 25 f-y/ml.
3. observation of the cohort composed of asbestos-processing plant workers: the study revealed elevated mortality from malignant neoplasms, including lung cancer (men: 102 deaths, SMR = 126, 95%CI: 103-153; women: 18 deaths, SMR = 259, 95%CI: 153-409) and pleural mesothelioma (men: 2 deaths, SMR = 510, 95%CI: 62-1842; women: 3 deaths, SMR = 2033, 95%CI: 419-5941).
4. medical examinations (screening) among former workers of asbestos-processing plants: the data obtained will serve as a basis for assessing the morbidity and incidence of asbestos-related diseases among persons occupationally exposed to asbestos dust in asbestos processing plants.

Preliminary results have been obtained. The final data will serve as a basis for assessing the morbidity and incidence of asbestos-related diseases among persons occupationally exposed to asbestos dust in asbestos processing plants.

Two publications were issued:
Asbestos-related diseases in Russia
Nikolai Izmerov, RAMS Institute of Occupational Health, Russian Federation (e-mail: izmerov@rinet.ru)
In collaboration with the Ekaterinburg Centre for the Prevention of Workers' Health, Ekaterinburg, Russia
This project is in search of funds.

For cross references see also:
TF 3: Occupational health problems, evaluation and control; Child labour/adolescent workers – Occupational health problems, evaluation and control
TF 4: Contributing information on interventions to reduce silica exposure
TF 10: Further development of PACE (India)
TF 14: Evaluation of the cost-effectiveness of interventions to reduce occupational exposure to Silica
TASK FORCE 5: HEALTH CARE WORKERS

Co-Chairs: George Delclos, University of Texas, USA (gdelclos@sph.uth.tmc.edu), Gerry Eijkemans, WHO (eijkemansg@who.int)

Ageing of the populations, rapid changes in the work life and economies, increased mobility of people as a consequence of globalization, and several adverse health phenomena in the world put additional pressures on improving the work and working conditions of health care workers world-wide. The work of this Task Force will contribute to the preparation of WHO Guidelines for Health Care Workers.

An International Conference 'Occupational Health for Health Care Workers'

International Commission on Occupational Health, Institute of Health and Safety at Work, Tunisia (dg.isst@email.ati.tn)

The international meeting held in Tunis in September 2002 had a successful attendance rate with occupational health specialists. The Conference was co-sponsored by WHO and ILO and organized with the Tunisian Medical Society for Occupational Health.

Training materials for latex allergies and safe use of chemotherapy agents

Cesary Palczynski (cpalczy@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

Keywords: training materials, latex allergy, chemotherapy agents, health care workers

Target group: health care workers

The purpose of the project is to raise awareness among health care workers concerning the health risk of exposure to natural rubber latex and/or chemotherapy agents.

The training materials will cover an introduction to natural rubber latex allergy, signs and symptoms, review of prophylactic approach and dealing with an employee sensitized to latex. Procedures concerning latex sensitized patients will be also presented. In the second part of materials health risk of the exposure to antineoplastic agents, as well as obligatory procedures during preparation and administration of cytostatics, and attendance to a patient will be reviewed.

Funding is in place. The project will be completed by 2004.

Train-the-trainer course for workers: health and safety in hospitals

George L. Delclos (gdelclos@sph.uth.tmc.edu) and Sarah Felknor, (sfelknor@sph.uth.tmc.edu)

Southwest Centres for Occupational and Environmental Health, University of Texas School of Public Health, USA

Keywords: worker training, risk mapping, injury reporting, train-the-trainer

Target group: This workshop is aimed at any hospital worker with reasonable presentation skills and who has an interest in hospital health and safety.

The objective of this project is to develop a train-the-trainer workshop focused on basic worker training in various aspects of hospital health and safety as well as basic methods of teaching. The program was developed based on sound principles of adult learning theory. Once trained, course attendees would have the expectation of teaching basic concepts to workers that will allow them to recognize hazards in their workplace, participate in workplace safety committees and report workplace injuries.

The workshop has been developed. It is available in Spanish, but could conceivably be translated into other languages. Funding would be needed to cover costs related to travel and lodging for instructors to administer the course.

Training course - Occupational health and safety in hospitals

Manuel Peña European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

Keywords: program administration, surveillance, hospital ergonomics, worker training

Target group: hospital administrators, physicians, nurses, hygienists, hazardous waste specialists and epidemiologists, as well as workers with an interest in healthcare worker health and safety.

The aim of this project is to conduct a workshop that provides basic training in fundamental aspects of health and safety in hospitals, which may eventually be modified for use in other non-hospital healthcare settings. The aim of the project is to develop distance learning at a broad audience with an interest in occupational hazards of healthcare workers. Its structure combines something of interest to the whole group at 4 beginning and ending monographic seminars on Health and Safety Program Management in Hospitals, Surveillance, Hospital Ergonomics and Worker Training in Hospital Health and Safety.

Training course – Health management

Manuel Peña European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

Keywords: hospital management, quality assurance, human resources
The planning of the project has been completed. Funds are needed for proceeding further. Considering that the planning phase has been completed, we are initiating to identify the necessary funding. In case human permanent exchange of information, updating, experiences and data.

During the mission the relevant interest of other possible scientific, technical and institutional partners was verified. A shared version of the scientific project has been defined and in the next few months the project will be integrated in a cooperation plan to submit to the competent authorities for funding. An internet discussion group has been set up for the cooperation plan to submit to the competent authorities for funding. An internet discussion group has been set up for the

The objective of this project is to work out modalities and training actions for prevention, occupational health and safety to improve health and safety at work in the health sector and in public services. This project strengthens the initiatives of the project Cooperation Italy-Brazil Global Strategy 7 and Global Strategy 8 (Task Forces 12 and 8).

The objective will be reached through the following stages: documentary research, production of a repertoire of training experiences, theoretical patterns to train the trainers and of organizational patterns to complete the task, reconstruction of work organization in the health sector in the two countries and implementation of an integrated plan to train workers in the health sector.

At the Iguassu Meeting, February 2003, an Italian-Brazilian seminar was held during which an important result was obtained, because the Segretaria da Saúde of the Paraná state joined the project and showed its interest in applying it to the metropolitan area of the State Capital City (Curitiba, 49 municipalities), with the perspective to extend the results to the entire state (about 400 municipalities). During the mission the relevant interest of other possible scientific, technical and institutional partners was verified. A shared version of the scientific project has been defined and in the next few months the project will be integrated in a cooperation plan to submit to the competent authorities for funding. An internet discussion group has been set up for the transformative exchange of information, updating, experiences and data.

Considering that the planning phase has been completed, we are initiating to identify the necessary funding. In case human and financial resources will not be identified within 12 months, the feasibility of reconsidering the project will be evaluated.

The planning of the project has been completed. Funds are needed for proceeding further.

**Target group:** hospital administrators, physicians, nurses, hazardous waste epidemiologists, as well as professionals with an interest in healthcare management.

The aim of this project is to conduct a workshop that provides continuous training in fundamental aspects of health management in hospitals and non-hospital healthcare centres, as well as to develop distance learning at a broad audience with an interest in Health Systems and Services Development, quality assurance, health economy and human resources management.

**Expertise on research methods in healthcare settings**

George Delclos, University of Texas, USA (GDelclos@sph.uth.tmc.edu)

**Keywords:** research methods, healthcare workers

**Target group:** Researchers in academic institutions with research interests in health and safety aspects of healthcare workers.

The aim of this project is to provide consultation and assistance in the design, conduct and implementation of research projects in occupational health related to healthcare workers. Our emphasis is on applied research that can be of benefit to healthcare institutions in the short term. The faculty at the University of Texas has extensive experience in the conduct of research related to health and safety in healthcare workers. These faculties are available to other centres to provide consultation and/or assistance in this area.

Research expertise of the faculty is also provided at the Southwest Centres for Occupational and Environmental Health. Funding would be needed to cover costs related to travel and lodging. Collaborative research relationships would be encouraged.

**Production of a kit for trainers (CD-ROM) and a Program to train trainers for health care workers**

Emilio Volturo, Vito Foà, Silvia Fusinoni and Chiara Rengo (omscons@unimi.it), Istituti Clinici di Perfezionamento, Department of Occupational Safety and Health and ISPESL/ICP Consortium for the WHO Collaborating Centre in Occupational Health, Clinica del Lavoro "Luigi Devoto", Milan, Italy

Sonia Maria José Bombardi (bombardismj@.gov.br) and Zuher Handar (handar@onda.com.br), Fundacentro, São Paulo, Brazil

**Keywords:** training, occupational health and safety, multimedia, health care workers.

**Target group:** health care workers of the Curitiba Municipality (Paraná), professionals of occupational health and safety

The objective of this project is to provide consultation and assistance in the design, conduct and implementation of research projects in occupational health related to healthcare workers. Our emphasis is on applied research that can be of benefit to healthcare institutions in the short term. The faculty at the University of Texas has extensive experience in the conduct of research related to health and safety in healthcare workers. These faculties are available to other centres to provide consultation and/or assistance in this area.

As the project was completed, we are initiating to identify the necessary funding. In case human and financial resources will not be identified within 12 months, the feasibility of reconsidering the feasibility of the project will be evaluated.

The planning of the project has been completed. Funds are needed for proceeding further.

**Realizzazione di un kit per formatori (CD-ROM) ed un programma di formazione formatori per gli operatori del settore sanitario**

Emilio Volturo, Vito Foà, Silvia Fusinoni, Chiara Rengo (omscons@unimi.it), Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza sul Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del Lavoro e l’Igiene Industriale, Clinica del Lavoro "Luigi Devoto", Milano, Italia

Sonia Maria José Bombardi (bombardismj@.gov.br), Zuher Handar (handar@onda.com.br), Fundacentro, São Paulo, Brazil

**Parole chiave:** Formazione, Medicina del Lavoro, Sicurezza, Multimedia, operatori del settore sanitario

**Utenza destinatata:** Lavoratori nel settore sanitario della municipalità di Curitiba, Esperti e professionisti di Medicina del Lavoro e Sicurezza operanti nelle strutture sanitarie.

Realizzazione di percorsi ed azioni formative efficaci ai fini del miglioramento della sicurezza e salute dei lavoratori nei luoghi di lavoro, per i lavoratori del settore sanità e gli operatori dei servizi pubblici di prevenzione e medicina del lavoro e sicurezza. Questo progetto rafforza i progetti inseriti nei Global Strategy 7 e Global Strategy 8 (task Forces 12 e 8).

L’obiettivo sarà raggiunto attraverso le seguenti fasi:

- Ricerca documentale
countries have to be taken into consideration. A code of good medical practice involving risk assessment in the workplace, risk factors of work-related latex allergy. A workshop is planned where effects of established interventions in the use of gloves. The guideline will cover the current medical knowledge on causes, prevalence/incidence, dose-response relations, and are put on or taken off. A main step to prevent latex sensitization is to reduce the exposure to powdered high-allergen latex for the society and affected individuals. Respiratory latex allergies result from the inhalation of powder released when gloves

Elaboration and realization of a plan integrated of formation for the workers of the health.

The aim of this project is to organize a workshop and prepare a guideline for the prevention of latex allergy in health care workers.

Preparation of a guideline for prevention of latex allergy in health care workers

Xaver Baur, Ordinariat und Zentralinstitut für Arbeitsmedizin, Hamburg, Germany (baur@uke.uni-hamburg.de)

Keywords: latex allergy, occupational asthma, contact dermatitis, prevention, inventory of good medical practice

Target group: In the first step, primarily European stakeholders, scientists in occupational health, state authorities for worker protection, with a focus on medical doctors in occupational health.

The aim of this project is to organize a workshop and prepare a guideline for the prevention of latex allergy in health care workers.

There is the high prevalence (4-17%) of sensitization among health care workers, resulting in a large socio-economic problem for the society and affected individuals. Respiratory latex allergies result from the inhalation of powder released when gloves are put on or taken off. A main step to prevent latex sensitization is to reduce the exposure to powdered high-allergen latex gloves. The guideline will cover the current medical knowledge on causes, prevalence/incidence, dose-response relations, and risk factors of work-related latex allergy. A workshop is planned where effects of established interventions in the use of powdered high-allergen latex gloves will be presented and discussed. Regulations of work and health protection in the different countries have to be taken into consideration. A code of good medical practice involving risk assessment in the workplace,
advice for reduction of health risks due to latex gloves, improved medical surveillance, health promotion, and examples illustrating concrete steps will be given.

A German campaign of a preventive approach to latex allergy among health care workers is currently evaluated. Other German centres are collaborating on the project. Interested centres in other countries are encouraged to contact the project team for possible collaboration.

Various guidelines for health care workers
Marie Haring Sweeney (MSweeney@cdc.gov) and Raymond Sinclair (RSinclair@cdc.gov), NIOSH, USA
The objective of the first project is to contribute to the development of WHO Guidelines regarding prevention of musculoskeletal injuries among nursing home workers and also to the development of WHO Guidelines regarding prevention of needlestick injuries.

The objective of the second project is to contribute two documents on hazards to health care workers, one pertaining to workers in hospitals and one pertaining to home health care workers (in preparation).

Funding is in place. The project will be completed by December 2005.

Bill Eschenbacher (BEschenbacher@cdc.gov), NIOSH, USA
The objective of this project is to contribute to development of WHO Guidelines on emerging infectious diseases and bioterrorism risks to health care workers and also to contribute to information obtained from the National Exposure at Work (NEWS) survey of hazardous exposures to health care workers.

Funding is in place. The project will be completed by December 2005.

Demonstrating and promoting best practices in reducing medical waste to avoid environmental releases of dioxins and mercury from health care practice
Peter Orris, MD, MPH, Great Lakes Centres For Environmental and Occupational Safety and Health, University of Illinois at Chicago School of Public Health, USA (porris@uic.edu)
Keywords: Health Care, Waste, Worker, Safety, Environment, Pollution

The Proposed Project is a Global Project to demonstrate best practices in the management of health care wastes with the intent of minimizing and eliminating releases of dioxins and mercury to the environment, and also to demonstrate ways of overcoming barriers to their adoption.

The project under development will be implemented by the United Nations Development Programme (UNDP) and will be executed by WHO (Protection of the Human Environment). The international NGO Coalition, Health Care without Harm (HCWH), has been an active partner in project planning and will continue as a WHO partner in project execution. The governments of the seven participating countries have endorsed the project: Argentina, India, Lebanon, Philippines, Poland, Senegal and Vietnam. In each participating country, the Project will demonstrate best practices in the management of health care wastes in a number of countries and regions to minimize dioxin and mercury releases; and it will establish national and/or regional programs in participating countries to train experts who can then replicate the program at other hospitals and facilities. Under this Project, best practices will include: Techniques for waste minimization; Segregation of infectious wastes from ordinary wastes; Selection and utilization of appropriate waste treatment approaches. It will as well address the health and safety issues of the health care and waste workers handling of waste including sharps, infectious materials, and toxins. The project is currently in the intergovernmental consultative planning phase.

Support of a WHO guidance document for the protection of healthcare workers
George Delclos, MD, MPH and Sarah Felknor, DrPH, University of Texas School of Public Health (GDelclos@sph.uth.tmc.edu) and Maritza Tenassee, M.D., PAHO (tenassm@paho.org).

This task is based on the outcome of discussions of Task Force 5 at the Network of WHO Collaborating Centres Meeting, held in Iguazu Falls, Brazil in February 2003, regarding a request from WHO for assistance in the development of guidelines for protecting health care workers. After much discussion on the role of WHO guidelines and the intended audience(s) of such a document, it was agreed that the following steps would be taken in the 2003-2004 time period and that the University of Texas would coordinate these activities in collaboration with PAHO:

- Development of an inventory and compilation of existing guidance documents globally, pertaining to occupational hazards of healthcare workers. This will include a survey of WHO Collaborating Centers and is expected to be completed by the end of 2003.
- White papers will be solicited and scientific referees will be identified to help organize the documents by topic, audience and intended use. This activity will be conducted in late 2003 and early 2004.
- A subgroup of Task Force 5 will reconvene to review the materials and make recommendations to further develop the documents. It is expected that this meeting will take place in early 2004.
- WHO will commission the final guidance documents based on the input and materials from Task Force 5.
Assessment of safety climate in hospitals and among health care workers
Sarah Felknor, DrPH and George Delclos, MD, MPH, University of Texas School of Public Health (GDelclos@sph.uth.tmc.edu)

**Keywords:** healthcare workers, safety climate, work organization

**Target group:** Healthcare workers in hospitals at all levels: administrative, professional, technical, basic ancillary services. The instrument can also be adapted for use in healthcare settings other than hospitals and other industrial settings.

The objective of this project is to create a survey tool that allows assessment of safety climate in healthcare settings, its determinants and the relationship between safety climate, workplace injuries and compliance with safety practices. Safety climate has been described as the perceptions and expectations that workers have of safety in their workplace. It is an "integrated" variable that reflects the influence of both organization-centred factors as well as worker-centred factors. It has also been shown to influence workplace injuries and compliance with safety practices. Safety climate and its determinants can be assessed using sound survey methodology. This group has previously developed and validated this methodology in public hospitals in Costa Rica. Results from the analysis of this survey methodology have led to the identification of determining workplace factors that can then be intervened on in order to improve safety climate. This improvement, in turn, will hopefully lead to a decrease in workplace injuries and increased compliance with safety practices.

The survey has been completed and results are available. However, it is important to note that there is a detailed methodology that accompanies use of this survey instrument. Training in that methodology is essential before using the instrument. Training sessions in methodology and in approach to its statistical analysis and interpretation of results are conducted. The instrument is available in English and Spanish.

Sustainable hospitals
Margaret Quinn, Sc.D., Department of Work Environment, University of Massachusetts at Lowell (Margaret_Quinn@uml.edu)

**Keywords:** demonstration project, substitutes, occupational and environmental exposures

**Target group:** hospital managers, occupational health professionals, regulatory authorities

The objective of this demonstration project is to present a model for identifying alternative substances for hospital use to reduce occupational and environmental exposures generated by hospitals.

Protecting hospital workers from chemical hazards
Juan Alcaino Lara, Instituto de Salud Publica de Chile, Chile (jalcaino@ispch.cl)

**Keywords:** air sampling, prevention, chemical substances, sterilization, disinfecting

**Target group:** public hospital workers expose to chemical substances (6000 people approximately).

The purpose of this project is to control chemical agents commonly used in public hospitals to prevent accidents and diseases due to them.

Even though, until 1995, public workers had workplace exposure accident and disease insurance, it didn't include risk prevention activities. On March 1, 1995, these workers were included in the regulation Nº 16744, dictated in 1964 that established an obligatory social insurance against working accident and diseases, which included risk prevention activities. Until that time, there was almost no knowledge about working conditions of public workers, and especially those that face chemical substances.

The focus areas of the present project are:

1. Air Sampling of Ethylene Oxide (sterilization facilities), formaldehyde (mortuaries-pathology anatomy and hemodialysis units), glutaraldehyde (disinfecting units), anesthetic gases (operating rooms) and organic solvents (clinic laboratories) to check whether the concentrations are under the exposure limits. All the samples were analysed at Occupational Laboratory of the Institute of Public Health from Chile.

2. Establishment of allowable limits of Ethylene Oxide residues on medical devices and formaldehyde residues on sets for hemodialysis (dialyzer).

3. To define air sampling criteria and strategies to have representative samples considering the different limits and the process involved.

4. To develop checklists to verify the fulfilment of working conditions.

5. To develop and spread checklists related to personal protection devices necessary to wear.

6. To propose protection and prevention measures for workers exposed to chemical substances indicated above.

A sample of 46 hospitals in the country has been taken for the evaluation of ethylene oxide, formaldehyde, glutaraldehyde, anesthetic gases and organic solvents.

The evaluation not only took into account air samples, but also other workplace conditions such as ventilation systems, procedure manuals, protection and prevention measures for workers, wearing and caring of personal protection devices (i.e. gloves, masks), training and labelling and posting of hazards.

Significant achievements have been made:

- Improvements in Sterilization Facilities: Separated loading and unloading rooms, manuals and instructions writing, ventilation system improvements. A checklist was also used to verify some workplace conditions. Aeration times were modified to meet regulation. FDA residual levels were adopted as a reference.

- Procedures of dialyzer cleaning have improved, with which formaldehyde air concentrations were reduced.
- Ventilation systems are being implemented in Anatomy Pathology Units.
- Sampling strategies were implemented according to both work processes and permissible limits for each substance.
- The project has advanced from the detection stage to the evaluation stage. The prevention stage is being implemented.

**Assessment of exposure to antineoplastic agents in pharmacy and hospital personnel**

Dr. Rudi Schierl, Institute and Outpatient Clinic for Occupational and Environmental Medicine, University of Munich, Germany (rudi.schierl@arbeits.med.uni-muenchen.de)

*Keywords*: cytostatic drugs, biological monitoring, working conditions

*Target group*: Pharmacy technicians, pharmacists, people involved in the transport of antineoplastic agents

Description of safe working conditions related to internal exposure of substances handled in centralised cytostatic drug preparation units in hospitals.

There is a risk of adverse health effects for personnel with occupational exposure to antineoplastic agents. The study is aiming at identification, quantification and evaluation of potential health hazards of occupationally exposed workers in pharmaceutical and oncology departments with central processing units for drug preparation. Biomonitoring for the leading substances is performed in a large number of pharmacy technicians and pharmacists in hospital pharmacies and oncological departments.

An environmental monitoring strategy is developed in order to detect contamination and attempt to improve hygiene during work.

Progress is being made continuously and according to the work plan.

Names of other Centres collaborating: 14 hospital pharmacies are currently partners in the collaborative study.

Product: Evidence-based recommendation to avoid / reduce internal exposure

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**Research project in Cuba to control exposure to anaesthetic gases in operating rooms**

Virginio Somenzi, Renato Gilioli, Silvia Fustinoni, Chiara Rengo (omscons@unimi.it), Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza sul Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del Lavoro e l’Igiene Industriale, Clinica del Lavoro “Luigi Devoto”, Milan, Italy

Alberto González Salso, Heliodora Diaz Padrón, Maria Esther Linares Fernandez (linares@infomed.sld.cu), Instituto Nacional de Salud de Los Trabajadores, Cuba

*Keywords*: anaesthetic gases, environmental and biological monitoring, operating rooms, neurobehavioral study

*Target group*: health workers of Cuban operating rooms

The objective of this project is to assess pollution and health risks from anaesthetic gases in subjects working in operating rooms in Cuba. The project aims at controlling anaesthetic pollution in Cuban operating rooms, with the following targets:

- Exchange of scientific and methodological documentation and supply of technical instrumentation and analytical methods for the Toxicology and Industrial Hygiene laboratory
- Environmental and biological monitoring in operating rooms (monitoring of anaesthetics such as Halothane and N₂O)
- Study of Neurobehavioral performance prior to and after work in operating rooms
- Specific training activities on the above topics.

The following has been accomplished thus far:

- Exchange of scientific and methodological documentation
- Supply of technical instrumentation and analytical methods for the Toxicology and Industrial Hygiene laboratory (i.e. donation by an Italian Company of instruments to control anaesthetic exposure, such as thermal desorption unit, head space autosampler and gas chromatographs equipped with flame ionization and electron capture detectors)
- Training course on the use of the apparatus, held in Milan
- Identification of suitable tools for the detection of possible changes in neurobehavioral performance (by means of BARS “Behavioural Assessment and Research System” in its Spanish version)

The project is preliminary to

1. cleaning up the operating rooms performed at sustainable cost
2. healthiness of the work environment and workers.

Phases 1 and 2 should be implemented within the next work plan (2006-2010).

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**Progetto di Ricerca per il controllo dell’esposizione a gas anestetici nelle sale operatorie cubane**

Virginio Somenzi, Renato Gilioli, Silvia Fustinoni and Chiara Rengo (omscons@unimi.it), Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza negli Ambienti di Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del lavoro e l’Igiene Industriale, Clinica del Lavoro “Luigi Devoto”, Milano

Alberto González Salso, Heliodora Diaz Padrón, Maria Esther Linares Fernandez (linares@infomed.sld.cu), Instituto Nacional de Salud de Los Trabajadores, La Habana, Cuba

*Parole chiave*: gas anestetici, monitoraggio ambientale e biologico, sale operatorie, studi neurocomportamentali

*Utenza destinatana*: personale sanitario delle sale operatorie cubane
Scopo del progetto: Valutazione dell'inquinamento e del rischio per la salute in soggetti esposti a gas anestetici nelle sale operatorie cubane. Il progetto ha lo scopo di controllare l'inquinamento da gas anestetici nelle sale operatorie cubane ed è articolato nelle seguenti fasi:

- Scambio di documentazione scientifica e metodologica e donazione di strumentazione tecnica e metodi analitici per la Tossicologia e il Laboratorio di Igiene Industriale
- Monitoraggio ambientale e biologico nelle sale operatorie (monitoraggio di anestetici quali Alotano e N2O)
- Studio delle performance neurocomportamentali del personale sanitario nelle sale operatorie
- Attività di formazione specifiche e mirate sull'argomento

Avanzamento:

- Scambio di documentazione scientifica e metodologica
- Donazione di strumentazione tecnica e metodì analitici per il Laboratorio di Tossicologia e Igiene Industriale (i.e. donazione da parte di una Società Italiana di strumenti per il controllo dell'esposizione a gas anestetici, come per esempio desorbi
termo autocampionatore per spazio di testa e gascromatografia, forniti di rilevatore a ionizzazione di fiamma e a cattura di elettroni)
- Attività di formazione all'uso della strumentazione donata, organizzata a Milano
- Identificazione di strumenti per lo studio delle performance neurocomportamentali (per esempio BARS "Behavioral Assessment and Research System” nella versione in lingua spagnola)

Il progetto è propedeutico a:

1. bonifica delle sale operatorie a costi sostenibili
2. successiva verifica della salubrità degli ambienti e delle condizioni dei lavoratori.

Si prevede di completare le fasi 1 e 2 del progetto nel prossimo quinquennio (2006-2010).

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**Proyecto de investigación para el control de la exposición a gases anestesicos en salones de operaciones cubanos**

Virginio Somenzi, Renato Gilioli, Silvia Fustinoni y Chiara Rengo (omscons@unimi.it), Instituto Clínico de Perfeccionamiento, Departamento de Seguridad Ocupacional y salud y Consorcio ISPESL/ICP Centro Colaborador de la OMS en Salud Ocupacional, Clínica del Trabajo Luígi Devoto, Milan, Italia

Alberto González Salso, Heliodora Díaz Padrón, María Esther Linares Fernandez (linares@infomed.sld.cu), Instituto Nacional de Salud de Los Trabajadores, La Habana, Cuba

**Grupo estudio:** Personal sanitario de los salones de operaciones cubanos

**Palabras claves:** Gas anestesico, monitoreo ambiental y biológico, salones de operaciones, estudio neurocon
ductual

**Proposito del proyecto:** Evaluación de la contaminación y del riesgo a la salud en sujetos expuestos a gases anestesicos en salones de operaciones cubanos

El proyecto esta dirigido al control de la contaminación de gases anestesicos en salones de operaciones cubanos con los siguientes aspectos principales:

- Intercambio de documentación y metodología científica y la donación de de equipamiento técnico y métodos analíticos para el Laboratorio de Toxicología e Higiene Industrial
- Monitoreo ambiental y biológico de los salones de operaciones (monitoreo de anestésicos como Halotano y N2O)
- Studio del funcionamiento neurocon
ductual del personal sanitario en los salones de operaciones.

Actividades de formación especifica sobre los aspectos anteriores.

**Progreso:**

- Intercambio de documentación científica y metodológica
- Donación de equipamiento técnico y métodos analíticos para el Laboratorio de Toxicología e Higiene Industrial (donación de parte de una Sociedad Italiana de equipos para el control de la exposición a gases anestesicos, como por ejemplo desorbit
termo automuestrador por head space test y gascromatografía, equipado con ionización de llama y captura de e
cltrones)
- Actividad de formación y adiestramiento para el uso del equipamiento donado, organizada en Milano
- Identificación del instrumento para el estudio de la función neuroconductual (por ejemplo BARS "Behavioral Assessment and Research System” en la version en lengua española).

El proyecto es propedeutico para:

1. Reformar los salones de operación a un costo sostenible
2. Verificaciones sucesivas de la salubridad del ambiente y de las condiciones de trabajo. La fase 1 y 2 deberán desarrollarse en el próximo quinquenio (2006 al 2010).

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**The management of liquid wastes in district hospitals of Benin**

Benjamin Fayomi, University Laboratory of Health at the Work and Environment (LUSTE) (bfayomi@intnet.bj)

**Keywords:** biological risk, liquid waste, hospital environment

**Target:** Health professionals, decision makers, NGOs

This study aims at analysing the mechanism of liquid waste management in the peripheral hospitals. The consequences for the environment due to solid waste such as also liquids constitute serious dangers in hospital environments.

Medical groups constitute important producers of waste, in particular biomedical waste whose management constitutes a major health and environmental problem.
Bad management of liquid waste can be the source of several endemic and epidemic diseases. Our objective is to describe the management of liquid waste produced in two peripheral hospitals in Benin to spread the awareness by decision-makers and health professionals. Indeed, the chemicals used in various services, blood, the faeces and the urine of certain patients of contagious diseases must be considered as potentially dangerous for our health and the environment. This universal principle is not currently practiced in Benin. The Ministry of Public health and the Béninoise Agency for the Environment are our collaborators.

La gestion des déchets liquides dans les hôpitaux de district au Bénin

Benjamin Fayomi, Laboratoire Universitaire de Santé au Travail et Environnement (LUSTE) (bfayomi@intnet.bj)

Mots clés : Risque biologique, déchets liquides, milieu hospitalier

Cible ; Professionnel de santé, décideurs, ONG

Cette étude vise à analyser le mécanisme de gestion des déchets liquides dans les hôpitaux périphériques. Les atteintes à l'environnement par les déchets solides comme liquides constituent des dangers graves en milieu hospitalier. Les formations sanitaires sont un groupe non négligeable de producteur de déchets, en particulier des déchets biomédicaux dont la gestion constitue un problème majeur de santé et d'environnement. La mauvaise gestion des déchets liquides peut être source de plusieurs maladies à caractères endémiques et épidémiques. Notre objectif est de décrire la gestion des déchets liquides produits dans deux hôpitaux périphériques au Bénin. Ceci pour éveiller la conscience des décideurs et des professionnels de santé. En effet, les produits chimiques utilisés dans les différents services, le sang, les matières fécales et les urines de certains patients atteints de maladies contagieuses doivent être considérées comme potentiellement dangereux pour notre santé et notre environnement. Ce principe universel n'est pas en pratique courante au Bénin.

Le Ministère de la Santé Publique et l'Agence Béninoise pour l'Environnement sont nos collaborateurs.

Gaining support of the decision-makers for improving working conditions in the health care sector

Maritza Tennassee, PAHO (tennassm@paho.org)

A document on the Healthcare Workers Situation in Latin America and the Caribbean Region is near completion and is already available as a draft. This document aims to help PAHO's decision-making on interventions. As the shortage of local data aggravates the unawareness of healthcare workers suffering, the project plans to work in both technical and political approaches, by facilitating advocacy actions as well as by offering technical cooperation to the Members States’ assessment and intervention on their situation.

The work plan is as follows:

2002: to publish a preliminary analysis on Healthcare Workers Situation in Latin America and the Caribbean Region, based on secondary sources of data.

2003: to prepare a pilot proposal to be conducted in some countries, to provide information about the needs and differences among the health care settings in LAC, as well as the development of assessment instruments, to prepare a document for the Planning Subcommittee.

2004: to begin the implementation of the proposal in the countries, to submit the document to the Planning Subcommittee and Executive Committee and to prepare the document and submit it to the Directing Council.

Funding is being mobilized in PAHO. This initiative uses the Healthy Workplace Approach and it is a responsibility of PAHO's Division of Health and Environment (HEP) in collaboration with HSP (Health Systems and Services Development), HPP (Health Promotion and Protection), HVP (Vaccines and Immunizations) and HCP (Disease Prevention and Control) Divisions.

Health care workers' occupational risks

Prof. Dr Jovanka Karadzinska Bislimovska, Institute of Occupational Medicine, Republic of Macedonia (bislimovska_j@hotmail.com)

Keywords: occupational risk, health workers, infectious agents, stress at workplace, preventive measures

Target group: health care workers, state authorities for worker protection, scientists in occupational health, medical doctors in occupational health

The objective of this project is to assess specific occupational health risks from infective agents (HIV, Hepatitis) and stress at work and to prepare a proposal for guidelines on prevention.

Biological infectious hazards and psychogenic stress as specific occupational risks derive from the character, type of working process and conditions of work in health care and are closely connected. Data from studies on the Republic of Macedonia in the last 10 years in different profiles of health workers occupationally exposed to biological, infectious agents indicate high prevalence of Hepatitis B (26,6%) and present biological markers such as HBsAg (19,2%). Numerous stress factors of working environment are manifested as emotional and behavioural disorders and increase in the risk of psychosomatic diseases.

The aims of this project are:

- Establishing the criteria for assessment of specific occupational risk of infectious and psychosomatic character
- Definition of highly risky segments and profiles of workers in health care
• Preparation of a draft guidelines on prevention of infective diseases (HIV/Hepatitis) and stress at work

In the methodology an epidemiological cross sectional study will be conducted with an exposed and a control group examination of health care workers. A structural questionnaire has been designed on infective agents and Maslach Burnout Inventory (MBI) on stress factors at work, medical examinations and laboratory analysis for markers to infectious agents (hepatitis and HIV) as well as psychological tests with Cornel index, Life style test, PIE questionnaire will be used. The practical outcome of this project will be the preparation of a proposal-guideline on prevention (including concrete preventive activities and procedures) to specific occupation health hazards in health care workers.

The methodology for this project (questionnaire and procedures) has already been prepared. A pilot study of 50 health care workers with different profiles has been conducted. Preliminary results are available.

Guidance on prevention and control of occupational hazards for health care workers

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Target Group: Health care workers.

The purpose is to analyze the occupational hazards and critical control points of health sectors and to improve the control and prevention.

Planning and the preparatory work have been initiated.

Funds have been secured by the Ministry of Sciences and Technology for 2003-2005

Assessment of working conditions and health of health care workers in public and private healthcare facilities in Vietnam

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

Keywords: working condition, health care, health care workers, facility, public, private

Target group: decision-makers at Ministries, academic institutions, health care facilities

The purpose is to analyze the occupational hazards, implementation of OSH policies in health care facilities and awareness of health care workers on OSH. The project will start in 2004 and funds have been secured by WHO, Vietnam Government.

Development of OSH guideline for health care workers in Vietnam

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

Keywords: working condition, health care, health care workers, facility, public, private

Target group: decision-makers at Ministries, academic institutions, health care facilities

The purpose is to improve control and prevention of occupational hazards for health workers.

The project will start in 2004 and funds have been secured by WHO, Vietnam Government.

For cross references see also:

TF 1 : National guidelines for healthcare for workers in various sectors in Vietnam

TF 5 : Protecting hospital workers from chemical hazards;

TF 7 : Study of the mental and physical burden, in collaboration with the HabibThameur Hospital, Medicine at Work Service of the company Light Subway Tunis

TF 11 : Training course – Occupational health and safety in hospitals; Training programmes and modules; Packaged training course for health care workers (available in English and in Spanish); Postgraduate training courses in maritime occupational health; Establishment of an international working group for utilisation of telemedicine to reduce health risks of seafarers; Development of a comprehensive medical training package for captains and first officers on ships; Training of Occupational Health and Safety Personnel; Training course - occupational health and safety in hospitals; Training course - health management

TF 14 : Role of primary care physicians and nurses in addressing occupational health issues
Health promotion programmes for selected groups in Central America

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National Institute for Working Life (Sweden); National Institute of Public Health (Sweden); Central American Universities and Institutes for Social Security; Central American Integration System; PAHO

Keywords: Central America, health promotion, safety promotion, prevention, social context

Target groups: workers, their families and communities; target industries; community, district and national health and labour authorities; trade unions; health care providers.

The objective of this project is the promotion of worker and community health in priority populations in Central America. Health promotion programmes are being designed to be undertaken in three phases: (i) assessment of feasibility; (ii) implementation of interventions; and (iii) evaluation. Phase (i) will be implemented in selected Central American target working/residential communities. Priority populations are construction workers (safety promotion only); sugarcane workers; hospital workers; workers in hotels and restaurants; migrant coffee workers; and urban informal-sector communities. Rapid feasibility assessment will be followed by intervention programmes and short- and long-term outcome and process evaluation. Feasibility assessment identifies priority hazards and prospects of successful launching of interventions, based on motivation and needs of workers and community members, and on the social context and resources. Interventions take the form of workplace and community health promotion and will be defined with the workers, community members and the social context, within the constraints of available resources. Outcome and process are evaluated at predefined intervals.
A first feasibility assessment has been completed for the workers in a Costa Rican hospital. Two scientific articles have been published. A protocol has been completed. Financial support is being sought for the continuation. Two scientific articles and a project protocol have also been produced. The programmes will begin in 2003.

Promoción de la salud en grupos selectos en América Central
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Instituto Nacional de la Vida Laboral (Suecia); Instituto Nacional de la Salud Pública (Suecia); Sistema Centroamericana de Integración (SCI); universidades y instituciones de seguridad social centroamericanas; PAHO

Palabras claves: América Central, promoción de la salud, promoción de la seguridad; prevención; contexto social

Grupos meta: Trabajadores, sus familias y comunidades, industrias, autoridades locales y nacionales de salud y de trabajo, sindicatos, y trabajadores de la salud.

Objetivo del proyecto: Promoción de la salud de los trabajadores y de las comunidades en poblaciones prioritarias en América Central.

Se están diseñando programas de promoción de la salud en 3 fases: (I) evaluación de la factibilidad; (ii) implementación de las intervenciones; y (iii) evaluación del proceso y del impacto. La fase (i) será implementada en grupos selectos de trabajadores centroamericanos y sus comunidades. Poblaciones prioritarias son trabajadores de la construcción (promoción de la seguridad); trabajadores en el cultivo de la caña; trabajadores de hospitales; trabajadores en hoteles y restaurantes; trabajadores migrantes en el sector cafetalero; y comunidades urbanas del sector informal. Métodos rápidos de evaluación de factibilidad serán seguidos por programas de intervención y por evaluaciones del proceso y del impacto. La evaluación de factibilidad identifica los factores importantes de riesgo y las intervenciones factibles, con base en la motivación y las necesidades de los trabajadores y de los miembros de las comunidades así como en el contexto y los recursos sociales. Las intervenciones tomarán formas apropiadas, definidas por los trabajadores, miembros de las comunidades y el contexto social y construidas por recursos. Se evaluará el proceso y el impacto con intervalos predefinidos.

La primera fase de factibilidad se ha completado para los trabajadores en un hospital costarricense. Se ha elaborado un protocolo. Se busca apoyo financiero para la continuación.

Productos: 2 artículos científicos; un protocolo. Año del comienzo: 2003

Development of healthy workplace initiatives in selected countries: Methodology of workplace health promotion programmes for elderly employees
Elzbieta Korzeniowska (whpp@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

The first part of the project has been finished. A research concerning health determinants and health behaviours in the population of employees over 45 has been conducted this year. The outcomes of the research will form a basis for developing methodology of workplace health promotion programmes for elderly employees.

Funding is in place. The project will be completed in 2003.

Healthy workplace programme in Vietnam
Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

Keywords: health promotion, SMEs, agriculture, village enterprises, joint-venture, foreign investment enterprises

Target group: decision-makers at ministries, academic institutions, medical university, trade union, Co-operative Union, Farmer Union

The project objective is to improve workers’ health, help workers to keep control over their health, and reduce annual incidences with the help of WHO, the Ministry of Health, and in close collaboration with National Institute of Occupational and Environmental Health, Hanoi Medical University, who developed the project "Health promotion at workplaces" in small and medium sized enterprises following the regional guidelines for the development of healthy workplaces of WHO combining with the WISE method of ILO and enforcement of occupational health and safety laws.

Steps in developing the project and its detailed results were published by WHO as a case study document "evaluation of a 1-year implementation of the regional guidelines for healthy workplaces in small and medium-scale enterprises in Ngo Quyen district, haiphong city and in Hue city - Healthy settings - Case study Documents Series, No1".

In 2000-2001, the project was expanded to 30 new enterprises. It established a health promotion model for workers in village enterprises and for agricultural workers.

Since 2002, the project has been expanded to SMEs over the country and health promotion activities have been initiated for workers in the agricultural sector, informal sector (village enterprises), large firms, joint-ventures and foreign capital enterprises. Products: Training materials on HPW for trainers, health workers, employers, employees; leaflets, handbooks and posters on HPW, Video tape recording achievements of the programme; CD-Rom on training materials on HPW. Funds have been secured by WHO,Vietnam Government, Enterprises.
Development of healthy workplace initiatives in selected countries: Analysis of trends of workplace health promotion in Polish enterprises and supporting network strategies

Krzysztof Puchalski (whpp@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

As a part of analysis of supporting network strategies a research in the occupational physicians in Poland has been conducted. The questionnaire concerned their knowledge, resources and opportunities for promoting workplace health in Polish enterprises. The outcomes will be analysed and used for developing training strategies for OSH professional and occupational physicians. Funding is in place. The project will be completed by 2005.

Development of a toolkit to implement the Healthy Workplace Initiative

Marcela Giraldo, Ministry of Health, Colombia (mgiraldo@minproteccionsocial.gov.co); PAHO (tennassm@paho.org); Institute of Occupational and Radiological Health, Belgrade, Serbia and Montenegro (Health promotion in SME); Ruddy Facci (ruddy@insatnet.com.br), Gustav Schaecke (gustav.schaecke.berlin.arbmed@s-online.de); ICOH Tobacco free initiative programme

Keywords: occupational health in the agriculture sector

Target group: small and medium-sized enterprises of agriculture sector

The purpose of the project is to design and implement a model of occupational health programme for small sized industries in the agriculture sector and to generate healthy work conditions policies through an occupational health programme for the agriculture sector. A model programme is being designed for the small agricultural companies. The basic model and pre-project are ready.

Guidance on Workplace Health Promotion: Principles and Practices

Tom Cox, Institute of Work, Health and Organizations, UK (tom.cox@nottingham.ac.uk)

Keywords: brochure, guidelines, workplace health promotion

Target group: decision-makers, educators, health authorities, occupational health and safety professionals, health professionals.

The aim of the project is to put an emphasis on health promotion at the workplace through the production of guidelines emphasizing its main principles and how they can be implemented efficiently at the workplace through a number of different practices. A brochure will be produced that will cover an introduction to main workplace health promotion principles, their importance, and practices through which they can be implemented at the workplace. A first draft of the brochure has been prepared and is now under review. The project will be completed by December 2003.

Health Promotion Programme for Prevention of Work-related Cardiovascular Disease

Kang-Sook Lee, Catholic Industrial Medical Centre, Korea (leekangs@catholic.ac.kr)

Keywords: Health promotion programme, cardiovascular disease

Target group: Director, manager, team leader and occupational health staff of companies

The purpose of the project is to develop and implement a health promotion programme. The project will include smoking cessation, regular exercise, alcohol restriction and stress management. It has already been started among Subway workers in Seoul.

The Korean Occupational Safety and Health Agency (KOSHA) is collaborating on the project.

Health promotion program for prevention of work-related cardiovascular disease

Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

Keywords: Health promotion program, cardiovascular disease

Target group: Director, manager, team leader and occupational health staff of companies

The purpose of the project is to develop and implement an educative programme for health promotion. The project will include smoking cessation, regular exercise, alcohol restriction and stress management.

Development of an effective model for a public campaign on health promotion focused on teenagers and young adults

Alberto Zucconi, Istituto dell’Approccio Centrato sulla Persona (IACP), Italy (azucconi@iacp.it)

Keywords: public campaign, teenagers, effective model, health promotion

Target group: Teenagers and young adults

The objective of this project is to develop an effective model for public campaign on health promotion focused on teenagers and young adults. It aims to identify some of the common denominators of successful projects and
the common denominators of failures to design the project and to run a pilot project. Literature search, interviews with experts, visits on some projects and selection of target groups have already been done.

The University of Mediterraneo Consortium is collaborating on the project. Funds are still required. It is scheduled to be completed by June 2005.

**Electronic bulletin board**
Alberto Zucconi, Istituto dell’Approccio Centrato sulla Persona (IACP), Italy (azucconi@iacp.it)
Greg Goldstein, WHO (goldstein@who.int) and Gianni Sulprizio (gsulprizio@iacp.it)
*Keywords:* health promotion activity, electronic bulletin board, task force 6
*Target group:* All task force 6 stakeholders
The purpose of this project is to enable all the Task Force 6 stakeholders to communicate and to be informed of their tasks progress. It aims to provide a user-friendly electronic Bulletin board. The Bulletin Board is operational.
Funds are in place. The WHO is collaborating on the project.

**Health Promotion Tool box electronic bulletin board**
Alberto Zucconi, Istituto dell’Approccio Centrato sulla Persona (IACP), Italy (azucconi@iacp.it)
*Keywords:* health promotion tools, health promotion resources, health promotion, electronic bulletin
*Target group:* members of Task Forces 6 and 12 and group 3 C.C. WHO EURO (Integrated workplace health management and ageing) and other authorized stakeholders
The objective of this project is to make various resources available worldwide for the effectiveness of health promotion programmes. It aims to share information about some useful tools that will facilitate the creation of effective and efficient health promotion activities: articles, research, assessment tools, researchers network, cost/benefit studies, best practices, books, videos, training packages, links with organizations, data banks etc.
WHO International and WHO EURO are collaborating on the project. The technical structure is complete. The Bulletin Board is now operational.

**Translation to Spanish language and dissemination of WHO documents: “Workplace health in the public health perspective. Good Practice in health, environment and social capital management in enterprises (GP HESME)”**
Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)
*Keywords:* occupational health, environmental health, safety management, health promotion, workplace.
*Target group:* Director, human resources managers, interdisciplinary professionals, team leader and occupational health staff of enterprises.
The purpose of the project is the translation to Spanish language and dissemination of the WHO document GP HESME in enterprises, to make a decision on the possibility of the model use as an integrated approach to health promotion of the working population with the active participation of employees, employers, as well as different state, public and scientific structures associated with this problem.

**Organization of an European Conference on “Integrated Policies on Occupational and Environmental Safety and Health. SALUS LABORIS fair.”**
Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)
*Keywords:* Congress, discussion forums, exhibitors, occupational and environmental protection, safety equipment.
*Target group:* Human resources managers, interdisciplinary professionals, occupational and environmental health staff of enterprises.
The international meeting taking place in Madrid in October 2003 is proposed to create discussion forums, with the participation and cooperation of employers, employees and interdisciplinary professionals, pretending to become a multidisciplinary approach for policy makers, branch organizations and enterprises to promote health at the workplace and to minimize its harmful impacts on the environment.
The European Agency for Safety and Health at Work collaborates with this project.

**Quality Assurance for Occupational Health Services**
David Escanilla, Instituto de Salud Publica de Chile, Chile (descanll@ispch.cl)
*Keywords:* quality assurance, interlaboratory comparison programme, occupational health services.
*Target group:* workers expose to noise, radiation and chemical risk.
The objective of this project is to promote and improve quality of services related to occupational health.
As the National Reference Laboratory, the Department of Occupational Health of Instituto de Salud Pública de Chile has been developing a quality assurance project for labour toxicology laboratories, audiometry centres and personal dose metric
The project is currently focusing on:

1. External evaluation programme for toxicology laboratories on metals as As, Hg, and Pb
2. External evaluation of laboratories that examine exposure to ionising radiation.

The project scope covers 20 laboratory toxicology laboratories, 136 audiometric laboratories and 5 personal dosimetric covering total facilities in fields all over the country.

The following progress has been realized so far:

1. The Department has been running an External Evaluation Programme since 1998 for labour toxicology laboratories dealing with metals as As, Hg, and Pb. This programme needs to be enlarged to cover other chemical risks as solvents, silica, and pesticides.
2. The Department also began the implementation of a programme to evaluate the quality of silent cabin, audiometer calibration, and operator competence of the audiometric centres in 1998. Until now, only a third of the centres has been evaluated. The programme needs to be enhanced to cover the entire country. In order to do so, a regional network of evaluation bodies needs to be trained and registered as local evaluators.
3. During the year 2001 a first round robin of control films, as a pilot project, was sent to the five laboratories authorized to conduct personal dose metric for exposed workers in X-rays labs, oncology centres, and other related facilities. The control films were prepared by the reference laboratory at the Chilean Commission for Atomic Energy (CCHEN) which is working in a collaborative project with the Department.

The National System of Health Services and Chilean Commission for Atomic Energy (CCHEN) are collaborating on the project. An overview of the “state of the art” methods of analysis and the performance of the organizations that gives these services on occupational health care in the country is available.

### Training and public communication in the application of ergonomics in industry

**Keywords:** Training, health promotion, ergonomics, workplace improvement, management systems

**Target group:** managers, worker representatives, occupational safety and health practitioners in industrial organizations and instructors in educational institutions

The purpose of the project is to provide information useful for training in applying ergonomics within various health promotion programs. The outcome of the project will include sample information materials useful for direct application of ergonomics in industry by the target groups. A particular emphasis will be placed on the importance of applying basic ergonomics principles, cost-effectiveness of ergonomics measures, and reports on positive examples.

The results of applying the proposed training materials have shown the importance of referring to basic ergonomics principles. Concrete examples of applying these principles are being analyzed.

### Hypertension in seamen: diagnosis, treatment, and prevention

**Keywords:** hypertension, seamen, disease, global programme

**Target Group:** Planners, managers, occupational health staff in general and in the Institute of Maritime Medicine.

The objective is to raise awareness among decision-makers in Departments of Health, Departments of Labour, Department of Sea transport, Trade Unions and companies and enterprises associated with a labour risk of hypertension in seamen of (a) the magnitude of the hypertension problem and (b) that the prevention of hypertension is a worthwhile and feasible objective, now being pursued by a global coalition, that they should support.

According to statistical data population morbidity and mortality from blood circulation diseases occupies the first place among all diseases. The most difficult complications are cardiac and cerebral stroke, which can lead to invalidity. An increase in the level of diseases was noted among the young working population. Maritime workers, whose work activity takes place in a high-stress environment, suffered more than others. The marine transport and fishing industries developed dramatically. The numbers of maritime workers who work at sea is growing continuously. Health and well-being on the ship are priorities to be achieved to ensure the development of safe, productive and competitive working activities. Accidents, injuries and professional diseases, not to mention their consequences in terms of social costs and quality of life, constitute a serious public health problem, so this research work is an effort toward improving the welfare of those who work at sea.

Participants of the activity are seafarers, port workers, city population. The first stage of the project comprises a detailed analysis of the literature and a close on-the-spot investigation with the aim of identifying needs and priorities concerning occupational safety and health of seamen. The second stage includes studying of the ship’s environment and individual behaviour patterns to determine hypertension at an early stage through medical examination, psychological, functional and laboratory tests. The third stage includes dissemination of the results of research activities through publications in medical journals, monographs and guidelines.
We expect results to help decrease morbidity and mortality among seamen in particular as well as the whole population; safer navigation; longer working capacity; prevent complications of hypertension; decrease treatment costs for medical complications. Results will serve for diagnostics, treatment and prevention of hypertension and improve medical examinations.

**Healthy workplace and health promotion activities - Symposium on occupational health promotion in 2003**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

*Target Group:* Occupational health staff in local Centers for Disease Control and in industries

The purpose is to exchange experience and information in health promotion. The organizing activities for 80-100 participants have been planned.

Funds are provided by WPRO/WHO for 2003.

**Environmental health assessment for selected areas**

Nguyen Ngoc Nga, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (n.n.nga@fpt.vn)

*Keywords:* exposure, environmental health assessment, indicator, profile, surveillance, selected zone

*Target group:* regional, national and local authorities, employees, employers, NGOs, communities, Ministry of Environment and resources, MOH, MOLISA

The objective of this project is to put the guideline of WHO'STC into practice to build capacity for an occupational health network in Vietnam through a pilot research on environmental health assessment; to raise awareness among employers, managers, policy-makers, MOH, MOLISA of the necessity of health assessment while considering one action plan; and to contribute to the set-up of the occupational health profile. Funds have been secured by WHO.

**Healthy workplace programme**

Taiyi Jin, Fudan University School of Public Health, China (tyjin@shmu.edu.cn)

Funding is needed. The project will be completed by 2004.

**Psychosocial factors of health behaviours as a basis for educational strategy**

Krzysztof Puchalski (whpp@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

Funds are in place. The project will be completed in 2003.

**Health Promotion Programme design and evaluation**

Fernando Crovari (gsafct@gw.achs.cl) and Patricia Arias (fsafct@gw.achs.cl), Asociación Chilena de Seguridad (ACHS), Chile

Funds will be provided by the host country. The project will be completed in December 2003.

**Biregional Programme on Work and Health; Southern Africa – Sweden**

Kaj Elgstrand (kaj.elgstrand@arbetslivsinstitutet.se), National Institute for Working Life, Sweden

Funding is still to be obtained. The first four-year phase has started.

**Biregional Programme on Work and Health; Central America – Sweden**

Kaj Elgstrand (kaj.elgstrand@arbetslivsinstitutet.se), National Institute for Working Life, Sweden

Funding is still to be obtained. The first four-year phase has started.

**Healthy workplace programme in Thailand**

Sasitorn Taptagaporn, Ministry of Public Health, Thailand (wilawan@anamai.moph.go.th)

Funds are in place (Thai Government budget). The project will be completed in the period 2002-2005.

For cross references see also:

TF 4 : Pilot introduction of the Programme “Good Practice in health, environment and social capital management in enterprises” (GP HESME) in the Republic of Bashkortostan; Development of OCH website for employers and employees of European SMEs

TF 5 : Gaining support of the decision-makers for improving working conditions in the health care sector; Preparation of a guideline for prevention of latex allergy in health care workers; Preparation of a guideline for prevention of latex allergy in health care workers
TF 7 : Mental health and stress at work: Programme design, evaluation, Chilean experience; Occupational stress in healthcare workers in Vietnam

TF 8 : Development of a health book and guideline on health promotion to small enterprises (agriculture, ceramic workers, mental workers and mechanists)

TF 10 : Training of occupational health and safety personnel

TF 11 : Train the trainers’ curricula on health promotion at work; Training of Occupational Health and Safety Personnel; China - Workshops and study tours on occupational health promotion at medium and small-scale workplaces; Philippines - Fellowship training of staff on environmental/occupational health risk management and on ergonomics; Viet Nam - Training courses on health promotion at workplaces; workshop on assessment of health and economic losses; Fellowship training on epidemiology in occupational health and on occupational health in technology transfer
In addition to the traditional risks and hazards, globalization, increasing competition and changing work organization bring along many new challenges; such as introduction of new technologies, new work organizations, haste at work, new work practices, and growing mobility. These are associated with new types of diseases and burdens, such as ergonomic problems, musculoskeletal disorders and injuries, increased psychological stress, and violence at work. The objective of this Task Force is to make workers aware of the problem and provide tools for increasing psychological and physiological well-being at work.

It is clear that the level of expertise, experiences and research in this area vary in different countries. Therefore, defining the target audience and countries for each product is a necessity.

Publication : Work organisation and stress

Stavroula Leka (Stavroula.Leka@nottingham.ac.uk), Amanda Griffiths (amanda.griffiths@nottingham.ac.uk), Tom Cox (thomas.cox@easynet.co.uk), institute of Work, health & Organisations, University of Nottingham, UK

Keywords : work organisation, stress, prevention, organisation culture, risk assessment

Target group : employers, managers and trade union representatives

This document is the third in a series of occupational health documents entitled: Protecting Workers’ Health. The World Health Organization (WHO) within the Programme of Occupational Health publishes it. It is the result of the implementation effort of the Global Strategy on Occupational Health for All as agreed upon at the Fourth Network Meeting of the WHO Collaborating Centres in Occupational Health which was held in Espoo, Finland from 7-9 June 1999.

Work stress is thought to affect individuals’ psychological and physical health, as well as organisations’ effectiveness, in an adverse manner. This booklet provides practical advice on how to deal with work stress. Discussed are the nature of stress at work, the causes and effects of stress, as well as prevention strategies and risk assessment and management methods. Also discussed are the role of the organisational culture in this process and the resources to be drawn upon for managing work stress.

The advice should be interpreted in the light of the particular problems faced by different groups of workers and what is reasonably practicable by way of solutions for each individual employer. Lists of common causes and effects of stress are included for illustrative purposes. References and suggestions for further reading are listed in Chapter 12.

The brochure was published in May 2003 (www.who.int/oeh/OCHweb/OCHweb/OSHpages/OSHDocuments/WHOOSHDocuments/WHOOCCHDocumentsHQDocs.htm#PWH) and will be available in French and Spanish early 2004.

Raising awareness on stress at work through a brochure

Irene Houtman ( hoi@arbeid.tno.nl ) TNO Work and Employment, NL

With WHO/HQ (Evelyn Kortum, kortummargote@who.int), University of Nottingham (Stavroula Leka, stavroula.leka@nottingham.ac.uk ), University of Dortmund, IfADo, Federal Insitute of Occupational Safety and Health, Berlin.

Keywords: brochure, stress, work, education

Target group: developing countries, in particular decision-makers, educators, OSH agencies, OSH professionals, companies, managers, trade union representatives.

The objective of this project is to raise awareness on the issue of work stress in countries which for obvious reasons do not yet recognise stress as a priority issue, but could learn from the mistakes and successes of combatting work stress in the developed countries to be prepared for the near future in which it can be expected that the issue of work stress will become important. The brochure will cover an introduction to stress by discussing its causes and effects on health and productivity. It will then proceed to discuss how it can be best managed at work.

A draft outline of the proposed brochure is ready. Collaboration with other Centres is under way.

Raising awareness in small businesses on workplace stress (English and Spanish versions)

Carol Stephenson (CStephenson@cdc.gov) and Paul Schulte (PSchulte@cdc.gov), NIOSH, USA

The objective of this project is to contribute informational and educational materials being developed for small businesses on a variety of occupational safety and health issues, including workplace stress. A video describing workplace stress and recommendations for abating and dealing with it has been produced. Currently, it is available in English on DVD and VHS. Accompanying print materials are in draft form and scheduled for evaluation by owners of small businesses during the remainder of 2003. English and Spanish versions are planned. Funds are in place. The project will be completed in 2005.
Preparation of guidelines for occupational health services on prevention of stress at work
Amanda Griffiths (amanda.griffiths@nottingham.ac.uk), Stavroula Leka (stavroula.leka@nottingham.ac.uk), Institute of Work, Health & Organisations (I-WHO), UK, Finnish Institute of Occupational Health and TNO

**Keywords:** brochure, guidelines, stress, occupational health, prevention

**Target group:** decision-makers, educators, health authorities, occupational health services, occupational health and safety professionals, companies operating in the health services sector, trade unions.

The project aims at putting an emphasis on preventative actions for stress at work, and to provide guidelines for its management in the sector of occupational health services. A brochure will be developed that will focus on the incident of work stress in the occupational health services and will provide guidelines for its prevention and management.

A draft outline of the proposed brochure is being prepared. Collaboration with other centres is under way. The project will be completed by December 2004.

Preparation of guidelines on prevention of stress at work for management
Stavroula Leka, Institute of Work, Health & Organisations (I-WHO), UK (stavroula.leka@nottingham.ac.uk)

**Keywords:** brochure, guidelines, stress, managers, prevention

**Target group:** decision-makers, educators, governmental education agencies, occupational health and safety professionals.

The objective is to educate managers on the prevention of work stress and to provide guidelines on how to facilitate prevention through the implementation of the risk management approach at their workplace. The outcome of this project will be a brochure that will address the issue of work stress and will aim to educate managers on how to facilitate its prevention at the workplace through the implementation of a risk management approach.

A draft outline of the proposed brochure is being prepared. The project will be completed by December 2003.

Preparation of guidelines on the prevention of stress at work for small and medium-sized enterprises
Stavroula Leka, (stavroula.leka@nottingham.ac.uk), Institute of Work, Health & Organisations (I-WHO), UK

**Keywords:** brochure, guidelines, risk management for work stress, small and medium-sized enterprises

**Target group:** small and medium-sized enterprises, managers, occupational health and safety professionals.

The aim of this project is to educate small and medium-sized enterprises on the causes and prevention of work stress, addressing issues of work organisation and risk management. The outcome of this project will be a brochure that will address the issue of work stress in small and medium-sized enterprises. It will aim to educate on the causes of work stress, its symptoms and its prevention through the implementation of a risk management approach.

A draft outline of the proposed brochure is being prepared. The project will be completed by December 2005.

Raising awareness on psychological harassment at work through a brochure
Renato Gilioli, Maria Grazia Cassitto, Emanuela Fattorini and Chiara Rengo, Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza sul Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del Lavoro e l’Igiene Industriale, Clinica del Lavoro “Luigi Devoto”, Milano, Italy (omscons@unimi.it)
Viviane Gonik, Institute of Occupational Health Sciences, Switzerland (viviane.gonik@inst.hospvd.ch)

**Keywords:** harassment, mobbing, stress, work-related diseases, prevention

**Target group:** health professionals, decision-makers, managers, Human Resources Directors and staff, Trade Unions and workers.

The purpose of the project is to raise awareness among health professionals, decision-makers, managers, Human Resources Directors and staff, Trade Unions and workers on the importance of psychological harassment at work, its health and social consequences and preventive measures. Psychological Harassment, also termed mobbing and bullying, is a form of employee abuse, without sexual connotations, due to unethical behaviour of colleagues or superiors, leading to victimization of the worker, with possible health effects, mainly of the psychic conditions. Social consequences and ways to combat the phenomenon are dealt with.

The brochure covers general information on psychological harassment at work, health effects, management and preventive measures. This project has been completed. The publication was presented and 2000 copies were distributed at the VI Network Meeting of the WHO Collaborating Centres and at the International Conference Occupational Health (ICOH) held in Iguassu (Brasil), February 2003. The booklet is currently being translated into Spanish by Fundación Iberoamericana de Seguridad y Salud Ocupacional (FISO), Colombia and should be printed within 2003.

Other WHO Collaborating Centres have shown interest in the translation into other languages.

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*Diffondere conoscenza e consapevolezza sulle molesties morali sul lavoro attraverso una guida*

Renato Gilioli, Maria Grazia Cassitto, Emanuela Fattorini and Chiara Rengo, Istituti Clinici di Perfezionamento, Department of Occupational Safety and Health and ISPESL/ICP Consortium for the WHO Collaborating Centre in Occupational Health, Clinica del Lavoro “Luigi Devoto”, Milan, Italy (omscons@unimi.it)
Viviane Gonik, Institute of Occupational Health Sciences, Svizzera (viviane.gonik@inst.hospvd.ch)
Parole chiave: molestie, mobbing, stress, patologie correlate al lavoro, prevenzione.

Utenza destinatari: professionisti della salute, responsabili dei processi decisionali, managers, addetti al personale, Sindacati e lavoratori.

Scopo del progetto: Diffondere conoscenza e consapevolezza tra professionisti della salute, responsabili dei processi decisionali, managers, addetti al personale, Sindacati e lavoratori sull'importanza delle molestie morali sul lavoro, le loro conseguenze sulla salute e sociali, e le misure preventive.

Descrizione sintetica del progetto: La guida fornirà informazioni generali sulle molestie morali sul lavoro, gli effetti sulla salute, il loro trattamento e le misure preventive.

Le molestie morali sul lavoro, dette anche Mobbing e Bullying, sono una forma di abuso esercitato su un dipendente, senza connotazioni sessuali, dovuto a comportamento non etico, di colleghi o superiori che provoca una condizione di victimizzazione del lavoratore, con possibili effetti sulla salute, in particolare sulle condizioni psichiche. Sono trattate anche le conseguenze sociali e le modalità per contrastare il fenomeno.

La brochure fornisce informazioni sulle molestie psicologiche nell'ambiente di lavoro, sui loro effetti sulla salute, su come gestirne gli effetti e mettere in atto misure preventive. Il progetto è stato completato e la pubblicazione è stata presentata e distribuita in 2000 copie al VI Meeting del Network dei Centri di Collaborazione con l'OMS e alla Conferenza Internazionale di Medicina del Lavoro (ICOH) che si sono svolti ad Iguassu (Brasile) nel Febbraio 2003. È in corso la traduzione in lingua spagnola, a cura della Fundación Iberoamericana de Seguridad y Salud Ocupacional (FISO), Colombia; se ne prevede la stampa entro il 2003. Altri Centri di Collaborazione hanno mostrato interesse alla eventuale traduzione in altre lingue.
issues treated can cause the other, leading potentially to a downward spiral that can effectively be countered by an integrated policy approach. In order to meet the needs of various audiences, SOLVE includes five training packages:

- SOLVE for Managing Directors (2.5 hours), The Policy-level SOLVE Course (40 hours), SOLVE for Workers (1.5 hours of orientation), MicroSolve (2 hours focussed on shopfloor action), Course Directors’ Course (24 hours).

The design of the SOLVE training package is based on the manufacturing industry. It is also adapted to the health care industry, the fire service and the maritime sector through modifications of handouts, activities and the simulation exercise. Further adaptations are foreseen. Selected institutions will act as host institutes for SOLVE. They take on the responsibility for coordinating the facilitation and instruction of the courses at national level. As the SOLVE methodology develops within a country, the institution may wish to consider adapting SOLVE to the local culture and to various occupational sectors or target audiences. The host institution may also consider the development of MicroSolve modules for application at the national level and the translation of SOLVE into local languages. Translations into French and Thai have been completed, translation into Italian is underway; German, Spanish, Bulgarian and Chinese are planned.

Funding has so far been assured by the Italian government.

**Publication on work stress and health research and training in Mexico**

Peter Schnall, UCLA and University of California at Irvine, USA (pschnall@workhealth.org)

with José Antonio Ramírez and Arturo Juárez of the National Autonomous University of Mexico at Iztacala (Mexico), and Leonor Cedillo of the College of Sonora (Mexico)

**Target group:** occupational health professionals, academics, government agencies involved with worker health

**Keywords:** work stress, psychosocial factors, occupational health, training

The purpose of the project is to publish in Spanish current research findings on psychosocial stress in the workplace in Mexico as an information dissemination tool.

Workplace psychosocial stress research and training is a nascent field in Mexico with only a few investigators working in this area scattered throughout the country. In December 2002, a meeting was held in Mexico City to bring together psychosocial stress researchers in Mexico to network, exchange ideas and discuss research and training needs within this growing field. This was the first time psychosocial researchers in Mexico had come together formally, many meeting each other for the first time. The meeting was organized by the General Directorate for Environmental Health (DGSA), the Mexican Institute for Social Security (IMSS) and the UCLA-Fogarty Program.

This project involves publishing the proceedings from this meeting. The book will provide background information on psychosocial factors in the workplace and associated deleterious health outcomes, compile the studies and findings of current research in Mexico and propose an agenda for future training and research. It will be published in Spanish and written to make it useful not only as an academic training tool, but also as a means to inform audiences beyond academia about this growing occupational health problem.

Articles are in the process of being compiled and edited. Publication is expected in 2003, supported by the National Autonomous University of Mexico.

**Publication on mental health and stress at work in Chile**

Marcelo Trucco, Asociación Chilena de Seguridad, Santiago, Chile (mtrucco@achs.cl)

**Keywords:** mental health, stress, work, promotion

**Target group:** managers, personnel managers, prevention experts, union officials, occupational health professionals and other personnel involved in health and safety activities in private and public organizations.

The purpose of the project is to introduce and promote basic knowledge regarding the prevalence and effects of stress and mental ill health in the workplace, and to provide recommendations and methodological elements to include mental health promotion activities in workplaces. The project involves the development of a manual, which will include sections on the scope of mental ill health in the general population and in the workplace; definitions of the stress process; basic information about mental health promotion; risk factors for stress and mental ill health at work; criteria for healthy workplaces; strategies for the introduction of mental health promotion in the work place.

A first version of a “Guide to Mental Health Promotion in the Workplace” is available in Spanish. This publication will serve as back-up material for the development of workshops or short seminars on this topic.

Centres collaborating on the project: Nina Horwitz, Department of Psychiatry and Mental Health, Faculty of Medicine, University of Chile (nhorwitz@machi.med.uchile.cl)

**Mental health and stress at work: Programme design, evaluation, Chilean experience**

Marcelo Trucco (mtrucco@achs.cl) and Alejandro Sallato (asallato@achs.cl), Asociación Chilena de Seguridad (ACHS)

**Keywords:** mental health, stress, work, promotion

**Target group:** This publication will serve as back up material for the development of workshops or short seminars on this topic. It will be addressed to managers, personnel managers, prevention experts, union officials, occupational health professionals and other personnel involved in health and safety activities in private and public organizations.
The purpose of this project is to introduce and promote basic knowledge regarding the prevalence and effects of stress and mental ill health in the work place, and to provide recommendations and methodological elements in order to include mental health promotion activities in workplaces. The project involves the development of a manual type of publication which will include sections on the scope of mental ill health in the general population and in the work place; definitions of the stress process; basic information about mental health promotion; risk factors for stress and mental ill health at work; criteria for healthy work places; strategies for the introduction of mental health promotion in the work place.

A draft outline and preliminary texts that are to be included in the definitive document have already been prepared. The Department of Psychiatry and Mental Health, Faculty of Medicine, University of Chile is collaborating on the project. Funds will be provided by the host country. The project will be completed in 2003.

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**Study of the mental and physical burden, in collaboration with the Habib Thameur Hospital, Medicine at Work Service of the company Light Subway Tunis**

Samira Miled and Habib Nouaigui, Institute of Health and Security at Work, Tunisia (dg.isst@email.ati.tn)

**Keywords:** mental burden, physical burden, cardio-frequencymetrics

**Target group:** health personnel in the 3 services of a hospital-university centre of Grand Tunis (Habib Thameur Hospital) and drivers of the Light Subway.

The purpose of the project is to evaluate the mental burden and identify its causes (questionnaire), to evaluate the physical burden by an objective method (cardio-frequencymetrics) and to propose, according to the results obtained, recommendations in order to improve the work conditions. The project will start in 2003 and will last a year.

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**Etude de la charge mentale et physique, en collaboration avec l'Hôpital Habib Thameur, Service Médecine du Travail de la Société Métro Léger Tunis**

Samira Miled et Habib Nouaigui, Institut de Santé et de Sécurité au Travail, Tunisie (dg.isst@email.ati.tn)

**Mots-clés:** charge mentale, charge physique, cardio-fréquencemétrie.

**Cible:** Personnel de santé dans trois services d’un centre hospitalo-universitaire du Grand Tunis (Hôpital Habib Thameur) et les conducteurs du Métro léger.

L’objectif de ce projet est d’évaluer la charge mentale et en identifier les causes (questionnaire), évaluer la charge physique par une méthode objective (la cardio-fréquencemétrie) et de proposer, en fonction des résultats obtenus, des recommandations afin d’améliorer les conditions de travail. Le projet débute en 2003 et durera une année.

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**Preparation of guidelines for shiftwork**

Barbara Griefahn, IfADo, Germany (griefahn@ifado.de)

The aim is to write a guideline for employers and employees which summarizes in short the state of the art and gives hints for a reasonable organization of shiftwork to prevent long-term adverse outcomes. The completion date is 2006. Funding is in place.

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**Violence at work - characterization of violence in the workplace, the Colombian case**

Julietta Rodríguez Guzmán, FISO, Colombia (jrodriguezg@fiso-web.org)

Funding is not yet in place. The project will be completion by July 2004.

**Keywords:** Descriptive study, violence at work, characterization.

**Target group:** Decision makers, planners and managers, and occupational health staff in the ministry of Social Protection (Health and Labor), employers and Trade Unions, Directors, managers, team leaders and occupational health staff of companies and enterprises exposed to violence.

The purpose of the project is to describe and identify factors associated to violent facts occurred in the workplace environment, and that will contact the forensic Colombian system, with the purpose of defining preventive actions and early interventions.

Considering violence is the first cause of death and the worst public health problem in Colombia, the project’s final report will include the description of the different types of violence that converge at the workplace, the national workplace violence situation identified as well as its most frequent associated factors in Colombia, a brief review of the established approaches to prevention, and a brief history of the national programs designed to eliminate violence at the workplace, as a complementation of the general violence prevention programs that are being conducted now days.

We are collaborating with The National Reference Violence Centre of Colombia on this project.

The protocol of the project has been prepared, with content and format defined. Products will include a proposal for a new classification of violence at work, based on the Colombian experience.

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**Training programme for prevention of workplace social violence in several economical sectors for the Colombian case**

Julietta Rodríguez Guzmán (jrodriguezg@fiso-web.org), Ignacio Hernández García (info@fiso-web.org) FISO, Colombia

**Keywords:** Prevention of terrorism, Kidnapping, extortion, interfamilial violence, work violence, self-protection, self-care, self-management.
Target group: Decision makers, planners and managers, and occupational health staff in companies and enterprises exposed to violence in Colombia, and perhaps other countries exposed to the violent phenomena mentioned.

The purpose of the project is to provide methodologies and skills to prevent different types of violence at the workplace, through different techniques of self-protection based in self-care and self-management.

An innovative initiative to prevent violence was designed and called "Self-protection program based on self-care and self-management". It consists of five (5) modules which include a theoretical framework, a student guide, a guideline for planning the training, and a set of slides for training. The modules were built to cover the most frequent different types of violence present at the workplace in Colombia, which are: terrorism, kidnapping, extortion, interfamilial violence, work violence and a guide to implement these programs within the enterprises. The modules were implemented and validated through 7 workshops done with employers and employees during 2002 and their results are being followed during the present year. They are now completed and available in Spanish.

The modules are finished and written in Spanish. The product is a "Self-protection program based on self-care and self-management" consisting of a set of (5) modules to prevent the most frequent types of violence at work, in Spanish, focused for the Colombian case.

Funding is in place.

Preparation of guidelines on prevention of stress at work for management
Marcela Soler (Msoler@minproteccionsocial.gov.co), Marcela Giraldo (mgiraldo@minproteccionsocial.gov.co), Ministry of Health of Colombia

Keywords: mental health; stress and work; promotion and prevention

The purpose of this project is to develop a basic norm for all the moments of psychological risk at work. The project aims to formulate a basic technical norm to deal with the risk of psychosocial stress in the work environment. Significant advances have been made in this respect. A pre-project of the norm is ready.

Protection of policemen against effects of occupational stress
Dorota Merecz (merecz@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

Keywords: Chronic occupational stress, prevention, police
Target group: Polish police forces

The purpose of the projects is to develop primary and secondary prevention of occupational stress for police officers. The project is focused on development of occupational stress preventive measures. These include both stress management and organizational intervention. The experimental version of stress prevention program has been implemented and evaluated. A preliminary report is available in Polish.

Protection of workers’ health against psychosocial factors
Bogdan Dudek (dudek@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

Keywords: psychosocial factors related to work, lifestyle, risk factors, prospective study
Target group: Police officers, fire fighters, prison personnel

The purpose of this project is to assess stress in specific group of workers and looking for predictors of health disorders to organise better prophylactic activities by occupational service. The project is planned as a prospective study.

A group of 500 subjects in the professions mentioned below will be examined twice or more often. The first stage is ongoing. The following variables are measured: stress caused by psychosocial problems, a sense of coherence, emotional reactions to work, IHD risk factors (blood pressure, cholesterol, smoking, alcohol consumption, physical activity) health status (psychosomatic disorders and symptoms, mental health).

The subjects are being followed during two years. Up to now (30.06.03) 350 subjects have been examined. The project is funded and will completed in 2005.

Psychological aspects of safety navigation and health of maritime workers
Lutaya T., Ponayotov A., State Enterprise Scientific Research, Institute of Maritime Medicine, Odessa, Ukraine (zvs@paco.net)

Keywords: stress, maritime workers
Target group: occupational health physician, psychologists, and educators

The purpose of this project is to monitor maritime workers in conditions of stress and extreme situations which require immediate decision-making; to recognise the basic signs of fatigue and decreasing of attention, and identify risk factors for stress at sea.

Size and importance of the problem: IMO (International Maritime organisation) pay a lot of attention to human factor problems in the system of safety navigation. Statistical data reveal that many accidents are caused by behavioural peculiarities. Humans
sometimes act under emotional impulses and show difficulties in controlling emotions. Aggression and irritation increase in conditions of limited space. Consumption of alcohol, drugs and smoking lead to decreasing work ability.

One of the main problems is fatigue, which often also is the reason for traumatic disorders and accidents. Prognosis of psychological disturbances is possible through in-depth examinations of the psychological state, of social conditions and interpersonal relationships.

We deem it useful to develop a special program for maritime workers, which includes theoretical and practical skills for managing emotions, for decreasing psychological tension, and for recovering after stress.

We expect to provide monitoring methods for seafarers; psychological rehabilitation methods after voyages; psychological training for operators.

Results will be published in the scientific magazines, methodical recommendations.

Duration of the activity: 2003-2006

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**Occupational stress in healthcare workers in Vietnam**

Nguyen Khac Hai, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (haink@hn.vnn.vn)

*Keywords:* occupational stress, health-care workers, psycho-physiology of work, guideline, prevention

*Target group:* academic institutions, decision-makers at Ministries, health care facilities

Objectives of this project are the evaluation of occupational stress of healthcare workers in Vietnam, the preparation of guidelines on the prevention of stress at work for healthcare workers, and recommendations on the establishment of policies for healthcare workers. Funds have been secured by WHO.

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For cross references see also:

TF 3: Child labour/adolescent workers – Occupational health problems, evaluation and control

TF 6: Health Care Workers; Health Promotion Programme for Prevention of Work-related Cardiovascular Disease; Psychosocial factors of health behaviours as a basis for educational strategy

TF 9: Publications on MSDs; Completing guidelines for the prevention of MSD as a basis for questionnaires to interested CCs to assess the load of the musculoskeletal system and to prevent MSD

TF 11: Development of a core syllabus in occupational health psychology
At present, many of the national level companies are fragmented into smaller independent units that often work in networks, outsourcing activities to smaller units, subcontracting smaller enterprises, and developing flexible work organizations. The fragmentation of the work life is likely to grow in the future, and therefore the most important provider of new job opportunities will be the small enterprises and self-employment. The number of workers in the informal sector, often not within the reach of occupational health and safety services, is considerable, particularly in developing nations. The organizing of occupational health and safety for small enterprises and for the self-employed deserves more attention in the whole world.

Guidelines for self-surveillance of agricultural workers

Somkiat Siriruttanapruk, Division of Occupational Health, Ministry of Public Health, Thailand (Somkiatk@health.moph.go.th)

Keywords: agricultural workers, self-surveillance, health book

Target group: The project has been conducted in 20 provinces of the country. It will be expanded throughout the country next year.

The objective is to develop guidelines (health book) for self-surveillance in Thai farmers. A health book has been developed as guidelines for Thai farmers to assess their health, working conditions and working environment in agriculture. The book consists of 3 main parts: self-administered questionnaires, instruction and guidelines, and medical record. It covers an introduction of occupational health and safety in agriculture, health and working history of a farmer, checklists of working conditions and working environment, and checklists of symptoms related to occupational diseases. The book will be used as a tool in the development of occupational health service and occupational health surveillance systems in agriculture in Thailand.

The first edition of the health book has already been finished and is being used in the field. The results of the study have been written up. The second edition of the book has been developed.

A Cooperative Project between Italy and Brazil for prevention of occupational risks in small and medium-sized shoe factories

Emilio Volturo, Vito Foà and Chiara Rengo, Istituti Clinici di Perfezionamento, Department of Occupational Safety and Health and ISPESL/ICP Consortium for the WHO Collaborating Centre in Occupational Health, Clinica del Lavoro “Luigi Devoto”, Milan, Italy (omscons@unimi.it)

Sonia Maria José Bombardi (bombardismj@fundacentro.gov.br) and Zuher Handar (handar@onda.com.br), FUNDACENTRO, São Paulo, Brazil

Keywords: shoe manufacturing, Occupational Health and Safety, International Cooperation.

Target group: Workers of shoe manufacturing form Italy and Brazil, experts and professionals in occupational health and safety of the two countries

The purpose of this project is to obtain prevention plans in the shoe-manufacturing sector with the participation of the scientific community, social partners, enterprises and public services of occupational health and safety. It strengthens the project Cooperation Italy-Brazil.

The objective will be reached through the establishment of a documentary repertoire (legislation, technical regulations, bibliography), the reconstruction of production cycles and work phases of the shoe manufacturing in the two countries, a survey of risks, training of workers, implementation of intervention plans.

At the Iguassu Meeting, February 2003, an Italian-Brazilian seminar was held during which has been shown that the choice of the shoe sector is correct as a field of application of the project. During the mission the relevant interest of other possible partners was verified. During the next few months the Brazilian Institutional partners will be identified. A shared version of the scientific project has been defined and in the next few months the project will be integrated in a cooperation plan to submit to the competent authorities for funding. An internet discussion group has been set up for the permanent exchange of information, updating, experiences and data.

Considering that the planning phase has been completed, we are initiating to identify the necessary funding. Should no human and financial resources be identified within the next 12 months, the possibility of reconsidering the feasibility of the project will be evaluated.
Examples of low-cost improvements applicable in the current situations in industrially developing countries will be presented. Measures, low-cost ideas for immediate improvements and suggestions for applying priority measures in the local context. Each checkpoint comprises a discussion of benefits by ergonomics.

The project is undertaken as joint work of the IEA and the ILO in cooperation with field experts in selected countries. The purpose of the project is to develop ergonomics checkpoints for improving conditions of work and life in agriculture particularly in industrially developing countries.

Target group: agricultural workers, managers and farmers in small agricultural undertakings, occupational safety and health practitioners in rural areas and instructors in educational institutions.

Keywords: training, agriculture, ergonomics checkpoints, low-cost improvement, quality of working life, action checklist

The project is undertaken as joint work of the IEA and the ILO in cooperation with field experts in selected countries. The outcome of the project will be a compilation of ergonomics checkpoints in agriculture with illustrations. These checkpoints cover materials storage and handling, workstations, agricultural machines and equipment, physical environment, welfare facilities, work organization and community-level cooperation. Each checkpoint comprises a discussion of benefits by ergonomics measures, low-cost ideas for immediate improvements and suggestions for applying priority measures in the local context. Examples of low-cost improvements applicable in the current situations in industrially developing countries will be presented.
The project is under development involving a team of ergonomics experts who compile typical examples of relevant ergonomics measures in cooperation with research centers and field institutions. Collected positive experiences in applying action checklists for improving agricultural work will be incorporated in the final joint publication.

ILO SafeWork is collaborating on the project.

Ergonomics guidelines for occupational health practice in industrially developing countries
Pat Scott, Chair, IEA IDC Committee (p.a.scott@ru.ac.za)

**Keywords:** Training, ergonomics, occupational health professionals, small and medium-size enterprises, low-cost improvement, checklists

**Target group:** occupational health professionals and practitioners active in industrially developing countries and trainers and instructors in training institutions

The purpose of the project is to develop basic ergonomics guidelines for occupational health professionals in industrially developing countries.

The project is undertaken as a joint work of the IEA and the ICOH in cooperation with selected research and training institutions active in these countries. The guidelines are compiled in the form of guidance materials for identifying problems in the working environment and applying practical intervention strategies based on basic ergonomics principles as part of occupational health practice in small and medium-size enterprises. The proposed outline of the guidelines comprises the following sections: (a) roles of ergonomics; (b) typical ergonomics-related risks; (c) risk identification and controls; (d) examples of ergonomics problems identified and solved; (e) sample checklists for use by occupational health practitioners; and (f) useful references.

The project work is done by a group of ergonomics experts experienced in occupational health in small and medium-sized enterprises. The draft guidelines have been prepared and are being tested in occupational health programs in industrially developing countries in cooperation with research centers and educational institutions in occupational health and ergonomics in these countries.

ICOH is collaborating on the project.

Level of risk and state of health of the workers of the informal sector at Cotonou
Benjamin Fayomi, University Laboratory of Health at the Work and Environment (LUSTE) (bfayomi@intnet.bj)

**Keywords:** Health, Work, informal sector, Africa

**Target:** workers, NGOs, decision makers

This study aims at highlighting the level of the risk and the state of health of the workers of various trades in Cotonou, we will carry out an exploratory study in 5 drawn communes of the city chosen randomly. This study is based on a questionnaire distributed to workers of the designated communes. These workers will be also examined clinically. We also will carry out measurements of some risk factors, in particular the level of solvents in paint workshops. We are working with the ILO on this project.

Niveau de risque et état de santé des travailleurs du secteur informel à Cotonou
Benjamin Fayomi, Laboratoire Universitaire de Santé au Travail et Environnement (LUSTE) (bfayomi@intnet.bj)

**Mots clés:** santé, travail, secteur informel, Afrique

**Cible:** Travailleurs, ONG, décideurs

Cette étude vise à mettre en évidence le niveau de risque et l'état de santé des travailleurs de différents métiers à Cotonou, nous allons réaliser une étude prospective dans 5 communes de la ville tirées au sort. Cette étude est basée sur un questionnaire à administrer aux travailleurs des communes retenues. Ces travailleurs seront également examinés cliniquement. Nous allons aussi procéder aux mesures de quelques facteurs de risques en particulier le niveau des solvants dans les ateliers de peinture. On travaille avec l'OIT sur ce projet.

Activities to improve small business access to OHS information
Sharon Burnell, National Occupational Health and Safety Commission, Australia (Sharon.burnell@nohsc.gov.au)

**Keywords:** small business, franchising

**Target group:** business advisors

The objective of this project is to improve internal processes in addressing small business issues across a range of products and activities and to improve small business access to information. The activity is undertaken in support of National Priority 2, which seeks to develop the capacity of business operators and workers to manage OHS effectively, which forms a part of the National OHS Strategy. Activities in relation to small business include producing a guide on OHS responsibilities, duties and obligations of businesses in the franchising sector, conducting a stock-taking and evaluation of OHS initiatives for small business in Australian jurisdictions and reviewing and updating OHS information for small business on the NOHSC website.

Current activities have focused on a national project to produce plain-English information on the OHS responsibilities, duties and obligations of business in the franchising sector. This work has been undertaken in conjunction with the National Research Centre for Occupational Health and Safety Regulation at the Australian National University and the Office of Small Business.
Establishment of gender-based standards in the floriculture and maquila industries
Donna Mergler, CINBIOSE University of Quebec, Canada (mergler.donna@uqam.ca)

Keywords: women, gender-based analysis, floriculture, maquila, pesticides

Target group: floriculture and maquila workers

The purpose of this project is the establishment of gender-adapted standards in the floriculture and maquila industries in Latin America using two pilot projects: one in Nicaragua (maquila) and one in Guatemala (floriculture). The project also aims eventually to develop labour standards adapted to the realities of both genders, in Latin America. The immediate goal is to make suggestions for standards in the two industries.

IRET (Costa Rica) is also collaborating on the project.

Promotion of OS&H in small enterprises and the informal sectors
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Target Group: Small industries with adhesives, dusts or metals exposure in Zhejiang, Shandong and Fujian Provinces.

The purpose of this project is to analyze the occupational hazards and critical control points of small industries with adhesives, dusts or metals exposure and to improve the control and prevention. The planning and preparatory work has been started.

Funds are provided by the Ministry of Sciences and Technology for 2003-2005.

Development of a support system for occupational safety and health management in small enterprises in Japan
Ippei Mori, National Institute of Industrial Health, Japan (mouri@niih.go.jp)

Keywords: small enterprises, occupational safety and health management system (OSHMS)

Target group: occupational safety and health staff in public sectors and companies, occupational safety and health service providers

The purpose of this project is to establish a support system for occupational safety and health management at small enterprises. The project will develop tools for occupational safety and health management (checklists, manuals and evaluation sheets), which are optimized for small enterprises, through case studies of risk management system developments at small or medium size enterprises and through a panel survey to improve work condition.

One day training activity for establishing self-sustaining OSHMS based on participatory work improvement training was conducted in a medium-scale battery manufacturing factory in September 2003. Documents and checklist used in the training was newly developed by the project staff in Japanese. After several months of implementation, an investigation for evaluation of the effect of the training, i.e. evaluation of work improvements which have done after the training, has been planned. The documents developed and the results of evaluation are expected to be put together and published in both Japanese and English in 2004.

The results of a panel survey for 84 factories was published in Japanese. A follow-up survey of the panel is planned in January 2004.

Products: Training materials for lead battery manufacturing (in Japanese); checklist for work improvement in lead battery manufacturing (in Japanese); the results of the baseline survey on OSH management in 84 small- and medium-scale enterprises in Japan (in Japanese).

Reproductive health of female workers in rural areas: Risk evaluation and management
Leonard Dobrovolsky, Kiev Institute for Occupational Health, Ukraine (yik@n.anu.kiev.ua)

Key words: agriculture, female workers, work conditions, reproductive health.

Target group: decision markers, planners and managers, occupational and public health staff, trade unions in mostly agricultural countries, managers of agricultural production.

The purpose of this project is to raise awareness among decision-makers in Departments of Health, Labour, Agriculture of work conditions and reproductive health of female agricultural workers, and to provide preventive measures. A report will cover description of working conditions of rural female workers, their reproductive health and complex of preventive measures. Main directions of research are psychological status workload, level of mechanization, chemical and biological factors at working places of female workers, indices of reproductive functions. The outline plan of the report and the introduction have already been prepared.

Occupational health and safety practices in small- and medium-sized enterprises: research of practices and identification of training needs
Stavroula Leka, (stavroula.leka@nottingham.ac.uk), Institute of Work, Health & Organisations (I-WHO), UK

Keywords: occupational health and safety, small- and medium-sized enterprises, training
Target group: small and medium-sized enterprises, managers, employees, trade unions, occupational health and safety professionals.

The purpose of the project is to research occupational health and safety practices in small- and medium-sized enterprises (SMEs) and determine their training needs as well as needs for future research. The outcome of the project will be a report that will present the main findings of research on the occupational health and safety practices of small and medium-sized enterprises, will identify their training needs and will suggest paths for future interventions.

A research programme in Greece and the UK has been completed. New collaborative countries are looked for. Funds are partly in place. The project is scheduled to be completed by June 2005.

Occupational health and safety practices in small and medium-sized enterprises

Stavroula Leka, Institute of Work, Health & Organisations (I-WHO), UK (stavroula. leka@nottingham.ac.uk)

Julietta Rodríguez Guzmán, FISO–Colombia (jrodriguezg@fiso-web.org)

This project is producing a basic occupational health programme to be implemented in small and medium size enterprises. It involves information systems design, structure, process and results. The model will be implemented at the national level.

A research programme in Greece and UK has been completed. New collaborative countries are looked for.

Funds are partly in place. The project is scheduled to be completed by June 2005.

Support for a local and a regional network of stakeholders in occupational health

Andrew Curran, Health and Safety Laboratory, UK (andrew.curran@hsl.gov.uk)

Keywords: stakeholders, network, local initiatives, targets, education

Target group: occupational health professionals, small to medium sized enterprises, employers and employees, trade unions

The objective is to raise awareness of occupational health issues amongst target groups through the coordinated activities of a local occupational health development group, comprising representatives of appropriate stakeholders; in particular, to provide training, support and information to small to medium sized enterprises. Activities will include training, production of relevant materials, standard setting and support for networking.

The Sheffield Occupational Health Development Group has developed an ongoing plan of work in many areas of occupational health including standards, primary care issues, secondary care provision, education and training, information provision and research and development.

Education and training: The Group holds an annual conference, which has proved very successful; each year it targets a particular stakeholder group. Other activities have included training days on Hand Arm Vibration syndrome. Members of the Group are also involved in discussions with Sheffield Universities and other agencies to raise the profile of occupational health in the curriculum and the local business community.

Information Provision: The Group produces a free quarterly newsletter and holds regular network meetings. These meetings discuss a single occupational health topic (e.g. workplace stress) and provide an opportunity for anyone to discuss occupational health issues informally over lunch. We have also developed a website, where we will be placing case studies, examples of best practice and copies of the newsletter.

Research and Development: Initial research by the Group has shown that there is still work to be done to convince employers of the benefits provided by good occupational health provision. We are currently planning work to estimate the nature and extent of occupational ill health in Sheffield, and assess the impact of targeted intervention (using workplace training and risk assessment) in improving workers' understanding of occupational ill health concerns specific for their workplace.

The following products are available: website (http://www.healthyworksheffield.org.uk), quarterly newsletters, quarterly network meetings and an annual conference.


Matti S. Huuskonen, Finnish Institute of Occupational Health (FIOH), Finland (huuskonen@occuphealth.fi)

Keywords: small workplaces, occupational health and safety, working capacity

Target group: The programme included 16 projects with 20,000 people from 600 workplaces and collaborated with 900 occupational health experts from 200 occupational health units. Experts from the institutes, unions, authorities and mass media supported the programme which functioned on workplace, sectoral and general levels.

The aim of the programme aimed is to promote working capacity and prevention of disability at work places.

In Finland 94% (1998) enterprises had less than ten employees. The law stipulates that workplaces of all sizes must provide occupational health services. An essential element of good occupational health care practices is the maintaining of the working ability. The results showed that the target of working capacities should always be the enterprise with its entire staff and that various types of action should be taken simultaneously at the level of individual, the work organizations and the working environment. The need to improve professional skills is particularly relevant for ageing employees and people with reduced working capacities. All working capacity subsectors must be addressed in order to achieve real improvement.

The project showed that small workplaces have less capacity than medium-sized and big companies to prevent and control hazards. In addition their awareness of occupational health and safety problems is not always well developed and they need external support. There are several problems in organizing such support. In Finland, the occupational health care units can...
reach small workplaces, start with them and support expert interventions for the development of well being of workers and workplaces. The FIOH small workplaces action programme was carried out from 1995-2000. However, reporting of many projects is still in progress.

**NIOSH safety checklist program for small business -- OSH CD-ROM with a safety program and resources for small enterprises**

John Palassis NIOSH, USA, (JPalassis@cdc.gov)

*Keywords*: safety, program, checklists, small business, supervisors, workers, construction, young workers, CD-ROM

*Target Group*: Small enterprise owners

The aim of this project is to contribute and disseminate occupational safety and health information in a CD-ROM format to small enterprises to assist the owners with regulatory requirements, information how to establish a safety checklist program in their workplace. Resources will include ready fill-in-the-blanks occupational safety programs, how to increase safety and health awareness in small enterprises, and also information for young workers in the workplace. The CD-ROM will provide information on how to establish a safety and health checklist program based on 82 safety checklists to increase awareness of workplace hazards and ways to control the hazards. The CD-ROM will include numerous safety and health and environmental resources and programs, and hundreds of links to helpful organizations and government agencies. The information in the CD-ROM will need to be reviewed internally, externally, and by focus-group. Funding for the project is in place. It is estimated that this CD-ROM project will be completed sometime in 2004.

**Occupational health and safety management model for small and medium-sized enterprises in Colombia, Chile and Argentina**

Julietta Rodríguez Guzmán, (jrodriguezg@fiso-web.org), Lelys Archila (larchila@007mundo.com), Carolina Cuartas (info@fiso-web.org), Fundación Iberoamericana de Seguridad y Salud Ocupacional FISO, Instituto de Medicina Legal y Ciencias Forenses/ Centro Nacional de Referencia de la Violencia, Colombia.

*Keywords*: Management for MSSE, micro and small scales enterprises.

*Target group*: Decision makers, planners and managers, and occupational health staff in the worker’s compensation insurance companies; employers and employees of micro and MSSE of Colombia, Chile and Argentina.

The purpose of the project is to design a comprehensive model to manage OHS programs and reinforce productivity, OSH programs and accomplishment of the laws for the MSSE and micro enterprises affiliated to worker’s compensation insurance companies of Colombia, Chile and Argentina.

Taken into account that more than 85% of the enterprises of Colombia, Chile and Argentina are micro, small and medium size enterprises, there is an increasing need to cover them with the benefits that social security (worker’s compensation) programs provide by the national laws. At the same time, it is needed to develop effective communication channels that will allow a permanent assessment of the micro and the MSSE. The comprehensive model develops a virtual channel, a massive channel and a presenencial channel, that communicates de insurance companies with the enterprises, allowing to deliver basic law information, news, OHS and productivity virtual and real training for the enterprises, as well as assessment for developing managerial enterprise skills. The model has established a basic structure that is being adapted to the needs, habits and the language jargon of each of the three countries. The final product will include all three channels described, as well as law, OSH, productivity and other prior topic assessment for nine (9) different prior economical activities.

The comprehensive model, its content and format, has been designed and is being validated with local task groups in each country. It is expected to be finished by June 2003.

Asociación Chilena de Seguridad, is collaborating on this project.

A new comprehensive model for micro and MSSE management, OSH and law assessment will be available on the web and the media. Funds are in place.

**Economic appraisal of occupational health and safety in small enterprises**

Monica Bergström, Finnish Institute of Occupational Health (FIOH), Finland (monica.bergstrom@ttl.fi)

*Keywords*: small enterprises, cost-effectiveness, work ability

*Target group*: 39 small-scale enterprises from three different sectors

The main aim of the study is define the Maintenance of Work Ability (MWA) factors that have on effect on productivity of small enterprises. The study is part of Small Workplace Action Programme (1995-2000) of Finnish Institute of Occupational Health. There were 39 small and medium sized enterprises from three different sectors involved in this study during 1998-2000. There were 92 enterprise-specific development projects with approximately 1-6 projects per firm. Data was gathered by using survey questionnaires and interviews for employers, employees and Occupational Health Service Units. In terms of economic impact on work ability, the rate of absenteeism and associated costs were analyzed. This was done by comparing absenteeism rates in each enterprise to the average and best enterprise of each sector. The business economic benefit for reducing the average sickness absenteeism rate to that of sectors best varies between € 950 - 2392 per employee per year. There is a positive correlation between personals working capacity and enterprise’s productivity and profitableness.
Analysis done, and success factors are being identified.

**Occupational health and safety practices in small and medium-sized enterprises**

Marcela Giraldo, Ministry of Health, Colombia (mgiraldo@minproteccionsocial.gov.co),

*Keywords*: safety practices, occupational health in small and medium-sized enterprises

*Target group*: small and medium-sized enterprises

The purpose of the project is to design and implement a model of occupational health programme for small sized enterprises (less than 10 workers). A basic occupational health programme to be implemented in small and medium size enterprises is being produced. It involves information systems design, structure, process and results. The model will be implemented at the national level. The basic model is ready.

**Training workshop on implementation of OSH policies in agriculture and informal sector**

Nguyen Thi Hong Tu, Ministry of Health, Vietnam (hongtu@netnam.vn)

*Keywords*: OSH, agriculture, village enterprises, policies.

*Target group*: decision-makers at ministries, academic institutions, medical university, trade union, Co-operative Union, Farmer Union

The purpose is to provide aspects of OSH in agriculture and informal sector. The workshop will be held in 2005. Funds have been secured by WHO, Vietnam Goverment.

**Indicators of chemical exposure in villages with traditional occupations**

Nguyen Ngoc Nga, National Institute of Ocupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (n.n.nga@fpt.vn)

*Keywords*: exposure, chemical, indicator, profile, surveillance, traditional career village.

*Target group*: regional, national and local authorities, employees, employers, NGOs, communities

The objective of this project is to survey exposures to selected chemicals and its influence on workers and the environment for sectoral, national and regional control in Vietnam; to draw out a scientific base for policy making; and to contribute to setting up an occupational health profile. Funds have been secured by WHO.

**To evaluate Quality of Life of female workers who suffer from reproductive tract infection (RTI)**

Nguyen Ngoc Nga, National Institute of Ocupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (n.n.nga@fpt.vn)

*Keywords*: RTI, Quality of Life

*Target groups*: policy-makers, managers, occupational health staff, female workers, employer, MOH, MOLISA, Women union

The objective of this project is to apply WHO-QOL-100 to evaluate Quality of Life of female workers who suffer from RTI; and to raise awareness among employees, employers, managers, policy-makers, MOH, MOLISA of the existing risks for RTI, the magnitude of the problem and the necessity of preventive measures. Funds have been secured by WHO.

**Development of a health book and guideline on health promotion to small enterprises (agriculture, ceramic workers, mental workers and mechanists)**

Somkiat Sirirutanapruk, Ministry of Public Health, Thailand (somkiatk@health.moph.go.th, wilawan@anamai.moph.go.th)

Funds are in place (Thai Government budget). The project will be completed by December 2003.

**Occupational and environmental development of the community enterprises, the Thai government policy**

Taweewan Leerapun, Ministry of Public Health, Thailand (wilawan@anamai.moph.go.th)

Funds are in place (Thai government budget). The project will be completed by December 2003.

**Occupational health and safety programme implementation in newly organized small enterprises**

Bogoljub Perunicic, Institute of Occupational and Radiological Health, Serbia and Montenegro (perunb@Eunet.yu)

The project is partly funded by the Governmental Agency for SSE. It will be completed by December 2003.

For cross references see also:

TF 2 : Moving forward the WHO/ILO Joint Effort on Occupational Health and Safety in Africa

TF 3 : Model development of occupational health management in child labour in the informal sector

TF 6 : Healthy workplace programme in Vietnam
TF 9 : Questionnaire to all interested CCs to survey the MSD situation
TF 12 : Development of OCH website for employers and employees of European SMEs
The musculoskeletal disorders are one of the main occupational health problems in both the old and new economies. Development of ergonomics, adoption of good and safe work practices and health promotion are in a key role when finding solutions to prevention of musculoskeletal disorders.

Musculoskeletal disorders in Motor Company Workers

Jung-Wan Koo, Catholic Industrial Medical Centres, Korea (jwkoo@catholic.ac.kr)

Keywords: musculoskeletal disorder, motor company

Target group: workers in the manufacturing industry

The aim is to evaluate musculoskeletal disorders in motor company workers. The project will be held in a motor company located in Bupyeong, South Korea. The musculoskeletal disorders will be evaluated by questionnaires and work survey and diagnostic tools. Criteria of the musculo-skeletal disorders are being prepared and the paper is being reviewed.

Questionnaire to all interested CCs to survey the MSD situation

Marcela Giraldo, Ministry of Health, Colombia (mgiraldo@minproteccionsocial.gov.co)

Keywords: Musculoskeletal disorders; accidents at work

Target group: Manufacturing force of small and medium sized industries

The purpose of the project is to design an instrument to identify factors that causes musculoskeletal accidents at work. Models used in the country will be compiled and a type or standard model will be produced with the back up of experts and universities to evaluate and investigate the related disorders. Initially a questionnaire will be used for the small and medium sized industries.

Joint efforts to produce publications on prevention of MSDs to end users in the developing countries

Gábor Galgóczy, National Institute of Occupational Health, Hungary (galgoczy@fjokk.hu)

Keywords: information about causes, diagnostic guidelines, reporting of occupational MSD, statistics of occupational diseases, prevention

Target group: occupational health physicians and nurses, rheumatologists, orthopaedists, health statisticians, health decision-makers

A publication has been compiled on the musculo-skeletal diseases caused by hand-arm vibration syndrome. We intend to expand this into a comprehensive methodological guide on occupation MSDs.

The modification of the first draft in preparation since 2002; deadline: 31 October 2003.

The draft methodological guide is to be submitted to the relevant professional colleges; deadline: 31 December 2003.

Incorporation of the recommendations of the professional colleges; deadline: 30 June 2004.

Translation of the methodological guide into English; deadline: 31 October 2004.


Musculo-skeletal Disorders among seafarers and port workers

Phd. Lobenko A., Phd. Ignatiev A, State Enterprise Scientific Research, Institute of Maritime Medicine, Odessa, Ukraine (zvs@paco.net)

Keywords: musculo-skeletal disorders, osteoporosis, maritime and port workers, vibration; calcium deficit

Target group: occupational health physician, orthopaedists, and health statisticians. The purpose of the project are epidemiological studies of musculo-skeletal disorders related to professional hazards of seafarers and port workers.

Morbidity caused by musculo-skeletal disorders increased twice during the last three years and takes the second place in the structure of invalidity after circulatory diseases. Invalidity of the working population caused by osteohondrosis increased by 20%. Fractures as a result of trauma increased by 25%. The percent of morbidity of musculo-skeletal diseases was more frequent where the level of vibration and noise was higher. Medical examination of workers showed that bone fractures were caused by osteoporosis and osteopenia. The laboratory data testified a correlation with calcium deficit.

We propose to continue medical examination of workers whose activity connects with high level of vibration.

We plan to study morbidity and invalidity of maritime and port workers (500 people), the condition of bone tissue by ultrasound densitometry, laboratory tests, and to develop prophylactic measures and recommendations. The first stage comprises monitoring of bone effects in workers exposed to vibration and the establishment of criteria for assessment of specific occupational risks of musculo-skeletal disorders. The second stage involves early determination of musculo-skeletal disorders,
the proposition of prophylactic measures for workers exposed to vibration; the determination of standards with regard to vibration exposure limits. The third stage will produce the results of research activities which will be delivered through publications in medical journals, monographs and guidelines. Training programmes for medical personnel have been organised. Duration of the activity : 2003-2006.

Publication on MSDs
Bernd Cugier, Federal Institute of Occupational Safety and Health (FIOSH), Germany (cugier.bernd@baua.bund.de)
As an activity of the FIOSH, a combined programme was developed in May 2002 aimed at the assessment of stress and strain in manual material handling and their relations to musculoskeletal disorders. The programme consists of two parts: Risk Assessment and Health Assessment. In the part Risk Assessment a method is described to calculate the risk of manual handling tasks by means of "key indicators" such as frequency or duration of lifting, load weight, body posture, and restricted working conditions. The "Key Indicator Method" is recommended for application according to the Load Handling Ordinance in Germany. In the part Health Assessment a multi-step inventory for diagnostics of musculoskeletal disorders in the occupational medical practice is given. It was developed by orthopaedic physicians in cooperation with the FIOSH. The combined programme is published on the web-site of FIOSH (www.baua.de/prax/index.htm) available in German only. There is also a simple PC programme for calculating the risk score.
Funding is in place. The project will be completed by December 2005.

Completing guidelines for the prevention of MSD as a basis for questionnaires to interested CCs to assess the load of the musculoskeletal system and to prevent MSD
Barbara Griefahn, Institute for Occupational Physiology at the University of Dortmund (IfADo), Germany (griefahn@ifado.de)
Keywords: MSD, Guideline, Questionnaire, Computer-based assessment of musculoskeletal load
Target groups: decision-makers at various levels (employers, Departments of Health and Labour, Trade Unions)
The purpose of the project is to determine the situation of MSD in various countries (where Collaborating Centres exist) and to provide a computer-based tool for the assessment and prevention of MSD.
Guidelines have been prepared in close cooperation of IfADo and the Federal Institute of Occupational Safety and Health (FIOSH) Berlin, Germany. They outline the significance of MSD as a main cause for absence from work and for high costs for public health. Health problems occur, in particular, if the mechanical workload is higher than the load-bearing capacity of the musculoskeletal system, irrespective of its components (bones, tendons, ligaments, muscles, etc.). Apart from mechanically induced strain effecting the locomotor organs directly, psychosocial factors such as time pressure, low job decision latitude or insufficient social support can augment the risk by elevated muscle tension and by effecting motoric coordination. Reducing the mechanical load on the musculoskeletal system during the performance of occupational work is an adequate preventive measure. Major risk factors are high force resulting from lifting, pushing, or pulling heavy objects, high repetition frequency or long-term force execution, unfavourable posture, static muscle forces or working on or with vibrating machinery. Effective measures for the reduction of forces acting within or on the skeletal and muscular structures consider occupying a favourable posture next to a reduction of load weight.
FIOSH Berlin, Germany is collaborating on the project.

Questionnaires on musculoskeletal disorders related with accidents at work
Kenneth R. Laughery (laugher@ruf.rice.edu), (Chair, IEA STP Committee) IEA STP-TC MSD, with STP and IDC Committees
Keywords: musculoskeletal disorders, ergonomics, accidents at work, occupational safety and health management systems
Target group: occupational safety and health personnel concerned with the prevention of musculoskeletal disorders and related accidents and instructors in relevant educational and training institutions
The objective of this project is to develop action-oriented questionnaires on musculoskeletal disorders related with accidents at work for their use by occupational safety and health personnel. The project is undertaken as an international activity of the IEA STP-TC Musculoskeletal Disorders. The project aims to examine current conditions of work and the working environment in different industrial settings and develop practical questionnaires on existing musculoskeletal disorders and necessary preventive measures. The questionnaire items are compiled on the basis of field experiences in various countries. The outcome of the project are tested by members of TC MSD and presented for use as guidance materials in occupational safety and health management systems. The project also aims at publishing positive experiences in the prevention of musculoskeletal disorders and related accidents.

Survey on musculoskeletal disorders in Vietnam
Le Van Trung, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (letrung@hn.vnn.vn)
Keywords: musculoskeletal disorders, ergonomics
The objectives of this project are the investigation on the occurrence of musculoskeletal disorders (MDs) in selected occupations in Vietnam, analysis in terms of causal factors, and suggestions of ergonomic interventions. Funds have been secured by WHO.
Inventory of other materials related to prevention of MSDs

Barbara Griefahn, Institute for Occupational Physiology at the University of Dortmund (IfADo), Germany (griefahn@ifado.de)
The project is funded in-house.
The goal is to develop predictive models for the MSD related to manual material handling and due to whole-body-vibrations as well as hand-arm-vibrations. The project will be completed by November 2004.

Evaluation of exposure and detection of health effects

Jana Hlávková, Centre of Industrial Hygiene and Occupational diseases, National Institute of Public Health, Czech Republic (jhlav@szu.cz)

Keywords: Musculoskeletal disorders, long-term overloading, small muscles, occupational diseases, and surface electromyography

Target group: Selected employees working under conditions that cause local-muscular overload. The selection of monitored persons will be made on the basis of an analysis of reported occupational diseases.

This project is aimed at evaluating the causal connection between working conditions and the onset of musculo-skeletal diseases, particularly those caused by long-term excessive load. It is known that various factors are responsible for the development of MSD. For the purpose of prevention it is essential to be acquainted with the significance and ratio of individual factors related to these diseases. We have therefore concentrated on assessing the influence and relative significance of individual occupational factors related to local muscular load. The aim is to reveal their significance in the onset of individual types of occupational diseases caused by excessive unilateral load, confirm the viability of currently used values and create criteria for assessment of individual occupational diseases.

Currently, data are being accumulated, analyzed and evaluated. The project is progressing according to schedule and currently data are being accumulated, analyzed and evaluated.

The project is scheduled to be completed by 2005 and funding is in place. The planned outcomes include establishing physiological criteria for the acknowledgement of MSD as an occupational disease, and elaborating the principles of prevention and intervention in MSD due to heavy physical work. The calendar is as follows: 2002 – 2004 for accumulating dates, continuous analysis and evaluation; and 2005 for final analysis and evaluation. The project is being run in close collaboration with all Authorities of Public Health nation-wide (regional and district).

Preparation of teacher’s guide and fact sheet within the area of occupational exposure to vibration

Lage Burström, National Institute for Working Life, Sweden (lage.burstrom@arbetslivsinstitutet.se)

Keywords: vibration, whole-body, hand-arm, occupational, guide

Target group: The Teacher’s Guide is targeted towards persons involved in the education of individuals who are either exposed to occupational vibration, need to manage environments where workers come into contact with vibration, or need to deal with various health effects of vibration. The target group is people located in developing and industrializing nations.

The purpose is to produce two documents, one teacher’s guide (40-80 pages) and one fact sheet (4-5 pages) within the area of occupational exposure to vibration. A draft outline of the teacher’s guide for the area of hand-arm vibration is under preparation and will be reviewed during the beginning of next year. The guide covering whole body vibration will be ready for review during 2003 as well as the fact sheet. Feedback on draft of the manuscripts is provided from WHO Collaborating Centres in Bulgaria, Ukraine, Chile, Czech Republic, Hungary and Thailand.

Joint efforts to produce publications on prevention of MSDs to end users in the developing countries

Barbara Griefahn, Institute for Occupational Physiology at the University of Dortmund (IfADo), Germany (griefahn@ifado.de)
The project is funded in-house. Activity was initiated in May 2002.

Publication on MSDs

Marie Haring Sweeney (MSweeney@cdc.gov) and Raymond Sinclair (RSinclair@cdc.gov), NIOSH, USA

The project aims to contribute to development of WHO Guidelines to prevent musculoskeletal injuries among workers. Funds are in place. The project will be completed by December 2005.

Publication on MSDs

Taiyi Jin, Fudan University School of Public Health, China (tyjin@shmu.edu.cn)
The project is in search of funds. The date of completion is yet to be confirmed.

Annual ergonomics workshop for occupational health professionals

Center for Occupational and Environmental Health, School of Public Health, University of California at Los Angeles (UCLA), USA - Victor Liu, California State University at Northridge, USA (vliu@ucla.edu) with the Center for Scientific Research and Postgraduate Education at Ensenada, Mexico.
Keywords: ergonomics, workshop, training, Spanish
Target group occupational health professionals, industrial hygiene specialists, human resource personnel, operations managers
The purpose of the project is to promote occupational safety and ergonomics in the maquiladora industry in Baja California, Mexico
This annual, one-day workshop serves to disseminate occupational safety and ergonomics information within the maquiladora industry in Mexico by training health professionals and other responsible personnel. The instruction includes tools to identify, solve and systematically prevent the occurrence of work related musculoskeletal disorders (WRMD) due to ergonomic factors. Participants are trained in evaluating and monitoring WRMD in order to increase productivity and reduce absenteeism. The workshop is supported by the Fogarty Center training grant at UCLA. The third workshop has just been conducted; the next one is anticipated in 2004.
Products are slide presentations from the workshop compiled on CD.

Course on ergonomics and the prevention of musculoskeletal disorders at the workplace
Chia Sin Eng, WHO Collaborating Centres in Occupational Health, Singapore (cofcse@nus.edu.sg)
Nguyen Viet Dong, Centre for Occupational Health and Environment, Ministry of Industry, Viet Nam (ttytelaodongcn@hn.vnn.vn)
Keywords: ergonomics, work process, musculoskeletal problems, practical recommendations.
Target group: occupational physicians from the Ministry of Industry and Ministry of Health, Viet Nam both at the capital and provincial levels will be selected to attend this Course.
The aim of this project is to train a group of occupational physicians and health care professionals so as to empower them to be able to evaluate possible risk factors for musculoskeletal disorders arising from the workplace. These trainers will then train others in the discipline. The project will consist of a one-week intensive stay-in course where participants will be taught by occupational physicians, ergonomists and occupational therapists. The sessions include lectures, case studies, tutorials and workplace visit with on site risk assessment, group presentations and report writings.
A draft outline of the proposed programme has been prepared, with content and format defined, and is now under review by the different ministries. The Course is planned for May 2003 in Hanoi, Viet Nam. The Singapore International Foundation is collaborating on the project. Other contributors are:
Peter Buckle, ICoH SC on Musculoskeletal Disorders, UK (p.buckle@surrey.ac.uk)
Nikolai Izmerov, RAMS Institute of Occupational Health, Moscow, Russian Federation (izmerov@rinet.ru), and IEA.

Application and validation of a biomechanical model for manual material handling
Matthias Jäger, IfADo, Germany (mjaeger@ifado.de)
The biomechanical model ‘Der Dortmunder’ allows the estimation of the strain on the spine caused various types of manual material handling. This model will be applied and validated in the field in cooperation with several partners (multi-center study). The aim is to predict the long-term effects on the spine. 2006 will be the completion date. Funding is in place.

Development of a biomechanical model
Martin Fritz (fritz@ifado.de), IfADo, Germany
Development of a biomechanical model for the prediction of forces in the spine and the long-term outcome caused by whole-body vibrations. The completion date is 2006. Funding is in place.

Spanish language computer software to help prevent musculoskeletal disorders
Victor Córdova, Asociación Chilena de Seguridad (ACHS), Chile (gsavcp@gw.achs.cl)
Funds will be provided by the host country. The project will be completed by December 2003.

Publication: Prevention of MSDs
Matthias Jäger (mjaeger@ifado.de), Barbara Griefahn (griefahn@arb-phys.uni-dortmund.de), Institute for Occupational Physiology at the University of Dortmund, Germany
Gustav Caffier (caffier.gustav@baua.bund.de), Falk Liebers (liebers.falk@baua.bund.de), Ulf Steinberg, Federal Institute for Occupational, Berlin, Germany
Keywords: Musculoskeletal diseases, prevention and control, workplace, risk factors
Target group: employers, supervisors and occupational health trainers
Disorders of the musculoskeletal system represent a main cause for absence from occupational work. Musculoskeletal disorders lead to considerable costs for the public health system. Specific disorders of the musculoskeletal system may relate to different body regions and occupational work. For example, disorders in the lower back are often correlated to lifting and carrying of loads or to the application of vibration. Upper-limb disorders (at fingers, hands, wrists, arms, elbows, shoulders, neck) may result from repetitive or long-lasting static force exertion or may be intensified by such activities. The severity of these disorders...
may vary between occasional aches or pain to exactly diagnosed specific diseases. Occurrence of pain may be interpreted as the result of a reversible acute overloading or may be a pre-symptom for the beginning of a serious disease.

The purpose of this document for the prevention of musculoskeletal disorders is to inform about risk factors and to influence actions of employers and the behaviour of workers in such a way that risks of physical loadings, dangerous to health or unnecessarily fatiguing, are avoided or diminished.

It is intended that this booklet be used by employers, supervisors and occupational health trainers to help them recognise risks that may lead to musculoskeletal disorders, as well as to design work itself and the work environment in a way which is safe for the employee. The brochure has now been published in English (www.who.int/oeh/OCHweb/OCHweb/OSHdocuments/WHOOSHDocuments/WHOCHDocumentsHQDocs.htm#PWH) and will be available in French and Spanish early 2004.

For cross references see also:
TF 2: Training in an ergonomics approach by safety experts in African countries
TF 5: Various guidelines for health care workers; Training course – Occupational health and safety in hospitals
TF 6: Training and public communication in the application of ergonomics in industry
TF 8: IEA/ILO checkpoints on ergonomics in agriculture; Ergonomics guidelines for occupational health practice in industrially developing countries
TF 10: Developing criteria for ergonomics quality in design accreditation procedures
TF 11: Training course – Occupational health and safety in hospitals; Sharing of training programs and materials in occupational health and safety; Training for occupational physicians and hygienists; China - Workshops and study tours on occupational health promotion at medium and small-scale workplaces; Philippines - Fellowship training of staff on environmental/occupational health risk management and on ergonomics; Viet Nam - Training courses on health promotion at workplaces; Workshop on assessment of health and economic losses
TF 12: Contributing to the development and use of ergonomics-related training materials on the web
Effective occupational health practice requires not only the front-line OHS at the enterprise and local levels, but also several expert services that individual companies or workplaces may not be afforded to sustain. Expert advisory and analytical services of occupational hygienists, ergonomists, and safety engineers, among others will be needed. In all steps of occupational health practice the principles of total quality management and continuous quality improvement should be followed.

Translation of Toolkit

Tom Sorahan (T.M.Sorahan@bham.ac.uk), Heather Jackson (Heather.Jackson@lyondell.com)

International Occupational Hygiene Association (IOHA), USA

Keywords: prevention, control banding, occupational hygiene, work-related illness, ILO Toolkit

Target group: all interested CCs over and beyond those who have currently expressed interest.

The objective is to make the control banding techniques, as illustrated by the ILO Toolkit, usable by all participating Collaborating Centres. The translation will afford the opportunity for individual countries to begin the process of taking ownership of the Toolkit as appropriate to their needs. The aim is to put forth the ILO Toolkit to the participating CCs and allow them to translate the Toolkit to ensure a culturally appropriate version for them to distribute, evaluate, and eventually implement.

A two-day workshop on Control Banding was hosted in London, UK on the 4th and 5th of November, 2002. This workshop included presentations that illustrated the translation of the Toolkit into Indonesian and Russian with applications begun within Indonesia. Further, current plans are to translate the Toolkit into Bulgarian, Chinese, and Spanish. As a result of this workshop approval has been given to IOHA to distribute the ILO Toolkit to the currently requesting countries and their respective CC’s. At this time, South Africa, Japan and Thailand have committed to translation of the Toolkit upon receipt. NIIH, Japan is collaborating on the project.

Assessing the Utility of Control Banding in the United States

T.J. Lentz (TBL7@cdc.gov), Rick Niemeier (RWN1@cdc.gov), Marilyn Fingerhut (MAF2@cdc.gov), National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, USA

Keywords: control banding, engineering controls, occupational hygiene, small businesses, work practices

Target group: International occupational health community, U.S. occupational health professionals and small business community

This project will investigate multiple issues relating to the utilization of control banding, an approach to controlling risk from chemical exposures designed specifically to meet the needs of small businesses. Primary objectives of this project will be to determine the utility and barriers to implementing control banding for addressing hazards in U.S. workplaces. Through meetings and discussions with international partners, national agencies, and labor groups in the United States, and an interdivisional NIOSH panel of experts (control banding committee), this project will generate strategies and products for guiding the implementation of control banding, evaluating the effectiveness of these techniques, and determining obstacles to overcome for effective implementation. By adopting and modifying existing approaches and tools first tested by international partners, the project will also consider development of additional control banding applications for NIOSH priority areas of ergonomics, dermal exposures, and traumatic injuries.

A summary of activities planned for Fiscal Year 2004 (10/03 – 10/04) is provided below.

- Co-sponsorship of the Second International Control Banding Workshop, March 2004, Cincinnati, Ohio, USA;
- Co-sponsorship of the AIHCE Forum on Control Banding, May 2004 Atlanta, Georgia, USA;
- Developing and establishing a Web Page on control banding, either internally or by assisting the WHO/IPCS or ILO through funding of a cooperative agreement to develop such a page;
- Developing and evaluating the utility of a control banding “toolkit” for approximately six chemical substances used in small business environments, utilizing technical and research capabilities either within the Institute or through joint agreements with the HSE, ILO, or WHO.
- Convening periodic interdivisional meetings of the Institute control banding committee and external national and international stakeholders via teleconferences, ENVISION, and in conjunction with other programmed travel or meeting opportunities.

Translation of ILO-toolkit and application of control banding techniques

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Target Group: Small industries with occupational hazards

The purpose of this project is to distribute the control banding technique and improve hazard control in small industries.
Assessing the Utility of the ILO Toolkit in Singapore
Magdalene Chan, Occupational Health Department, Ministry of Manpower, Singapore (magdalene_chan@mom.gov.sg)

Keywords: ILO Toolkit, control banding, risk assessment, chemical hazard analysis and control, small and medium enterprise

Target group: international occupational health community, occupational health professionals and small business community

The objective of the project is to investigate the issues involved in applying the ILO Toolkit that uses the control banding approach and to evaluate its usefulness in small and medium enterprises (SMEs) in the Singapore context.

The project will be carried out in two phases. In the first phase, the ILO Toolkit will be tested out in parallel with a semi-quantitative risk assessment method developed by Singapore’s Ministry of Manpower, based on exposure data and other parameters. The field tests will be conducted by industrial hygiene professionals on selected processes from various industries. Risk levels derived from the risk assessment method will be compared to the control approaches obtained from the Toolkit assessment to evaluate the consistency of both methods. In the second phase, different SMEs will be selected to try out the Toolkit method using their own resources. The applicability of the Toolkit will be assessed based on the results of the field tests and feedback from the SMEs.

The project is in its first phase and field testing has been conducted on processes from the metalworking and paint manufacturing industries.

Names of other centres collaborating on the project: Heather Jackson (Heather.Jackson@lyondell.com), International Occupational Hygiene Association (IOHA).

Product: Report on the applicability of the ILO Toolkit in Singapore. The project is expected to be completed by early 2005.

Translation of ILO OSH-MS Guidelines into Bulgarian
Emilia Ivanovich, National Center of Hygiene, Medical Ecology and Nutrition, Sofia, Bulgaria (e.ivanovich@nchmen.government.bg) with Svetla Zolova and Theodor Panev

Keywords: brochure, chemicals, adverse effects, prevention

Target group: decision makers, planners and managers, occupational health stakeholders

The purpose of the project is to supply decision makers at national, regional and company level with guidance and instruments for developing occupational health and safety policy.

This translation will supply methodology and tools for effective management of the risks due to exposure to hazards of different nature. It will contribute to effective occupational health practice and risk management, raise awareness of employers for implementation of good occupational health practices and principles of total quality management and continuous improvement of the working environment and workers well-being.

Centres involved in the project are the National Center of Hygiene, Medical Ecology and Nutrition, Bulgaria, CIS Centre – NCHMEN, ILO – Ministry of Labour and Social Policy

Alternatives for pesticide use in Costa Rica
Fabio Chaverri, IRET-UNA, Universidad Nacional, Costa Rica (fchaverr@una.ac.cr)

with Ministry of Environment (MINAE), University of Costa Rica (UCR, Faculty of Agro-Nutritional Sciences); Technological University of Costa Rica (ITCR, School of Agronomic Sciences); National Association of Organic Agriculture (ANAO); Biomass Users Network (BUN); Eco-Lógica (an organic certification organization); Latin American Pesticide Action Network (RAPAL)
**Keywords:** Integrated Pest Management, Organic agriculture, Sustainable agriculture, Technology transfer, Environmental management certification.

**Target group:** Pesticide users (large agro-industries, small and medium farmers, agricultural workers), policy makers, general public.

The objective of the project is the reduction of pesticide use in Costa Rica. It began in 1993. The most problematic crops and pesticides are prioritized for preventive action. Elimination and substitution of the most dangerous pesticides are targeted. The project includes, among other activities, elimination of methyl bromide and sustainable crop management in melon, elimination of methyl bromide in flower production, production of organic banana and coffee including support to Eco-Lógico in organic certification, and certification of enterprises in environmental management. Public and governmental awareness is raised through campaigns directed to policy makers, pesticide users and consumers.

Successful cases of elimination of methyl bromide in melon and flowers have been demonstrated. Since 2000 the increasing trend of methyl bromide use is in reverse. The project has also supported the creation of an organic certification organization (Eco-Lógico) and participated in the drafting of legal regulations. There is an increase in area of organic farming, particularly in coffee and banana.

The methyl bromide project is embedded in an international project directed by the United Nations Environmental Programme (UNEP) and United Nations Development programme (UNDP). Many activities are coordinated with PAHO (project PLAGSALUD). The project has also cooperated frequently with the Agronomic School of the Humid Tropical Region (EARTH), International Labour Organisation (ILO), Ministry of Agriculture (MAG), and many nongovernmental organizations.

Products so far are 1 book, 2 booklets, 4 technical articles, 2 conference presentations, 1 video, 2 consultation tasks, including chemical pesticide residue analyses in control of organic management.

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**Alternativas al uso de plaguicidas en Costa Rica**

Fabio Chaverri, IRET-UNA, Universidad Nacional, Costa Rica (fchaverr@una.ac.cr)

Centros incluidos en el proyecto: Ministerio de Ambiente y Energía (MINAE); Universidad de Costa Rica (UCR, Facultad de Ciencias Agroalimentarias); Instituto Tecnológico de Costa Rica (ITCR, Escuela de Agronomía); Asociación Nacional de Agricultura Orgánica (ANAO); Red de Usuarios de Biomasa (BUN); Eco-Lógica (una organización de certificación de producción orgánica); la Red de Acción en Plaguicidas en América Latina (RAPAL).

**Palabras claves:** Agricultura orgánica, transferencia de tecnologías, certificación en manejo ambiental

**Grupos meta:** usuarios de plaguicidas (agroindustrias grandes, agricultores pequeños y medianos), tomadores de decisiones y el público en general.

**Año del comienzo:** 1993.

**Objetivo del proyecto:** Reducción de uso de plaguicidas en Costa Rica

Los cultivos y plaguicidas más problemáticos son priorizados para acciones preventivas. Actualmente, se enfatiza la eliminación y sustitución de los plaguicidas más peligrosos. El proyecto incluye, entre otras actividades, la eliminación del bromuro de metilo y manejo sustentable del cultivo de melón, eliminación de bromuro de metilo en la producción de flores, producción orgánica de banano y café incluyendo apoyo a Eco-Lógico en la certificación de producción orgánica, y certificación e empresas en el manejo ambiental (empezando con melón). El proyecto aumenta la conciencia a nivel de gobierno y la población general mediante campañas dirigidas a tomadores de decisiones, usuarios de plaguicidas y consumidores.

Demostraciones de casos exitosos de eliminación de bromuro de metilo en melón y flores. Reversión desde el año 2000 de la tendencia creciente del uso de bromuro de metilo. Apoyo en la creación de una organización de certificación orgánica (Eco-Lógica). Participación en la elaboración de legislación. Hay un incremento en el área de cultivos dedicados a producción orgánica, especialmente en café y banana.

Colaboración con otros centros: El proyecto de bromuro de metilo es parte de un programa internacional dirigido por el Programa Ambiental de las Naciones Unidas (PNUMA) y el Programa de las Naciones Unidas para el Desarrollo (PNUD). Muchas actividades son coordinadas con el programa PLAGSALUD de la Organización Panamericana de la Salud (OPS), la Escuela Agrícola de la Región Tropical Húmeda (EARTH), la Organización Internacional del Trabajo (IWW), y organizaciones no gubernamentales en general, especialmente la Corporación Educativa para el Desarrollo Costarricense (CEDECO).

Productos: 1 libro, 2 folletos, 4 artículos técnicos, 2 presentaciones en congresos internacionales, 1 video, y 2 tareas de consultorías (incluyendo análisis químicos de residuos de plaguicidas en control de manejo orgánico).

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**Application of preventive technologies to focus especially on small enterprises**

Tom Sorahan, University of Birmingham, UK (t.m.sorahan@bham.ac.uk); Heather Jackson, IOHA, USA (Heather.Jackson@lyondell.com)

**Keywords:** prevention, control banding, participatory occupational hygiene, work-related illness, ILO Toolkit

**Target group:** All interested Collaborating Centres over and beyond those who have currently expressed interest.

The objective of the project is to make the control banding techniques, as illustrated by the ILO Toolkit, usable by all participating Collaborating Centres and allow them to translate the Toolkit to ensure a culturally appropriate version for them to distribute, evaluate, and eventually implement. Translation of the Toolkit for local applications will best assist individual countries to begin application of the Toolkit and to focus on the needs of small enterprises. The project also aims at creating...
a mechanism to share successes and practical applications with similar trades and small enterprises based in part on the concepts of participatory occupational hygiene.

A two-day workshop on Control Banding was hosted in London, UK on the 4th and 5th of November, 2002. This workshop included presentations that illustrated the translation of the Toolkit into Indonesian and Russian with applications begun within Indonesia. Further, current plans are to translate the Toolkit into Bulgarian, Chinese, and Spanish. As a result of this workshop approval has been given to IOHA to distribute the ILO Toolkit to the currently requesting countries and their respective CCs. At this time, South Africa, Japan and Thailand have committed to translation of the Toolkit upon receipt.

The centres collaborating on the project are Japan (NIIH), China (Dept OH + IOM), Viet Nam (NIOEH), Chile (ACS), Thailand (NICE + Dept. of PH), Russia (SCIOH), Bulgaria (NCHM), Serbia and Montenegro (IOPH), South Africa (NCOH) and India (NIOH).

**Translation of ILO-OSH Management System**
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)  
The ILO-OSH Management system has been translated into Chinese. Following this, a National Occupational Health Management System was recently developed incorporated with the Chinese National Law on Prevention and Control of Occupational Diseases. The tailored OSH Management system will be adapted for coal mining, adhesives industries etc. The project will be completed by 2005.

**Developing criteria for ergonomics quality in design accreditation procedures**
Waldemar Karwowski (karwowski@louisville.edu), EQUID Committee, with IEA STP Committee  
*Keywords:* ergonomics quality, products design, work systems, services, certification, human-system compatibility  
*Target group:* managers and designers concerned with ergonomics quality in design and institutions and bodies for promoting ergonomics and occupational safety and health and for developing relevant assessment and certification procedures

The objective of this project is to elaborate and develop criteria for ergonomics quality in design and assist institutions and bodies interested in relevant assessment and certification procedures. The project is managed by the IEA EQUID Committee in collaboration with IEA Federated Societies and research and educational institutions in the ergonomics field. The project aims to contribute to the enhancement of human well-being and overall system performance including safety and health aspects. Human-system interaction design considerations for the project include physical, cognitive, social, organizational and environmental factors. The outcome of the project will be incorporated in the process of ergonomics quality in design accreditation that should contribute to the sound development of products and work systems.

The project has initiated the development of the policy and procedures for training of assessment and certification personnel related to ergonomics quality in design. The outcome of the project will be incorporated in the process of ergonomics quality in design accreditation that should contribute to the sound development of products and work systems.

**Further development of PACE**
Gunnar Rosén (gunnar.rosen@arbetslivsinstitutet.se) and Ing-Marie Andersson (ing-marie.andersson@arbetslivsinstitutet.se), National Institute for Working Life, Sweden; Hannu Riipinen, Finnish Institute of Occupational Health, Finland (hannu.riipinen@occuphealth.fi); Michel Guillenim, Institute of Occupational Health Sciences, Switzerland (Michel.Guillemin@inst.hospvd.ch); H.N. Saiyed, National Institute of Occupational Health, India (saiyedh@gmail.com)  
*Target Group:* practitioners, trainers and researchers in industrialised and developing countries, searching for means for prevention and control of occupational hazards.

It was planned to diffuse the information through our training and education activities. This was partly done both here in Switzerland and also in some developing countries such as a few French speaking African countries.

The Swedish and the Finnish Institutes are putting their resources in the planning of courses (PACE-initiated) on dust control and PIMEX that will be organised in South Africa in 2003. So far the two Institutes carried out two pilot courses on the topic of control of occupational dust exposure; one course in Cape Town and one in Johannesburg, South Africa. A training package including 4 CD-ROMs with more than 100 video illustrations was prepared. The courses have been evaluated and a report is being prepared by the national co-ordinator Dr Sophie Kisting.

http://www.sheafria.info/Events.htm. Funding is partly in place, partly applied for.

**Dust control course (PACE-initiated) in South Africa**
Gunnar Rosén (gunnar.rosen@arbetslivsinstitutet.se) and Ing-Marie Andersson (ing-marie.andersson@arbetslivsinstitutet.se), National Institute for Working Life, Sweden  
*Keywords:* prevention, control, dust  
*Target Group:* industry based health and safety officers, industry based ventilation officers, occupational health inspectors, environmental health officers, industry based occupational nurses and doctors, a small number of lecturers involved in teaching dust control methods

The objective of this project is to prepare training material and to arrange courses based on the WHO/PACE dust control document. This includes the document Hazard Prevention and Control in the Work Environment – airborne dust, a CD-ROM-
Further development of PACE (India)
H.N. Saiyed (saiyedhn@yahoo.com), National Institute of Occupational Health, Ahmedabad, India

Keywords: National silicosis elimination programme, agate industry, quartz crushing industry, stone quarries, dust control device.

Target groups: Employers, workers, occupational health and safety regulation enforcing agencies, policy makers, trade unions, general public with emphasis on people living in the surrounding of the high risk industry.

The purpose of the project is to develop simple and affordable dust control devices for the industries with high risk of silicosis. This activity is one of the Component of National Silicosis Elimination Programme and the progress is as follows:

- Dust control system developed and successfully installed for the agate industry. The evaluation work is completed. Ten factories are already using the dust control devices.
- Dust control device developed and installed in quartz grinding factories. The evaluation work is on the way.
- Development of dust control device is on the way in stone quarries.

Other Centres collaborating on the project are: Director General Mines Safety, Government of India. Dr. P.K.Sisodiya. Desert Medicine Research Centre, Jodhpur, India. Dr. M.L.Mathur; Chief Inspectors of Factories Gujrat and Rajasthan State. Mr. B.N.Mehta. Chief Inspector of Factories; Directorate General, Labour Institute, Mumbai. Mr. S.K.Saxena, Director General.

Courses in the use of the PIMEX method
Gunnar Rosén (gunnar.rosen@arbetslivsinstitutet.se) and Ing-Marie Andersson (ing-marie.andersson@arbetslivsinstitutet.se), National Institute for Working Life, Sweden

Keywords: prevention, control, visualisation, PIMEX.

Target group: industry based health and safety officers, industry based ventilation officers, occupational health inspectors, environmental health officers

The objective is to train a group of occupational hygiene specialists in the use of the PIMEX method and to provide them with necessary software and know how. The course that will be arranged will give the participants an overview of different visualisation tools that can be used for a more effective search for measures aimed at control of occupational hazards.

PIMEX is one such method. The participants will be given deep knowledge about the method and a strategy for its use and also full access to know how and software to implement the method.

Courses have been arranged as planned. All course documentation including special software was put on one CD-ROM and handed out to the course participants.

The Finnish Institute of Occupational Health, Finland, the University of Cape Town, the National Center for Occupational Health, Johannesburg, and WHO are collaborating on the project.

Development and maintenance of consistency in asbestos fibre counting by Proficiency Testing schemes
Alan Jones, Institute of Occupational Medicine, UK (Alan.Jones@IOMHQ.org.uk)

Keywords: asbestos, fibre counting, proficiency testing (PT), international comparability

Target Group: Laboratories that measure asbestos fibre concentrations, and hence people liable to be exposed to asbestos.

The objective of this project is to provide a comprehensive network linking national fibre counting schemes and to provide a sound proficiency testing service for laboratories in countries without a national system. The measurement of concentration of airborne asbestos fibres is very dependent on the proficiency of the analysts who count the fibres by phase contrast optical microscopy. National PT schemes help achieve consistency within countries. This project aims to help establish consistency between various national PT schemes, to maintain this consistency by establishing international links.

Meetings between European national PT schemes for fibres counting have led to a comparison exercise, which is being organised by the IOM. Initial data has been discussed at a meeting in November. Funding is partly in place, partly awaiting authorisation of application.

Development and maintenance of consistency in asbestos fibre counting by Proficiency Testing schemes
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

The objective of this project is to provide a comprehensive network linking national fibre counting schemes and to provide a sound proficiency testing service for laboratories in countries without a national system.
Workplace monitoring guidelines and industrial hygiene practice

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)
Claude-Alain Bernhard, Institute of Occupational Health Sciences, Switzerland (Claude-Alain.Bernhard@inst.hospvd.ch)
Tom Sorahan, University of Birmingham, UK (T.M.Sorahan@bham.ac.uk)
Nikolai Izmerov, RAMS Institute of Occupational Health, Russia (izmerov@rinet.ru)

The occupational health standards of 200 more chemicals in TWA or STEL were investigated and issued in May 2001. The biological exposure limits of about 10 chemicals or their metabolites were approved to be the indicators of biological monitoring in 2002.

Funding from the Ministry of Health, China is in place. The project will be completed by 2003.

Reduction of cow allergen in farmers’ households

Rudi Schierl, Institute and Outpatient Clinic for Occupational and Environmental Medicine, University of Munich, Germany (rudi.schierl@arbeits.med.uni-muenchen.de)

Keywords: cow dander allergy, allergen reduction, working conditions

Target group: Farmers, farm workers

The purpose of the project is the evaluation of simple measures to reduce cow allergen in farmers’ homes. Allergies to cow dander is a major problem in farming environments. Occupational asthma due to animal allergy forces many farmers to give up work. Despite the avoidance of animal contact, the disease often persists. One mechanism is the transfer of allergens from the stables into the living room, kitchen, and bed. Our project aims at behavioural and technical measures to reduce exposure to farm animal allergens.

Local agricultural professional associations co-operate on this project.

At the end of our study, we will be able to develop simple recommendations to reduce allergen exposure in farmers’ homes. The study was started in 2002 and will be finished in 2004.

Design of a quality assurance system for professional risks

Juan Carlos Llano (jllano@minproteccionsocial.gov.co), Fanny Grajales (fgrajales@minproteccionsocial.gov.co), Ministry for Social Protection, Santaté de Bogotá, Chile

Keywords: Quality Guarantee System, Professional risk system.

Target group: Quality Guarantee System, Professional risk system.

The purpose of the project is to design and implement a Quality Assurance System for the professional risk system to educate leaders in quality assurance, to collect information regarding quality assurance in other countries, to develop requirements to be applied in quality assurance, to validate the requirements through a pilot project, to publish the legal requirements, and to implement them in the professional risk system.

The first step to design the quality assurance system is to sign agreements with qualified entities for the formation of project leaders. The next step is to recollect information about quality guarantee systems and to define the requirements for the development of the system, followed by the validation of the system through a certified organism made by a competent organism. A pilot project will be developed to test the requirements, which will then be implemented into the legal regulation.

GTZ Convention Project Chemical Safety

Susanne Scholaen (susanne.scholaen@gtz.de), Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ), Germany, Martin Tischer (tischer.martin@baua.bund.de), Bundesanstalt fuer Arbeitsschutz und Arbeitsmedizin (BAuA), Germany

Keywords: chemical management; control banding; developing countries; prevention

Target group: small and medium-sized enterprises with chemical hazards

The project aims to support developing countries in the implementation of the Rotterdam and Stockholm Conventions, create human resources and institutional capacities and to demonstrate via pilot measures how chemical safety in the partner countries can be improved and sustainably implemented in line with international standards. With this objective the development of a Chemical Management Guide (CM Guide) for small and medium-sized enterprises in developing countries has been initiated. The guide describes a step-by-step approach which is based on identifying ‘hot-spots’ and develop an action plan for the implementation of improvement. In a second step the companies are trained to make an inventory of all chemicals within their company with the aim to provide the information needed to calculate losses, consider substitutes, and determine and evaluate adequate controls on the basis of the ILO Toolkit. Thus, the CM Guide is a management tool for cost management, environmental and occupational hygiene management, and organisational change.

Based on the ideas outlined above, a draft version of the CM Guide was developed and tested in practice. Experiences from workshops held in Indonesia and from a test implementation of this approach in five Indonesian SMEs are available. These experiences provide insight into the obstacles that companies typically face in undertaking chemical management. Currently a “handbook for trainers” is being developed that aims to provide local trainers with teaching materials on control banding and occupational safety. Another workshop is planned for Chile in March 2004 and for Vietnam in April 2004.
Products: Chemical Management Guide in English and Bahasa Indonesia, Handbook for Trainers in English. Both will be translated into Spanish, French and Vietnamese and are available soon.

**Translation of WHO Guidelines Good Practice in Occupational Health Services. A contribution to workers health.**
Emilia Ivanovich (e.ivanovich@nchmen.gov BG), National Center of Hygiene, Medical Ecology and Nutrition, Bulgaria
Target date: 2003

**Translation of OSH-MS Guidelines into Bulgarian**
Emilia Ivanovich (e.ivanovich@nchmen.gov BG), National Center of Hygiene, Medical Ecology and Nutrition, Bulgaria
Target date: 2003

For cross references see also:
TF 5 : Development of OSH guideline for health care workers in Vietnam
TF 8 : Application of Preventative Technologies to focus especially in small enterprises
TF 11 : Assistance in adaptation of various materials to local conditions
Co-Chairs: Dan Hryhorczuk, University of Illinois in Chicago, USA (dhryhorc@uic.edu); Gerry Eijkemans, WHO (eijkemansg@who.int); Evelyn Kortum, WHO (kortummargote@who.int)

The objective is to ensure the harmonized contents of various curricula in occupational health and safety, the full utilization of programmes and materials already available and the sufficient numbers of trained experts in the field.

Gathering and sharing of training programmes and materials in occupational health and safety

Daniel Hryhorczuk, Great Lakes Centres, University of Illinois in Chicago, USA (dhryhorc@uic.edu)

Keywords: occupational, safety, health, training

Target group: Collaborating Centres and their trainees

The purpose of this project is to develop a web-based system to track training programmes offered by the network of WHO Collaborating Centres in Occupational Health.

The individual Collaborating Centres that comprise the global network of WHO Collaborating Centres in Occupational Health are each offering a variety of occupational safety and health training courses in their own regions as well as around the globe. There is currently no central, WHO-endorsed site that offers prospective trainees a complete and up-to-date list of these training opportunities. This project reviews the training notification systems that are currently available on the web, assesses their usefulness and limitations, and seeks to propose a shared system for registering training opportunities which can be used by members of the network and their prospective trainees. This project will propose the key fields that need to be entered into, will assist in the development of a pilot site, and evaluate the usefulness of this system from the standpoint of course providers and users.

A survey instrument to capture data has been developed that would be useful for prospective trainees. The websites of 22 of the Collaborating Centres have been surveyed to determine the extent to which individual Centre web sites provide information which can help prospective trainees learn about training opportunities and register for future courses. The Canadian Centre website has initiated a prototype system for registering courses. The survey instrument is currently being piloted at three Collaborating Centres. Once the key data elements have been identified, the web page will be developed and the system pilots in collaboration with the Canadian Centre for Occupational Safety and Health.

Training course – occupational health and safety in hospitals

George L. Delclos, Southwest Centres for Occupational and Environmental Health, Texas, USA (gdelclos@sph.uth.tmc.edu)

Keywords: programme administration, surveillance, hospital ergonomics, hazardous waste management, worker training

Target group: hospital administrators, physicians, nurses, hygienists, hazardous waste specialists and epidemiologists, as well as workers with an interest in healthcare worker health and safety.

The aim of this project is to organize a workshop that provides basic training in fundamental aspects of health and safety in hospitals. It may eventually be modified for use in other non-hospital healthcare settings. The 5-day workshop is aimed at a broad audience with an interest in occupational hazards of healthcare workers. Its structure combines some a beginning and ending plenary session of interest to the whole group, but quickly breaks down into 5 separate workshops, which people sign up for, according to their area of interests. The 5 workshops are: Health and Safety Programme Management in Hospitals, Surveillance, Hospital Ergonomics, Worker Training in Hospital Health and Safety, and Hospital Hazardous Waste Management. The course can be taught in either Spanish or English.

The project is completed. Course, course materials, instructors and course evaluation are available. Funding would be needed to cover costs related to travel and lodging for instructors to administer the course. The courses are available in English and Spanish.

Agricultural workers and use of pesticide (teaching materials and instructions for the course delivery)

Marco Maroni, ICPS, International Centre for Pesticide and Health Risk Prevention, Unit of Occupational Medicine, Hospital L. Sacco, University of Milano, Italy

Keywords: Agriculture, chemicals, pesticides, training, education

Target group: Workers, Occupational Health Physician

The purpose of the project is the development of teaching materials to be used for courses addressed to workers for the safe use of pesticides in agriculture.

Agriculture is one of the most dangerous working activities in the world (accidents and occupational diseases). Risk may arise during several activities: pesticide application may pose health risks to the farmers and pesticide workers, often as a consequence of improper or careless handling, even if it may be necessary to prevent losses of the agricultural production. The preparation of teaching material for training activities among pesticide workers is aimed at giving advice on how these health risks can be reduced. The material is thought to be used by agricultural workers all over the world, also as a tool to help health professionals and pest managers in promoting safe working procedures.
Institute of Occupational Health and Poison Control, Chinese Centres for Disease Prevention and Control, China is collaborating on the project.

**Assistance to occupational hygiene graduate programmes in developing countries and countries in transition**

David Zalk (zalk1@llnl.gov) and Berenice Goelzer (berenice@goelzer.net), IOHA, USA

*Keywords:* prevention, IOHA, occupational hygiene, training, ACGIH International Committee  
*Target group:* bodies deemed appropriate as described within IOHA articles of association.

The aim of this project is to utilize IOHA expertise and member organisation support in delivering content criteria for occupational hygiene graduate programmes, occupational hygiene mentorships, training, publications, and related materials to participating university programmes. It aims to offer professional delivering content criteria for occupational hygiene graduate programmes, occupational hygiene contacts as direct student mentors and deliver these materials to universities in developing countries and countries in transition, and any other bodies deemed appropriate recipients by IOHA.

ACGIH and the ACGIH International Committee are supplying mentorships to requesting students in Masters of Public Health programme at the University Witwatersrand in South Africa. IOHA, through ACGIH, are also establishing a fund of a minimum of $2000 annually for at least five years for the purchase and distribution of educational publications to university libraries and other entities as deemed appropriate through the IOHA. Two BOD members of IOHA have delivered their commitment to the UW to teach modules associated with the MPH programme. Content criteria for occupational hygiene graduate programmes currently in active development. Content criteria for graduate programmes in occupational hygiene. The Mentorship programme is being actively disseminated and ACGIH publications and other technical documents are available.

IOHA, University of Birmingham, UK and NGO, IOHA are collaborating on the project.

**Assistance in adaptation of various materials to local conditions**

Tom Sorahan (T.M.Sorahan@bham.ac.uk), The Institute of Occupational Health, University of Birmingham, UK; Heather Jackson (Heather.Jackson@lyondell.com), International Occupational Hygiene Association (IOHA), USA

*Keywords:* prevention, control banding, occupational hygiene, work-related illness, ILO Toolkit  
*Target group:* bodies deemed appropriate as described within IOHA articles of association.

The aim is to utilise IOHA expertise in delivering Occupational Hygiene training and related materials locally to countries, CC's, Universities, and any other bodies deemed appropriate recipients by IOHA.

ACGIH and ACGIH International Committee are supplying mentorships to requesting students in Masters of Public Health programme at the University Witwatersrand in South Africa. IOHA, through ACGIH, is also establishing a fund of a minimum of $2000 annually for at least five years for the purchase and distribution of educational publications to university libraries and other entities as deemed appropriate through the IOHA. Two BOD members of IOHA have delivered their commitment to the UW to teach modules associated with the MPH programme. The Mentorship programme is being disseminated and ACGIH publications and other technical documents are available.

Other Centres collaborating on the project are IOH, University of Birmingham, UK and NGO, IOHA.

**Gathering and sharing of training programmes and materials: Evaluation of effectiveness of training in occupational health - methodology and application**

Andrzej Boczkowski, Nofer Institute of Occupational Medicine, Poland (abocz@imp.lodz.pl)

*Keywords:* training in occupational health, quality of training, evaluation of training effectiveness, assessment methodology, evaluation procedures  
*Target group:* all persons and institutions having something in common with the training in occupational health

The aim of the project is to develop procedures and instruments of evaluation of training effectiveness in the field of occupational health and, after verifying in the course of special pilot studies, to implement them to the OH training practice. The quality of training in occupational health is of key importance from the point of view of the future OH practice. In this connection the activities aiming to monitor and assess the quality of teaching and learning in this field are particularly important. The training quality is understood as a training effectiveness, i.e. (1) real achievement of educational objectives during the courses and (2) real achievement of defined standards of professional competencies.

Two assessment questionnaires were developed, each including several parts aimed to measure the effectiveness of training process in its different aspects. The evaluation procedures with the use of these questionnaires are also elaborated and applied after many courses and postgraduate studies in the Nofer Institute of Occupational Medicine. As a methodological result of these applications the changes in both questionnaires and procedures are introduced and their new improved version are prepared.

Two books and several papers were published and presented on national and international scientific meetings

The project funding is in place and the project is due to be completed in 2004.
Formación con especialización y investigación en salud en el trabajo y el ambiente en África

Benjamin Fayomi, Universidad Laboratorio de Salud en el Trabajo y el Ambiente (LUSTE) (bfayomi@intnet.bj)

Keywords: formación a distancia, salud, trabajo, África

TARGET: profesionales de la salud, trabajadores, empleadores, tomadores de decisiones

El objetivo principal del proyecto es crear un notable grupo de investigadores especializados en la salud ocupacional en los países de habla africana, lo que permitirá lograr una investigación de alto nivel en este campo. Esto ayudaría a los gobiernos a tomar decisiones informadas basadas en datos socio-económicos relevantes de sus respectivas regiones.

1. Establecer un programa educativo y de formación en investigación para un Máster en Salud Ocupacional y Occidental en África (equivalente a un diploma de estudios de posgrado) y luego a la certificación en investigación.

2. Establecer una base sólida de colaboración sostenible en salud ocupacional entre las instituciones africanas: Benín, Costa de Marfil, Marruecos, Senegal, Gabón y instituciones relevantes en Canadá y otros países de habla francesa.

El ILO es nuestro colaborador en este proyecto.

Formation à la Spécialisation et à la Recherche en Santé au Travail et Environnement en Afrique FORST

Benjamin Fayomi, Laboratoire Universitaire de Santé au Travail et Environnement (LUSTE) (bfayomi@intnet.bj)

Mots clés : formation à distance, santé, travail, Afrique

Cible : Médecin, Travailleurs, Employeurs, décideurs.

L'objectif général du projet est de créer une masse critique de chercheurs spécialisés en santé au Travail dans les pays d'Afrique francophone menant à la mise en place d'un programme de recherche dynamique dans ce domaine afin de munir les gouvernements concernés, de données pertinentes au développement socio-économique de leur pays respectifs.

1. Établir un programme d'enseignement et de formation à la recherche conduisant à la maîtrise en Santé au Travail et permettant d'obtenir en Afrique la spécialisation en Santé au Travail (équivalent CES) puis la certification en recherche (équivalent DEA).

2. Établir des bases solides d'une collaboration durable en Santé au Travail entre les institutions des pays africains : Bénin, Côte d'Ivoire, Maroc, Sénégal, Gabon et les institutions pertinentes au Canada et ailleurs en Europe francophone.

Le BIT y el nuestro colaborador en este proyecto.

Training and continuous education in occupational and environmental health in Central America

Elba de la Cruz, Catharina Wesseling (cwesseli@una.ac.cr), Luisa Castillo (lcastill@una.ac.cr), Patricia Monge (pmonge@una.ac.cr) and Clemens Ruepert (cruepert@una.ac.cr), IRET-UNA, Costa Rica with University of Washington; University of Texas; Karolinska Institute; Stockholm University; Utrecht University; University of Quebec in Montreal; National Autonomous University of Nicaragua at León (UNAN-León); Technological University of Costa Rica.

Keywords: Central America, Graduate programmes, Continuous education, Courses, Training materials

TARGET GROUP: (i) nurses, physicians, hygienists, engineers, social scientists, toxicologists, environmental scientists; and (ii) professionals in occupational and environmental health and related disciplines.
The purpose of the project is to (i) provide graduate training in occupational and environmental health in Central America; and (ii) develop continuous education (CE) programmes for occupational and environmental health professionals in Central America, focusing on toxic substances and working environment.

The project began in 1995.

(i) A two-year Master Programme in Occupational Health is underway since 1999, organized by IRET and the Technological University of Costa Rica, with emphasis on environmental hygiene. To be expanded to cover Central America. Master Programme in tropical ecotoxicology starts 2003.

(ii) IRET has provided short courses and seminars since 1995. Training materials are produced. International, regional and national conferences and workshops are organized. A network of professionals in occupational and environmental health with interregional training support is being designed.

The following progress has been achieved so far:

(i) Forty Costa Rican students are attending the Master in Occupational Health Programme.

(ii) National and regional CE courses have been organized in occupational and environmental epidemiology; environmental health; occupational hygiene; risk assessment and management; clean technologies; aquatic tropical ecotoxicology; pesticides in the tropical marine environment; watershed-based ecological risk assessment; pesticide toxicity and environmental chemistry; low-tech methods for analyzing pesticide residues; neurotoxicology; and neurobehavioral research and surveillance. Courses and training materials include a Central American Pesticide Manual and a Manual of Neurobehavioral Tests, both produced in collaboration with PAHO. PAHO has co-funded several courses. International Conference on Pesticide Use in Developing Countries: Impact on Health and Environment was organized by IRET in 1998, attended by 500 participants from over 30 countries.

PAHO is also collaborating on the project. The programme is in progress: courses, theses, and student supervision are in place. Other accomplishments include one international conference; one regional workshop; 14 regional courses; course materials; 2 manuals; over 30 seminars with national and international speakers.

Capacitación y educación continua de salud y seguridad ocupacional y salud ambiental en América Central

Elba de la Cruz, Catharina Wesseling (cwesseli@una.ac.cr), Luisa Castillo (lcastill@una.ac.cr), Patricia Monge (pmonge@una.ac.cr) y Clemens Ruepert (cruepert@una.ac.cr), IRET-UNA, Costa Rica

Centros incluidos en el proyecto: University of Washington; University of Texas; Karolinska Institute; Stockholm University; Utrecht University; University of Quebec in Montreal; National Autonomous University of Nicaragua at León (UNAN-León); Technological University of Costa Rica.

Palabras claves: América Central, Programas de maestría, Educación continua, Cursos, Materiales educativos

Grupos meta: (i) Enfermeros, médicos, higienistas, ingenieros, profesionales en disciplinas sociales, toxicólogos, profesionales en ciencias ambientales; (ii) profesionales en salud ocupacional y ambiental y disciplinas relacionadas.

Objetivo del proyecto: (i) programa de maestría en salud ocupacional y en salud ambiental en América Central; (ii) desarrollo de programas de educación continua para profesionales en salud ocupacional y ambiental en América Central.


(i) Un programa de Maestría en Salud Ocupacional de dos años de duración se está implementado desde 1999, organizado por IRET y ITCR, con énfasis en higiene ambiental. Un programa de Maestría en Ecotoxicología Tropical empezará en 2003.

(ii) IRET organiza cursos y seminarios cortos desde hace 1995. Se produce materiales de enseñanza. Se organizan conferencias y talleres internacionales, regionales y nacionales. Se diseñará un red de profesionales en salud ocupacional y ambiental.

Avance:

(i) 40 estudiantes costarricenses están participando en el Programa de Maestría en Salud Ocupacional.

(ii) IRET ha organizado cursos de educación continua nacionales y regionales en epidemiología, salud ambiental, higiene ocupacional, evaluación y maneja de riesgos; tecnología limpia, ecotoxicología acuática tropical, plaguicidas en el ambiente marítimo tropical, evaluación de riesgos ecológicos en base en cuencos, toxicología de plaguicidas, química ambiental métodos de tecnología de bajo costo para el análisis de residuos de plaguicidas, neurotoxicología, e Investigación ciencia y vigilancia neuroconductual. Materiales de educación incluyen el Manual Centroamericano de Plaguicidas y el Manual de Pruebas Neuroconductuales, ambos producidos en colaboración con OPS. La OPS ha co-financiado cursos. IRET organizó la International Conference on Pesticide Use in Developing Countries: Impact on Health and Environment en 1998, con 500 participantes de más de 30 países.

Colaboración con otros centros: Ver arriba (Centros incluidos en el proyecto). OPS.

Productos: (i) El programa se está llevando a cabo: cursos, tesis, y supervisión de estudiantes; (ii) 1 conferencia internacional; 1 taller regional; 14 cursos regionales; materiales para cursos; 2 manuales; mas de 30 seminarios con presentantes nacionales y internacionales.

Graduate training in occupational health

Fernando G. Benavides (fernando.benavides@cesx.upf.es), Occupational Health Research Unit, Research Unit on Respiratory and Environmental Health, Barcelona, Spain.

Keywords: graduate training, occupational health
**Target group:** Graduate and postgraduate students in occupational and environmental health from any country, on a competitive basis. Applications from students from Spanish-speaking developing countries are especially encouraged.

The purpose of the project is to provide short-term training in occupational health. Funded opportunities for students from Spanish-speaking developing countries are being identified.

Public funds from Catalunya support the academic infrastructure for this activity, and students are required to pay tuition in this program. However, scholarship opportunities are also available, on a competitive basis, for qualified students. In particular, the proposed Barcelona WHO Collaborating Centre will work with the WHO Collaborating Centre at The University of Texas to offer scholarships, on a competitive basis, to students from developing countries in Latin America. The WHO website and the Network of Collaborating Centres in Occupational Health will disseminate announcements of scholarship opportunities. These academic programs are open to citizens of other countries as well. The languages of instruction are Catalan, Spanish and English.

The graduate programs are already in place. Scholarships for students from Spanish-speaking developing countries are expected to be in place for the 2003-2004 academic term.

Centres collaborating on this project are the Southwest Center for Occupational and Environmental Health at The University of Texas School of Public Health in Houston, Texas.

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**Short-term training and continuing education workshops and short courses in Spanish for occupational health professionals**

Fernando G. Benavides (fernando.benavides@cesx.upf.es), Occupational Health Research Unit, Research Unit on Respiratory and Environmental Health, Barcelona, Spain; George L. Delclos (gdelclos@sph.uth.tmc.edu), Houston, University of Texas

**Keywords:** short-term training, continuing education

**Target group:** Occupational health researchers, graduate students and professionals from Spanish-speaking developing countries.

The purpose of the project is to provide short-term training, in Barcelona, in specific areas of occupational health for researchers from Latin America, on a case-by-case basis, and to support the continuing education activities in Latin America currently being conducted by the Southwest Center for Occupational and Environmental Health at The University of Texas School of Public Health.

This project will add to existing short-term training and continuing education offerings for Latin American occupational health professionals. Many of these activities, especially the short courses, will be conducted in collaboration with the University of Texas WHO Collaborating Centre. This latter Centre is already established in this area in several Latin American countries. Financial support for these activities is secured largely through a U.S. Fogarty International Center training grant at the University of Texas. Technical consultation may be requested from PAHO, largely for assessing short-term and continuing education needs in Latin America. For the short-term training and teaching activities in Barcelona, trainees from Latin America have access to the full complement of facilities and faculty of the Unit during their stay.

Coordination, implementation and evaluation of continuing education courses and workshops in Latin America will be provided by The University of Texas Collaborating Centre. The proposed WHO Collaborating Centre in Barcelona will provide faculty and course materials for selected short courses in Latin America. Partial financial support, in the form of short-term traineeships and scholarships, for these courses will be provided by separate sources, including the Fogarty Center training grant held by The University of Texas. The proposed new Collaborating Centre in Barcelona will make important contributions by providing course faculty and instructors in those areas of expertise where the University of Texas is lacking.

Short-term training and continuing education courses are already being offered by the University of Texas Collaborating Centre. The support provided by the proposed WHO Collaborating Centre in Barcelona will broaden the spectrum of Spanish-language expertise in occupational health, allowing a greater diversity of offerings for Latin American occupational health professionals.

In preparation for this activity, a postdoctoral fellow from the proposed Barcelona collaborating centre will be spending one year at The University of Texas, in part to assist in preparation of training materials and delivery.

New "packaged" Spanish-language continuing education courses and training modules will be added to the existing inventory of training materials already produced by The University of Texas.

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**New Masters programme in environmental and occupational health**

Jadranka Mustajbegovic (jmustajb@snz.hr), Department of Environmental and Occupational Health, Andrija Štampar School of Public Health, Medical School University of Zagreb, Croatia

**Keywords:** training, occupational and environmental health

**Target group:** staff in public and private health insurance institutes at national and local levels; primary health care providers; staff in public health institutes at central and local level; ministerial staff

The purpose of the project is to envisage local (county) political, professional and administrative structures to be able to establish their own policy and implement it into everyday practice. This implies an urgent need for education of the new professionals, administrators and politicians for the new tasks.

The project aims at developing the centre for education in Occupational and Environmental Health on the postgraduate level at “Andrija Štampar” School of Public Health. Within that framework new curricula is developed as a modular structure according to ETCS (the European Credit Transfer System). Furthermore, the implementation of the curricula will involve the further dissemination of the curricula concept in Croatia and other countries in the region of Southeast Europe. Such approach
will enable a creation of the network of the institutions in the region in order to upgrade the learning resources and finally
develop quality assurance mechanisms for the execution of the proposed curricula.

Establishment of postgraduate training for medical doctors and environmental scientists including both specializations in
occupational health and Master or PhD titles.

Other centres collaborating on the project are The Finish Institute of Occupational Health, ICPS, Italy, the Institute of
Occupational and Radiological Health, Belgrade, the Institute of Occupational Health, Republic of Macedonia

The finalised project proposal was accepted by the Stability Pact Health Network (joint activity of WHO and CoEU) on 27
June 2001. Funds for the implementation are still required.

Sharing of training programs and materials in occupational health and safety
Kenneth R. Laughery (laugher@ruf.rice.edu), Chair IEA STP Committee

Keywords: training programs, training materials, management systems, ergonomics, occupational health and safety personnel
Target group: occupational safety and health personnel active in industry and in educational and training institutions, instructors
and trainers in applying ergonomics to occupational health and safety practices

The objective of this project is to promote the sharing of training programs and materials in applying ergonomics within
occupational health and safety practices. The relevant training programs and materials are collected through the various
activities of the IEA STP Committee and its affiliated Technical Committees. The results will be distributed through these
committees and the federated societies. The network of field experts associated with the IEA IDC Committee will also be utilized
in the collection and dissemination of such programs and materials.

The collection of training programs and materials is under way through the IEA activities and through IEA-endorsed
conferences. The efficacy of disseminating these materials through the IDC Committee is being examined.

The IEA IDC Committee is collaborating on this project.

Sharing training materials on the web
S. Len Hong, Canadian Centre for Occupational Health and Safety, Canada (hongl@ccohs.ca)

Keywords: education materials, training materials, educators, trainers, OHS curriculum
Target groups: curriculum developers, teachers, OHS trainers, skill development

This Project will focus on content that can be used to develop training materials for teaching occupational health and safety
at the primary and secondary school level. The content will be based on occupational health and safety principles. The
organization of the content will enable teachers to integrate OHS information into their daily teaching activities. Additionally
the content will be arranged to meet the needs of proper curriculum design and to enable the use of student achievement grids
and learning objectives.

Phases of this project will be implemented over the next three years. It will be completed by 2004. Funds are in place.

On-line training in occupational health
Linda Forst, Great Lakes Center, University of Illinois at Chicago (forst-l@uic.edu)

Keywords: environmental occupational health online training
Target group: Professionals in occupational health who need continuing education

The purpose of the project is to build capacity in Occupational Health among practitioners who work ministries of health and
other public health institutions, internationally.

This is a 15- week course at the University of Illinois School of Public Health entitled, Principles of Environmental and
Occupational Health. It is being offered for a certificate to four individuals who are associated with the WHO Occupational
Health Collaborating Centres. It entails 70 hours of work to complete.

This is week 2 of a 15 week course. Students have received books and are working within the course frame at this time.

Centres collaborating on the project are: Ghana: Edith Clarke; Costa Rica/IRET: Catharina Wesseling

Product: web-based training in occupational health
Deadline/finalisation stage: August 2003 - December 2003

Occupational health in Europe in Russian
Nikolai Izmerov, RAMS Institute of Occupational Health, Russian Federation (izmerov@rinet.ru)

Funds are needed for this project. It is scheduled to be completed by 2005.

Training for occupational physicians and hygienists
Marianne Sereda, Institut universitaire de santé au travail, Switzerland (Marianne.Sereda@inst.hospvd.ch)

Keywords: occupational health, legislation, training centres, quality of the training in OH

Target group: OH physicians, hygienists, ergonomists, Oh nurses
The aim of the project is to follow the training in OH, and also develop distance learning in the future. Several publications in OH and ergonomics are already available.

Institut für Hygiene und Arbeitsphysiologie, ETH Zürich, Switzerland is collaborating on the project.

**Utilizing existing training materials of the Lausanne Institute on the web**

M. Guillemin (Michel.Guillemin@inst.hospvd.ch) and Marianne Sereda (Marianne.Sereda@inst.hospvd.ch), Institut universitaire de santé au travail, Switzerland; Prof Krueger, Institut für Hygiene und Arbeitsphysiologie in Zürich (ETH), Switzerland

*Keywords:* Basic Support for Cooperative Work

*Target group:* occupational physicians, hygienists, ergonomists, safety engineers, occupational health nurses

The objective of this project is to share documents, input for discussions, information on OHS problems and OHS news, and to create a Distance Learning Project in the future. All the students will utilize this tool as often as possible.

**Programme for one-month course for OHS personnel**

Emilia Ivanovich, National Centres of Hygiene, Medical Ecology and Nutrition, Bulgaria (e.ivanovich@nchmen.government.bg)

*Keywords:* occupational health, postgraduate training, one month

*Target group:* physicians, safety engineers and other staff for Occupational Health Services and all interested in Occupational Health.

There is a lack of occupational health professionals in Bulgaria. Building capacity is of great importance for the country in the process of transition and implementation of new approaches for ensuring health and safety at work. The drastic economical changes in the transitional period and the reorientation of the system from curative towards preventive make new approaches in the building capacity necessary. A newly designed programme for postgraduate education has been developed to cover the basics of occupational health, risk assessments and comprehensive preventive approaches.

The programme has been successfully implemented for the purposes of one-month training courses (6 modules). A questionnaire for evaluation of the programme has been developed.

**Web-based training for occupational medicine**

Dr. Joerg Reichert, Institute and Outpatient Clinic for Occupational and Environmental Medicine, University of Munich, Germany (joerg.reichert@arbeits.med.uni-muenchen.de)

*Keywords:* web based learning

*Target group:* Health care professionals learning occupational medicine, medical students

The purpose of the project is the dissemination of web based learning modules in occupational medicine.

Occupational medicine has a wide range of aspects, and prevention is a major topic. In order for doctors to obtain knowledge about occupational and environmental influences, occupational medicine is a compulsory subject in the medical curriculum at German universities. About 650 5th year medical students are taught at our department every year. Within this course for occupational medicine each student visits six small-group-sessions held by different tutors. In order to enhance the learning experience by a more patient-oriented format of this course, we integrated a case-oriented, e-learning-tool. The aim of this project is to improve learning and memorizing of occupational medicine topics and increase the students’ motivation for the subject. The web based training programme in occupational medicine which was primarily developed for students has been altered in order to be used by various health care professionals.

Up to now, 12 cases have been developed, two of them have been translated into English and Spanish (www.promediweb.de; Login: gastarb; Passwort: gastarb). An international co-operation is currently planned.

Other Centres collaborating on the project: 5 other national and international universities

**Training programme for seafarers: Updating the text of the International Medical Guide for Ships**

WHO/ILO/IMO; Stanislaw Tomaszunas, Institute of Maritime and Tropical Medicine, Gdynia, Poland (tomasz@immt.gdynia.pl)

Funding is in place. Gdynia will update several chapters for the IMGS-3.

**Adaptation of various training and measurement materials to local conditions**

Emilia Ivanovich, National Centres of Hygiene, Medical Ecology and Nutrition, Bulgaria (e.ivanovich@nchmen.government.bg)

Funding is in place. The project will be completed by 2003.

**Packaged training course for health care workers (available in English and in Spanish)**

George Delclos, University of Texas, USA (GDelclos@sph.uth.tmc.edu)

Training materials have already been developed. The course is available. Funding would be needed to support travel and course delivery.
Training of occupational health and safety personnel

J. Myers, Occupational and Environmental Health Research Unit, South Africa (Myers@cormack.uct.ac.za)

Keywords: Internet, e-learning, CD rom, self-directed learning, postgraduate

Target group: doctors, nurses, occupational hygienists, environmental engineers, other relevant graduates in health and related sciences

The purpose of this project is to provide postgraduate training in occupational health. This includes the development of electronic materials for postgraduate training in occupational and environmental health for occupational health professionals including doctors, nurses, occupational hygienists and environmental engineers. Courses will be made available through webCT on the Internet or downloadable from CD Rom or from webpages. All aspects of occupational health including epidemiology, occupational hygiene, occupational health services management, occupational medicine, toxicology, legislation, health promotion, social and behavioural impact factors and relevant environmental health will be covered.

The project is currently in progress with some materials for the first of 8 block courses in epidemiology, biostatistics and research methods under construction. It is planned to have this block ready for delivery on an experimental basis to residential students doing their first block of the Postgraduate Diploma in Occupational Health in March 2003. The course will be taken in a computer laboratory to simulate distance conditions.

National Centre for Occupational Health, University of Natal, Peninsula Technicon and University of Witwatersrand are collaborating on the project. Coursework materials are under construction.

Training of industrial hygiene and occupational health personnel in India

Patrick N. Breysse, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA (Pbreysse@jhsph.edu)

Funding procedures are pending.

Distance education for training researchers in occupational health in Latin America – FOINSAL

Julietta Rodríguez Guzmán, FISO, Colombia (jrodriguezg@fiso-web.org); Luois Patry (louis.patry@mcgill.ca)

Keywords (up to five): Distance education, research in Latin America, Occupational Health, virtual education

Target group: Occupational health professionals in Latin America, initially in Colombia, Chile and Argentina.

The objectives of this project are to implement an innovative educational approach based on distance learning and the internet network; to offer a master degree program in Occupational Health (MSC); to achieve an effective transfer of knowledge from Canada to Latin American countries; to establish a regional network coordinated by FISO and grouping Latin American universities committed to collaborate on this program; and to familiarize hygienists and occupational health professionals with research and undertake a research project in their home working environment; to propose prevention methods and follow-up and control methods.

The Ibero-American Occupational Safety and Health Foundation (FISO) requested a collaborative project with McGill University in order to implement a distance education training program in occupational health in Latin America. The aim of this project is to give an opportunity to occupational health professionals to access formal learning through a distance education program. It also intends to minimize educational costs through the use of virtual channels, avoiding students to travel and reducing expenses to access of higher levels of education than those available in the countries.

The project consists of the implementation of a distance education-training program, initially in 3 different Latin American countries: Colombia, Argentina and Chile. It is based upon the current model of McGill’s Distance Education Program in Occupational Health, which leads to a Masters degree in Science. The Distance Education Program is designed in response to the specific needs of Occupational Health Professionals and it is expected to provide students with flexible access to education. The comprehensive model, its content and format, have been designed based on the Master’s Degree Program from McGill University. It is expected to start the second term of 2003 and the completion date envisaged is June 2006.

General information is available in Spanish. Funding is to be placed in 2003.

Gathering and sharing of training programmes and materials on OSH

Marcela Giraldo, Ministry of Health, Colombia (mgiraldo@minproteccionsocial.gov.co)

Keywords: training, industry

Target group: All types of industries.

The aim of this project is to design events in occupational health training and publish educational material. Technical Cooperation agreements with other governmental agencies will be developed, such as the Ministry of Work and the Social Security Institute. The aim will be to create common strategies to design materials on Social Security, Health and Work policies. Additionally Ministry of Health as the Collaborating Centrestres will update policy lines for qualification in occupational risk prevention.

Organization of an international consultation on capacity building in OH&S to address access to training programmes and intellectual property issues

Gerry Eijkemans, WHO/HQ (eijkemansg@who.int)
There was agreement by CCs and WHO at the Changmai Network meeting in 2001 to carry out preliminary activities before proceeding to hold this consultation. In 2002, the gathering of information on existing training courses was begun by several Collaborating Centres. Additionally, an international meeting was sponsored in Baltimore, US, in October 2002 by WHO, NIOSH, ICOH, and the Johns Hopkins Collaborating Centres to assess the status of internet-based education for developing countries. Further, the University of Illinois Collaborating Centres piloted an effort to include 10 developing nation students in the Basic Principles in Occupational Health Internet course. In 2003, there will be an assessment of the information and consideration of the next steps to be followed.

Funding is in place. The project will be completed by 2005.

Further development of curricula and materials for occupational health and safety experts - The WHO modules in occupational safety and health

Linda Forst, Great Lakes Center, USA (Forst-L@uic.edu), Leslie Nickels, Lorraine Conroy

The WHO modules in occupational health are designed for professionals who are charged with the responsibility of protecting the health of workers. These may include public health officers, physicians, nurses, policy makers, plant managers, and union health and safety representatives.

The modules are organized into four economic sectors: Manufacturing, Service, Agriculture, and Mining. Each module (sector) contains all the course materials to present a 16 hour course. For each sector, there is an Instructor Manual and a Student Manual; both have a "Resources" section to be utilized during didactic sessions.

These materials are available in paper format. They are also available on CDs (compact discs) as pdf files (to preserve formatting) and Microsoft Word/Power Point documents (to allow instructors to alter them). The modules were packaged for use with a multidisciplinary audience—representatives of Hygiene, Medicine, Nursing, Epidemiology, and designers of programs and policies in Occupational Health. Individual exercises may be removed, altered, and re-packaged for other target audiences (e.g., groups of one discipline).

On-line training in Occupational and Environmental Health

Linda Forst, Great Lakes Center, USA (Forst-L@uic.edu)

Keywords: environmental health, occupational health, distance learning, on-line learning, international occupational health

Target group: WHO put out a message soliciting international students for this pilot. Ten people responded and all 10 were enrolled.

The purpose of this project is to determine whether an on-line, 15-week, interactive format is a viable delivery method for international training. A 3-credit university course was adapted and offered to 10 international students as a pilot. Students are required to read the text, Principles of Environmental Health by Yassi et al, to read additional, posted materials, and to engage in on-line "discussions regarding course material. They took several quizzes, and composed a debate stance with fellow students.

Five the 10 students engaged in the "debate" along with US students, composing two lengthy documents as a group. The whole course is a potential product, though the University of Illinois at Chicago holds intellectual property rights for the moment.

Development of evidence-based occupational health (medicine) training course and material

Frank van Dijk, Coronel Institute, The Netherlands (f.j.vandijk@amc.uva.nl)

Funding is partly in place, and partly needed especially for material development. The project is scheduled to be completed by December 2004. Invitation for collaboration has been presented to other Centres e.g. in Thailand, South Africa, Finland (Timo Leino, e-mail: timo.leino@occuphealth.fi) and the UK to contribute to this project. Coronel Institute is co-operating on this topic, as well as in two ICOH SCs and the European Association of Schools of Occupational Medicine (EASOM).

International two-year training course: occupational safety and health & development for participants from Northern Africa, Middle East and Iran

Kaj Elgstrand, National Institute for Working Life, Sweden (kaj.elgstrand@arbetslivsinstitutet.se)

Funding is in place. The project started in September 2001, and is to be completed before the end of 2003.

International two-year training course: occupational safety and health & development for participants from Asia

Nils Petersson, National Institute for Working Life, Sweden (nils.petersson@arbetslivsinstitutet.se)

Funding is in place. The project started in October 2002, and is to be completed before the end of 2004.

Postgraduate training courses in maritime occupational health

Stanislaw Tomaszunas, Institute of Maritime and Tropical Medicine in Gdynia, Poland (tomasz@immt.gdynia.pl)

Keywords: training of trainers, maritime occupational health
The objective of this project is to train medical officers, mainly from developing countries and countries of Eastern and Central Europe, in maritime occupational health and prepare them for training other doctors in their home countries in the same subject (postgraduate training of trainers).

In most of the developing countries, where hundreds of thousands of seafarers have been employed on "flag of convenience" merchant ships, maritime workers including seafarers and fishermen have not yet been covered by occupational health services. Following the economic and political changes in countries of Central and Eastern Europe during the 1990s, such services provided by governments have been discontinued, and most of the national seafarers there look for employment on foreign flag ships. Re-building of the occupational health services there is necessary. The health and safety of seafarers should be better protected.

In summer 2002, funding was obtained from the ITF Seafarers' Trust. Training materials were obtained from WHO, ILO, ITF, and from other sources. The WHO Intercountry Training Course on Maritime Occupational Health was conducted in Gdynia, Poland, on 6-20 October 2002. 26 participants from Bulgaria, Croatia, Cyprus, Georgia, Germany, India, Indonesia, Latvia, Norway, Philippines, Poland, Russia, Thailand, and Viet Nam were trained by the staff of the Institute in Gdynia, and 10 guest lecturers from abroad.

Lecturers from the WHO CCs in Denmark and Germany were the lecturers in this course. Publications from sister CCs on maritime medicine were distributed among the participants. 26 doctors (trainers) completed the WHO course and received diplomas. The next WHO intercountry training course will be conducted in 2003, subject to the availability of funds.

### Publishing the Journal International Maritime Health

Stanislaw Tomaszunas, Institute of Maritime and Tropical Medicine in Gdynia, Poland (tomasz@immt.gdynia.pl)

**Keywords:** publishing, exchange of experiences, occupational health

**Target group:** Scientists in research institutes, health staff in ports and on ships, shipowners, seafarers' unions, international organizations and non government organizations, Departments of Health, Departments of Labour, port health authorities.

The objective of this project is to continue publishing the journal as a forum for the exchange of experiences and dissemination of information on the results of research on the health problems of maritime workers: seafarers, fishermen, divers, dockers, shipyard workers; and to inform health staff in maritime countries on practical activities aimed at the protection and promotion of health of workers at sea and in ports.

52 volumes of this journal (previously published under a different title) were published up to 2001. Similar journals are published in Japan, China, Spain and Ukraine, in their national languages. The IMH is the only specialized journal published in English. It is indexed in Medline. Materials for volume 53/2002 have been collected (19 original and review articles received from authors from Austria, Germany, UK, Denmark, Poland, Canada, Sweden, Norway, Estonia, Netherlands, and Georgia), and texts for the Chronicle section. Texts for volume 53 were received from authors from the Centres in Germany and Denmark. Volume 53/2002 of the IMH journal will be published before the end of the year.

### Establishment of an international working group for utilisation of telemedicine to reduce health risks of seafarers

Xaver Baur, Central Institute of Occupational Medicine, Hamburg, Germany (xaver.baur@bug.hamburg.de)

**Keywords:** Telemedicine, merchant ships, accidents, emergencies, seafarers

**Target group:** occupational health staff in departments of health/labour, ship owners, insurance agencies, trade unions of seafarers.

The aim of this project is to promote the introduction of suitable telemedicine equipment on board of ships without a doctor in order to improve medical care of ill/injured seafarers. Telemedicine is an extremely useful new technology that should be immediately used to improve medical assistance of seafarers. The major objective of the project is to reinforce international standardisation, harmonisation and co-operation that are urgent to introduce effective and compatible telemedical devices.

A pilot study involving the following steps has been started: further development of medical devices; tests for suitability and applicability of the devices in co-operation with nautical officers and testing the medical suitability of the equipment in special, simulated emergencies and diseases, among others, cardiac diseases, inhalation traumata, injuries, skin diseases. A further step will be an appropriate, intensive education and training of captains and first officers.

A preliminary concept has been prepared. CIRM, Rome and the Norwegian Centre of Telemedicine are collaborating on the project.

### Development of a comprehensive medical training package for captains and first officers on ships

Anthony Low, Port Health Centres, Hamburg, Germany (anthony.low@bug.hamburg.de)

**Keywords:** Medical training package, international, ship officers.

**Target group:** occupational health staff in seafaring, educational centress for ship officers, maritime transportation departments and trade unions, shipping agencies, seamen.
By developing this medical training package, this training programme for seafarers - which at present can be very different in quality and duration from country to country - should be a guide for decision-makers in agencies dealing with seafaring, especially in developing countries, as to raising their appropriate teaching standards.

The training package will encompass detailed basic theoretical and practical medical training specifically for ship officers, taking into account medicines and medical equipment carried on board. Besides a short history of treatment on ships without doctors, it will emphasize prophylaxis and therapy to improve health conditions at sea. Knowledge gained from several decades of standardized medical maritime education in Germany will be integrated in the package.

The theoretical part of the training package is nearing completion. Collaboration is on between HPHC and the WHO Collaborating Centres, Gdynia, Poland.

Auszarbeitung eines umfassenden (ausführlichen) medizinischen Ausbildungsprogramms (Paketes) für Schiffskapitäne und Erste Offiziere

Anthony Low, Hamburg Port Health Centres (HPHC) des ZfA, (anthony.low@bug.hamburg.de)

Schlüsselwörter: Medizinische Ausbildung, international, Schiffsoffiziere.


Durch die Ausarbeitung dieses medizinischen Trainingspakets wird dieses Ausbildungsprogramm für Seeleute - welches sich zur Zeit von Land zu Land erheblich hinsichtlich Qualität und Ausbildungsdauer unterscheidet - eine Richtlinie bzw. Hilfe sein für jene, die Entscheidungen in Behörden und Schiffssagenturen treffen, insbesondere in den sich entwickelnden Ländern, bezüglich der Anhebung der entsprechenden Ausbildungsstandards.


Ein Entwurf des theoretischen Teils des medizinischen Ausbildungs-programms wird zur Zeit fertig gestellt.

Zusammenarbeit zwischen dem HPHC und dem WHO Collaborating Centres in Gdynia, Polen.

Training of occupational health and safety personnel

Jean-Marie Mur, INRS, France (jean-marie.mur@inrs.fr)

Keywords: Training, Occupational Health and Safety, Programme, French

Target group: French speaking people involved in Occupational Health

The aim of this project is to gather training programmes on OHS in French, and to put the references of French training programmes in OHS on the Internet site of the WHO CCs in OHS.

The project is on going. Several Internet sites have already been identified. Several references have already been put on the Internet site.

Train the trainers' curricula on health promotion at work

Alberto Zucconi, Istituto dell’Approccio Centrato sulla Persona IACP, Italy (azucconi@iacp.it)

Funding is in place.

Development of a core syllabus and eLearning course in occupational health psychology

Amanda Griffiths (amanda.griffiths@nottingham.ac.uk) and Stavroula Leka, (stavroula.leka@nottingham.ac.uk), Institute of Work, Health & Organisations (I-WHO), UK

Keywords: syllabus, occupational health psychology, eLearning, training, personnel

Target group: educators, trainers, occupational health and safety professionals, occupational health and safety personnel.

The purpose of the project is to produce a core syllabus in occupational health psychology that will form the basis for training initiatives for occupational health and safety personnel. To also develop an eLearning course in occupational health psychology that will facilitate flexible distance learning on an international basis. The scope of this project is the development of a core syllabus in occupational health psychology. This syllabus will then serve as a basis for the development of appropriate training initiatives, based on eLearning for occupational health psychology internationally.

A draft outline of the syllabus has been prepared and is now under review. The eLearning course has started to be developed. The project will be completed by December 2005.

Course on diagnosis and management of Asbestosis

Chia Sin Eng, WHO Collaboration Centres in Occupational Health, Singapore (cofcse@nus.edu.sg)

Nguyen Thi Hong Tu, Department of Preventive Medicine, Ministry of Health, Viet Nam (hongtu@netnam.org.vn)
The aim of this project is to train a group of occupational physicians in the diagnosis of asbestosis. These trainers will then train others in the discipline.

The project will consist of a 3-day intensive stay-in course where participants will be taught by occupational physicians. The sessions include lectures, case studies, tutorials and workplace visit with on site risk assessment, group presentations and report writings. In addition, the participants will be taught how to read the ILO Pneumoconiosis set of standard chest x-rays. They will also be shown the different types of lung function test used in diagnosis of asbestosis.

A draft outline of the proposed programme has been prepared, with content and format defined, and is now under review by the Ministry of Health, Viet Nam. The Course is planned for May 2003 in Hanoi, Viet Nam. The Singapore International Foundation is collaborating on the project.

Training of Occupational Health and Safety Personnel
Prof. Dr Jovanka Karadzinska Bislimovska, Institute of Occupational Medicine, Republic of Macedonia (bislimovska_j@hotmail.com)

Target group: university teachers, physicians, nurses, safety engineers, professionals in occupational and environmental health and related disciplines

The objective of this project is to develop content and forms of education programmes and training of undergraduate and postgraduate studies in the field of occupational health.

The Institute is a base of the Chair of Occupational Medicine, Medical Faculty, Skopje and provides lecturing activities in the field of occupational medicine for undergraduate students (Medical Faculty, Dentistry Faculty, Radiological technicians, Interdisciplinary studies for safety at work-safety engineers) and students at the postgraduate level (specialization-3 years, subspecialisation- 2 years, masters degree-2 years, PhD degree-3 years). It is an institution appointed by the Ministry of Health for practical education of medical doctors who specialize in occupational medicine, hygiene, and social medicine and those who subspecialize in pulmonology and allergology as well as clinical toxicology. The Institute organizes educative seminars, short courses for the purpose of training of occupational health experts. The Institute organized the First meeting of Occupational Medicine Chairs of 9 Universities of South-east Europe (March, 2002). Common conclusions, recommendations and suggestions for actual and future activities in the educative field (training curricula) of occupational medicine in this region of Europe were achieved. Development of training curricula on different levels in area of occupational health for new competencies of occupational health physician, occupational hygienist and nurses is now underway in the Republic of Macedonia. Introducing four years of Occupational Health specialization and harmonization with EU schools and establishing a specialization programme based on WHO and EASOM guidelines should be achieved. Development is expected for the course of occupational health as a part of a new postgraduate teaching programme, Masters programme of Public Health Medical faculty Skopje. Activities also comprise the participation of an expert level for the curriculum development of the postgraduate masters course on "Environmental and Occupational Health" for the joint WHO/Council of Europe initiative "Health Development Action in South East Europe "South East Europe Health Network, in the framework of the Social Cohesion Initiative of the Stability pact for SEE.

In the framework of this project short courses or educative seminars aimed at OHS professionals and practitioners will be organized on occupational allergy, stress at work, health promotion at workplace. Specific educational materials for occupational health personnel (booklet on stress at work, videotape on workplace health promotion in Macedonian language) will be prepared.

The accomplishments so far include:
- Educative seminar-one day training concerning stress at work -new approach for occupational health physicians from 25 Occupational Health Services at the municipality level.
- Developing, printing and distributing of the educational booklet ( 12 pages in 2000 Copies) titled "Stress at work".
- Description of training curricula and required competence for occupational health physician.

Developing resources for end users, including practical solutions and training materials
Sergio Tavassi, ISPESL, Italy (tavassi.doc@ispesl.it)

Keywords: risk profiles, solutions, safety checks, sectors, sub-sectors

Target group: employers, workers’ safety representatives, workers, responsible people of prevention and protection services, decision-makers, stakeholders

The aim of this project is to support SMEs for risk assessment. The Information System will be redesigned, according to the target group needs, focusing on reduction of risk exposure for each subsector. Designing the new information system addressed to SMEs and updating of the databases is underway. The National network of the European Agency for safety and health at work is collaborating on the project.
WHO/WPRO Training Programmes
Hisashi Ogawa, WPRO (Ogawah@wpro.who.org)

The following are the activities funded by WHO regular country programme budgets for training in occupational health:

China - Workshops and study tours on occupational health promotion at medium and small-scale workplaces. Funding is secured. The activity has been initiated.

Philippines - Fellowship training of staff on environmental/occupational health risk management and on ergonomics. Funding is secured. The activity has been initiated.

Viet Nam - Training courses on health promotion at workplaces; workshop on assessment of health and economic losses; Fellowship training on epidemiology in occupational health and on occupational health in technology transfer. Funding is secured. The activity has been initiated.

Other contributors: Kaj Elgstrand, ICOH SC on Development and Occupational Health (kaj.elgstrand@arbetslivsinstitutet.se); Bonnie Rogers, ICOH SC on Education and Training (rogersb@email.unc.edu); David Zaik, IOHA (zaik1@llnl.gov)

Psychosocial factors surveillance workshop in Mexico
Peter Schnall, UCLA and University of California at Irvine, School of Public Health, University of California at Los Angeles (UCLA), USA (pschnall@ucla.edu)

with the University of Sonora, the National Autonomous University of Mexico, Professional Association of Occupational Safety and Health, and other institutions in Mexico

Keywords: training, work stress, surveillance

Target group: occupational health professionals and academics, government agency representatives responsible for worker health

The purpose of the project is to train health professionals and researchers on how to conduct workplace surveillance. A growing network of psychosocial stress researchers in Mexico has recently identified the need to hold a workshop that would provide training in workplace surveillance. Increasing evidence correlates psychosocial stressors in the work environment with the etiology of hypertension and cardiovascular disease. The training would focus on methodological and practical issues in the measurement of workplace psychosocial factors, such as job strain and effort-reward imbalance, and blood pressure as a health outcome indicator. Blood pressure measurements are non-invasive and, with the development of ambulatory monitors, simple to use at an employee’s worksite. The workshop is expected to promote workplace surveillance by health professionals responsible for labor health and safety and to facilitate research studying the relationship between work stress and hypertension.

This project is in the planning phase and is expected to be completed in 2004 with partial support from the UCLA-Fogarty international training program.

Ergonomics professional training program
Victor Liu, California State University at Northridge (CSUN), School of Public Health, University of California at Los Angeles (UCLA), USA (vliu@ucla.edu)

with the Center for Scientific Research and Postgraduate Education at Ensenada, Mexico.

Keywords: training, ergonomics, health professionals

Target group: occupational health professionals working with maquiladoras

The purpose of this project is to provide in depth training to occupational health or related professionals working in the maquiladora industry in Baja California, Mexico.

Thousands of maquiladora factories, involving labor intensive assembly operations, have been established over the years on Mexico’s side of the border with the United States. Nearly one-third of them are located in Baja California. Some studies have indicated that musculoskeletal problems due to ergonomic hazards might be one of the major health issues in maquiladoras. This project was developed to provide occupational safety and ergonomics training to health professionals from Baja California who are working in maquiladoras. The curriculum includes 12 monthly weekend training sessions at CSUN incorporating theoretical concepts and practical tools for conducting worksite assessments. A field practicum involving applied research is required for completing the training.

Two new physicians have just begun the 12-month training program, with support from the UCLA-Fogarty international training program. The next opening for trainees will be in spring 2004.

Training on blood pressure surveillance in the workplace
Peter Schnall, Center for Occupational and Environmental Health, School of Public Health, University of California at Los Angeles (UCLA), USA (pschnall@ucla.edu)

with Leonor Cedillo at the College of Sonora and the Sonora section of the national union CTM (Central de Trabajadores de México).

Keywords: worker training, work stress, surveillance, occupational health, blood pressure measurements

Target group: industrial workers, health professionals, union leaders, academics
The purpose of the project is to train workers and health professionals on how to conduct workplace surveillance of blood pressure.

This project is part of a larger effort by the College of Sonora and some union groups in the State of Sonora to provide practical occupational health and safety training to workers. The training effort has been developed as a 40-hour course including topics in industrial hygiene, ergonomics, psychosocial stress factors and health outcomes. This project will support the development of a module on workplace surveillance as part of the overall training course. The module will focus on blood pressure measurement as a potential indicator of psychosocial stress in the workplace. While useful to workers and occupational health practitioners, this module will also be informative for academics conducting psychosocial research.

The 40-hour course will be held by June 2003; publication of the handbook is expected by the end of 2003. The Ford Foundation is funding the overall course and publication; the UCLA-Fogarty international training program will support the surveillance training module.

Information presented within the 40-hour course will be compiled and published into a practical manual that can be used as a reference for evaluating workplaces. This project will contribute a chapter on blood pressure surveillance as part of the manual.

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**Training and continuous education in occupational and environmental health**

Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

**Keywords:** Graduate programs, Continuous education, Courses, Training materials

**Target group:** nurses, physicians, hygienists, engineers, social scientists, toxicologists environmental scientists; and professionals in occupational and environmental health and related disciplines.

The purpose of the project is to provide graduate training in occupational and environmental health; and develop continuous education programs for occupational and environmental health professionals, raising awareness of managers and professionals on the development of integrated policies of Health, Environment and Safety Management in enterprises.

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**Training for occupational physicians**

Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

**Keywords:** occupational health, training center, quality of the training in Occupational Heath

**Target group:** Occupational health physicians, Occupational health nurses.

The aim of the project is to follow the continuous training in Occupational Health, developing distance learning. Several publications in OH are already available.

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**Occupational health and safety training documents in Spanish**

Angela Helmer, Labor Occupational Safety and Health, UCLA, Center for Occupational and Environmental Health (COEH), USA (ahelmer13@yahoo.com)

**Keywords:** worker safety, health, educational materials, Spanish

**Target group:** Spanish-speaking workers in the US and Latin America, labor unions, community-based organizations, academia, health professionals.

The purpose of the project is to provide Spanish-speaking workers in the US and Latin America with educational materials concerning workplace safety and health (e.g., agriculture, pesticides, noise, metals, construction, ergonomics, women workers, mining, biological hazards, hazardous waste, forestry, toxic substances, etc.).

This project focuses on updating an existing Spanish language bibliography, which was initially compiled through funding from PAHO and the COEH and published in 1990 and 1999 under the title “La Fuente Obrera – A Worker’s Sourcebook”. New educational materials (e.g., fact sheets) are being developed in Spanish for workers on the topic of safety and health.

The bibliography and educational materials will be posted on the Labor Occupational Safety and Health website (www.losh.ucla.edu), so that workers from throughout the Americas can have access to the information. These materials are being collected from different institutions in the US, Latin America and Europe.

Funding to update the bibliography has been secured through the National Institute of Environmental Health Sciences for this one-year project.

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**On-line training in Occupational and Environmental Health**

Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

**Keywords:** Environmental health, occupational health, distance learning, on-line learning

**Target group:** hygienists, engineers, social scientists, toxicologists environmental scientists; and professionals in occupational and environmental health and related disciplines.

The purpose of this project is to develop an on-line, 4-week, interactive format for environmental and occupational health training.
Postgraduate training courses in occupational safety and health
Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

Keywords: Postgraduate, occupational health, distance learning, on-line learning, CD-Rom.

Target group: interdisciplinary professionals, graduate students.

The purpose of this project is to provide postgraduate training in occupational safety and health. This includes the development of training materials for postgraduate training in occupational and environmental health for interdisciplinary professionals. Courses will be made available through webCT on the Internet or downloadable from CD-Rom or from webpages. All aspects of occupational health including epidemiology, occupational hygiene, occupational health services management, occupational medicine, legislation, health promotion, social and behavioural impact factors and relevant environmental health will be covered.

This is a postgraduate master course, and the Institute is officially authorized by the Spanish Public Administration. This training is regulated by the Ministry of Labour and Social Affairs.

Postgraduate training courses in public health
Manuel Peña, European Institute of Health and Social Welfare, Madrid, Spain (admon@ie-es.com)

Keywords: Postgraduate, public health, health promotion, on-line learning,

Target group: physicians, nurses, other relevant graduates in health and related sciences.

This project is proposed to provide postgraduate training in public health. This includes the development of training materials for postgraduate training in public health for health professionals. Courses will be made available through Internet. All aspects of public health including epidemiology, occupational health management, health promotion, life styles, and socio-economic, socio-psychological factors determining life quality and human health will be covered.

Training materials for specialisation in occupational health
Adam Cybart (cybart@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl),
Nofer Institute of Occupational Medicine, Poland

The project is in search of funds. The completion date is yet to be determined.

Evaluation of effectiveness of training in occupational health – methodology and application
Andrzej Boczkowski (abocz@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl),
Nofer Institute of Occupational Medicine, Poland

Funding is in place. The project will be completed by 2004.

Training courses on prevention of childhood lead poisoning
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Keywords: lead, poisoning

Target Group: Professionals in occupational health and maternal and child health

The purpose of this project is to promote the knowledge in prevention of childhood lead poisoning. Two training courses have been held. Two more training courses are being planned.

Funds are provided by WPRO/WHO

Epidemiology of pesticides poisoning.
Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

Keywords: Epidemiology, pesticides, poisoning

Target Group: Physicians in emergency department of county hospitals

The purpose of this project is to collect the case information of acute pesticide poisoning. A training course on data collection for participants from 11 county hospitals was held.

Funding: Funds are provided by IPCS.

Training course - occupational health and safety in hospitals.
Manuel Peña, European Institute of Health and Social Welfare (admon@ie-es.com)

Keywords: program administration, surveillance, hospital ergonomics, worker training

Target group: hospital administrators, physicians, nurses, hygienists, hazardous waste specialists and epidemiologists, as well as workers with an interest in healthcare worker health and safety.
The aim of this project is to conduct a workshop that provides basic training in fundamental aspects of health and safety in hospitals, which may eventually be modified for use in other non-hospital healthcare settings. The aim of the project is to develop distance learning at a broad audience with an interest in occupational hazards of healthcare workers. Its structure combines something of interest to the whole group at 4 beginning and ending monographic seminars on Health and Safety Program Management in Hospitals, Surveillance, Hospital Ergonomics and Worker Training in Hospital Health and Safety.

Training course – health management
Manuel Peña, European Institute of Health and Social Welfare (admon@ie-es.com)
Keywords: hospital management, quality assurance, human resources
Target group: hospital administrators, physicians, nurses, hazardous waste epidemiologists, as well as professionals with an interest in healthcare management.

The aim of this project is to conduct a workshop that provides continuous training in fundamental aspects of health management in hospitals and non-hospital healthcare centres. The aim of the project is to develop distance learning at a broad audience with an interest in Health Systems and Services Development, quality assurance, health economy and human resources management.

Sharing information on training programmes and materials
Magdalene Chan, Occupational Health Department, Ministry of Manpower, Singapore (magdalene_chan@mom.gov.sg)
Keywords: occupational safety & health training courses, materials, case studies, web-based information
Target group: Persons and institutions interested in OSH training information and materials.

The objective of the project is to make available, through the internet, information on OSH training programmes and materials, such as case studies and guidelines.

The project scope involves to promote the utilization of OSH programmes and materials already available, information on such training and materials should be made accessible and the internet is a good vehicle for this. Currently, information on OSH training and materials in Singapore is available on the Ministry of Manpower’s website at the web pages of the Occupational Safety and Health Division. Visitors to the site can also subscribe free of charge to an OSH Alert service at www.mom.gov.sg/MOM/CDA/0,1858,1297----------,00.html that informs them of events, training programmes and case studies.

A computer based network is being developed for members of the Association of Southeast Asian Nations (ASEAN) to facilitate the exchange of relevant OSH information and sharing of expertise. The additional link from Singapore to the ASEAN OSHNET web page will provide useful information on the member countries, including training aspects.

The Manpower Ministry’s website has been enhanced and made more user-friendly. Information on OSH training and promotion is available at : http://www.mom.gov.sg/MOM/CDA/0,1858,322----------,00.html. The ASEAN OSHNET website has been established:  http://www.asean-oshnet.or.id/

Products: information on occupational safety & health training courses and materials. The project is completed.

National conference on research needs and lessons learnt for coordination and policy formulation on occupational health among key stakeholders
Nguyen Khac Hai, National Institute of Occupational and Environmental Health, Vietnam (haink@hn.vnn.vn)
Keywords: research need, coordination, policy formulation, occupational health.
Target group: academic institutions, decision-makers at ministries, medical university

The purpose is to recommend measures for strengthening coordination in policy formulation on OH and translating research results into policies on OH. The conference will be held in 2005 and funds have been secured by WHO, Vietnam Government.

For cross references see also:
TF2 : refer to all activities related to training
TF 4 : Health risk assessment and development of intervention programme in cottage industries with high risk of silicosis; Training workshop on interpreting radiographs of pneumoconiosis using ILO classification 2000
TF 7 : Training programme for prevention of workplace social violence in several economical sectors for the Colombian case
TF 8 : Training workshop on implementation of OSH policies in agriculture and informal sector
TF 9 : Preparation of teacher’s guide and fact sheet within the area of occupational exposure to vibration; Course on ergonomics and the prevention of musculoskeletal disorders at the workplace
TF10 : Assistance in adaptation of various materials to local conditions
Occupational health practice, training, research and communication are critically dependent on an effective supply of scientific and practical information and the availability of relevant databases. Internet should be utilized as widely as possible because of its easy access where it is available. Access to information systems for experts in each country should be taken as an objective of the national occupational health programme. The ultimate objective is to develop the website of Occupational Health to cover all the main topics of occupational health and safety, to indicate sources of relevant information, to deposit the materials available in an electronic form, and to provide links to relevant other sources world-wide.

**Guidance for web-based occupational hygiene information**

Ton Spee, International Occupational Hygiene Association (IOHA), USA (spee@arbouw.nl)

**Keywords:** prevention, IOHA, occupational hygiene, website, ILO Toolkit

**Target group:** Cooperation with ILO, WHO, CC's and bodies deemed appropriate as described within IOHA articles of association.

The objective of this project is to utilize IOHA expertise and member organisation support in reviewing electronic documents, websites and related links pertaining to occupational hygiene topics, Preventative Technologies Toolbox, and the ILO Toolkit. The aim is to offer initial guidelines to the utilisation of occupational exposures as they may relate to adolescent worker issues.

A two-day workshop on Control Banding was hosted in London, UK on the 4th and 5th of November, 2002. This workshop included presentations that illustrated the translation of the Toolkit into Indonesian and Russian. Permission has been given to IOHA to distribute the ILO Toolkit to currently requesting countries and their respective CC's. These initial steps forward will soon require a centralisation of this information within Internet resources. IOHA has begun cooperative work with WHO to identify appropriate hubs amongst the CC's to ensure all aspects of this effort are freely available on the Internet.

NGO, IOHA is collaborating on the project. A Compendium of occupational training online, the ILO Toolkit and translated versions are already available.

**Developing internet resources for end-users, including practical solutions and training materials**

S. Len Hong, Canadian Centre for Occupational Health and Safety, (CCOHS), Canada (hongl@ccohs.ca)

**Keywords:** Internet, best practices framework, best practice documentation, solutions, voluntary sharing

**Target groups:** OSH specialists, employers, workers, associations, agencies, governments, researchers, policy analysts

A database framework is being developed and provided for self-reporting of best practices. This Internet-based framework will provide for a consistent, organized, and indexed description of best practices in occupational health and safety. It will be available as one of the platforms that could be a repository of global self-reported OSH successes and best practices. The framework contains a broad range of elements consistent with OSH management system criteria to permit the documentation of comprehensive analyses and reports of the many facets of OSH systems that were involved in the creation of a best practice.

**Preparation of a framework plan for the development of the WHO Occupational Health website**

P.K. Abeytunga, Canadian Centre for Occupational Health and Safety, (CCOHS), Canada (abey@ccohs.ca)

**Keywords:** WHO, Collaborating Centres, Web Portal, OSH, Network

**Target group:** primarily WHO Collaborating Centres, OH&S experts, decision-makers, governments, managers, employers and anyone worldwide involved in OH&S.

The objective of this project is to design a network web portal framework complementing the WHO website on the Collaborating Centres Programme with the objective of expanding the utilization of the Internet by the network of WHO Collaborating Centres to facilitate its global programme of work and to fulfil the OH&S information needs of the global population. The network web portal will have the following features:

- The content of the portal structure to be multi-lingual (English, French, Spanish at the start), with the facility for the content of OH&S information on the portal to be presented in any language.
- A search engine with sophisticated search and retrieval capabilities.
- Discussions groups (Forums) for exchanging messages, documents and other communications to facilitate the work of working groups and task forces of the network. Facilities will include the archival of communications maintained on the Web, to be searchable and accessible by the relevant members through passwords.
- A powerful web server with large storage space, high-speed network connections and near 24-hour/day, 7-day/week availability.

A prototype of the design of the structure, functionality, presentation details, and navigation capabilities, together with the search and retrieval facilities, has been created for review.
Website for the Cooperation Italy-Brazil in Occupational Health and Industrial Hygiene

Emilio Volturo, Silvia Fustinoni and Chiara Rengo, Istituti Clinici di Perfezionamento, Department of Occupational Safety and Health and ISPESL/ICP Consortium for the WHO Collaborating Centre in Occupational Health, Clinica del Lavoro “Luigi Devoto”, Milan, Italy (omscons@unimi.it)
Sonia Maria José Bombardi (bombardismj@fundacentro.gov.br) and Maria Inês Franco Motti (motti@fundacentro.gov.br), FUNDACENTRO, Brazil

Keywords: information, Internet, Occupational Safety and Health, International Cooperation

Target group: experts and professionals in Occupational Health and Safety of the two countries

The purpose of this project is to create a web site to activate, through the Cooperation between Italy and Brazil, actions to improve safety and health at the Workplaces of both countries.

At the Iguassu Meeting, February 2003, an Italian-Brazilian seminar was held during which the relevant interest of other possible scientific, technical and institutional partners was verified.

As a first step, while waiting for resources, an internet discussion group has been set up for the permanent exchange of information, updating, experiences and data.

A shared version of the scientific project has been defined and in the next few months the project will be integrated in a cooperation plan to submit to the competent authorities for funding.

Considering that the planning phase has been completed, we are initiating to identify the necessary funding. In case human and financial resources will not be identified within 12 months, the possibility of reconsidering the feasibility of the project will be evaluated.

Web Site per la Cooperazione Italia Brasile in Medicina del Lavoro e Igiene Industriale

Emilio Volturo, Silvia Fustinoni and Chiara Rengo, Istituti Clinici di Perfezionamento, Dipartimento di Medicina del Lavoro e Sicurezza sul Lavoro e Consorzio ISPESL/ICP per il Centro di Collaborazione con l’OMS per la Medicina del Lavoro e l’Igiene Industriale, Clinica del Lavoro “Luigi Devoto”, Milano, Italia (omscons@unimi.it)
Sonia Maria José Bombardi (bombardismj@fundacentro.gov.br) e Maria Inês Franco Motti (motti@fundacentro.gov.br), FUNDACENTRO, Brasile

Parole chiave: Informazione, Internet, Medicina del Lavoro e Sicurezza, Cooperazione Internazionale

Utente destinatari: Esperti e professionisti di Medicina del Lavoro e Sicurezza dei due Paesi.

Scopo del progetto: Realizzazione di un sito web destinato ad attivare, favorire e sostenere, attraverso la Cooperazione tra Italia e Brasile, azioni positive per il miglioramento della sicurezza e della salute dei lavoratori nei luoghi di lavoro dei due Paesi.

Al Congresso di Iguassu, febbraio 2003, si è tenuto un seminario Italo-Brasileiano nel quale si è verificato l’interesse notevole e fattivo di altri possibili partner scientifici, tecnici, istituzionali.

Come prima base, in attesa di maggiori risorse, si è deciso di attivare un gruppo di discussione in Internet per lo scambio permanente di informazioni, aggiornamenti, esperienze, dati.

È stata definita una versione condivisa del progetto scientifico, che nei prossimi mesi sarà integrato in un piano di cooperazione da sottoporre alle autorità competenti per il finanziamento.

Considerando che la fase di progettazione è stata completata, ci si attiverà per la ricerca dei fondi necessari. Se entro 12 mesi non si saranno recuperate le necessarie risorse umane e finanziarie, si valuterà la possibilità di riconsiderare la fattibilità del progetto.

Web Site sobre a Cooperação Itália-Brasil em Segurança e Saúde no Trabalho

Emilio Volturo, Silvia Fustinoni and Chiara Rengo, Instituto Clínico de Aperfeiçoamento – Departamento de Segurança e Saúde Ocupacional e Consórcio ISPESL/ICP para o Centro Colaborador da OMS em Saúde Ocupacional – Clínica Del Lavoro “Luigi Devoto”, Milão, Itália (omscons@unimi.it)
Sonia Maria José Bombardi (bombardismj@fundacentro.gov.br) e Maria Inês Franco Motti (motti@fundacentro.gov.br), FUNDACENTRO, Brasil

Keywords: Informação, Internet, Segurança e Saúde no Trabalho, Cooperação Internacional.

Gruppo de alvo: especialistas e profissionais da área de Segurança e Saúde no Trabalho dos dois países

Finalidade do projeto: Criação de website destinado a ativar, auxiliar e manter na Cooperação entre Itália e Brasil, ações para a melhoria da Segurança e Saúde dos Trabalhadores nos locais de trabalho dos dois países.

No Congresso de Foz do Iguaçu, fevereiro de 2003, foi realizado um Seminário Italo-Brasileiro no qual foi notável e factível interesse de outros possíveis parceiros científicos, técnicos e institucionais. Como primeiro momento, no aguardo de maiores recursos, foi decidido pela criação de um grupo de discussão via Internet para o intercâmbio permanente de informações, atualizações, experiências e dados. Foi definida uma versão consensuada do projeto que nos próximos meses será integrada a um plano de cooperação, a ser submetido às autoridades responsáveis pelo financiamento. Considerando que a fase de planejamento está completa, estamos voltando nossa atenção à busca dos recursos necessários. Se em 12 meses não
conseguirmos os recursos humanos e financeiros necessários, iremos avaliar a possibilidade de reconsiderar a viabilidade do projeto.

**Inventory of available training materials on the web**

Daniel Hryhorczuk and Leslie Nickels, Great Lakes Centres, University of Illinois in Chicago, USA (dhryhorc@uic.edu)

*Keywords:* occupational, safety, health, training, Internet

*Target group:* Teachers, students, and practitioners of occupational safety and health around the world.

The aim of this project is to create a web-based library of occupational safety and health training materials that are in the public domain and which can be downloaded at no cost by occupational safety and health teachers, students, and practitioners around the world.

Many governmental agencies, academic institutions, and non-governmental organizations have developed occupational safety and health training materials and made them available for downloads at no cost on the World Wide Web. Finding appropriate materials can be difficult and time consuming. This project will pilot the development of an internet-based library of these materials. It will begin by focusing on a few specific topic areas and attempt to assemble, review, and catalogue all available training materials for these topics.

A collection of web-based training materials has been initiated. A prototype of this virtual library will be presented at the next meeting of the network.

The University of Cape Town, South Africa and the University of Texas, USA are collaborating on the project.

**Training materials for specialisation in occupational health**

Adam Cybart (cybart@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Lodz, Poland

*Keywords:* Training, specialisation, occupational health

*Target group:* Occupational health physicians

The purpose of the project is to facilitate the access to the occupational health training and increase modern media involvement and usage in the training process.

The project is designed to answer the needs of occupational health physicians requesting distance learning opportunities that increase the access to training and allow more independent/time-self-adjusted study scope.

An introductory course in occupational health has been launched. Financial support is needed to proceed further.

Products contain an introductory course for occupational health specialisation (available in Polish only).

**Contributing to the inventory of training materials**

Vern P. Anderson (vanderson@cdc.gov) and Nancy Muturi (nmuturi@cdc.gov), National Institute for Occupational Safety and Health, USA; University of Illinois in Chicago; University of Cape Town, South Africa; University of Texas, USA

*Keywords:* training, inventory, safety, health, Internet

*Target group:* occupational health staff in departments of health, departments of labour, and Trade Unions in all countries, safety and health practitioners.

The aim of the project is to provide sources and criteria for excellence in e-training web sites that would be accessible from the Global Occupational Health Web Site Compile an annotated database of e-training web sites that provide occupational and health training and/or materials for the Global Occupational Health Web Site. The project will establish criteria for selecting and classifying occupational e-training materials and develop a standardized evaluation form for recipients of web-based training.

E-training web sites have the potential to offer current, credible, international access to current health and safety information and training through out the world. Presently, there are more 100 web sites offering various forms of occupational safety and training through the Internet (see the site: http://dmoz.org/Health/Occupational_Health_and_Safety/Training).

The quality and credibility have yet to be defined. The goal of this project is to develop a database of web training opportunities providing safety and health information. NIOSH in collaboration with the COHS and ILO (CIS) have taken a first step in providing a standardized form for accessing electronic information on occupational safety and health training at http://www.ciscentres.org/en/training/usa/

A draft inventory of e-training web sites has been compiled. Criteria are being developed for sorting and rating the e-training web databases. Occupational safety and health information related to training resources available in the U.S. is available.

There is close collaboration between WHO and ILO; University of Illinois in Chicago; University of Cape Town, South Africa; University of Texas, USA; Canadian Center for Occupational Health and Safety, Hamilton

**Sharing case studies of successful health hazards control on the internet**

Magdalene Chan, Occupational Health Department, Ministry of Manpower, Singapore (magdalene_chan@mom.gov.sg)

*Keywords:* occupational health hazards, control solutions, case studies

*Target group:* OH&S professionals, employers and employees
The objective of this project is to make available, through the internet, and specifically through the WHO Global Web Portal, case studies of successful health hazards control.

The project will establish a repository of successful cases of health hazards control and make available these case studies on the internet through Singapore’s recently established link to the Global Web Portal aimed at complementing the Programme of the WHO Collaborating Centres Network.

The case studies will include examples from winners of national awards, such as the Noise Control Award, and the new Occupational Health Best Practices Award which has been launched in October 2003.

The indexed database will have a search function enabling cases to be retrieved by industry, hazard or keywords. It will have the following data items:

- Problems identified in the work process
- Solutions and Control measures proposed to reduce the hazard
- Implementation cost
- Cost benefits

The prototype of the database structure has been created. The case studies will be updated when the web-based database has been developed.

**Product(s):** Web-based information on successful health hazards control. The project is expected to be completed by January 2004.

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**Contributing to the development and use of ergonomics-related training materials on the web**

John Wilson (john.wilson@nottingham.ac.uk), Chair IEA PSE Committee

*Keywords:* training materials, website, ergonomics, occupational safety and health, resource development, internet links

*Target group:* occupational safety and health personnel engaged in training of managers, workers and personnel in industry, instructors and trainers in applying ergonomics to occupational safety and health programs, resource development staff for training on the web

The purpose of the project is to facilitate the sharing of training materials on the web for applying ergonomics within occupational health and safety clearinghouse activities.

The links to existing web-based training materials related to ergonomics are promoted so as to facilitate the finding of appropriate materials that can be downloaded at no cost by occupational safety and health trainers and practitioners. The networks of IEA Technical Committees and federated societies as well as the IEA directory of training institutions will be used.

The project is in progress through voluntary contributions of ergonomics professionals and institutions with the aim of developing a database of web-based ergonomics training materials that are available for basic ergonomics training in selected topics.

The IEA IDC Committee is collaborating on the project.

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**Set up of distance training and educational tool and database of practical improvement cases on worksites between Japan and an Asian country**

Toshiaki Higashi, University of Occupational and Environmental Health, Japan (thigashi@med.ueh-u.ac.jp)

Funds are partially in place. The project will be completed by June 2005 (including the establishment of a distance learning system).

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**Enable access to national internet-based database that identifies practical solutions to OHS issues**

Thomas Stoddart, National Occupational Health and Safety Commission, Australia (Thomas.stoddart@nohsc.gov.au)

*Keywords:* practical guidance

*Target group:* users requiring hazard specific or industry specific guidance material on OHS issues.

The objective of this project is to facilitate the dissemination and sharing of practical guidance material on OHS issues, to assist employers and employees in implementing safe systems of work.

A web based database has been developed that indexes material published by all Australian jurisdictions and links directly to the full documents. It includes guidance material, safety alerts, and codes of practice.

The Australian OHS Index is available at: http://natindex.nohsc.gov.au

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**Development of a web information collection system for active surveillance of work-related diseases and occupational exposure, and of a web publication system for information dissemination to occupational safety and health practitioners**

Ippei Mori, National Institute of Industrial Health, Japan (mouri@niih.go.jp)

*Keywords:* Internet, web based data collection and publication, active surveillance, work-related diseases, occupational exposure

*Target group:* occupational safety and health staff in companies, occupational physicians, and industrial hygienists.
The objective of this project is to establish a web-based data collection system for active surveillance for work-related diseases and occupational exposure, and a web-based information publication system for supporting occupational safety and health practitioners working at enterprises. The website is provided for occupational physicians to inform about work-related diseases they experienced and for companies or providers of work environment measurement to provide occupational exposure levels they assessed.

Development of the web-based data collection system, the core technology of this project will finish in several months and trial data collection of work-related diseases will be expected to start before March 2004. Development of the web page for data collection for work-related diseases has almost been finished. Minor changes and bug-fixings are ongoing.

**Development of OCH website for employers and employees of European SMEs**

WHO EURO, HQ (bba@who.dk). Others are invited to join.

Funds are in place. The scheduled date of completion is 2003.

To see the current state of this task development, consult http://www.epaw.co.uk/HESME/ (click on HESME web guide at the end of home page)

**Support system for diagnosis of pneumoconiosis using digitization system of image information by relatively reasonable computer system (incl. asbestos-related diseases)**

Toshiaki Higashi, University of Occupational and Environmental Health, Japan (thigashi@med.ueh-u.ac.jp)

Funding is in place. The project will be completed by June 2005.

**Identification of significant occupational health and safety issues, development of the consensus view on the issues and dissemination via the web.**

Julie Hill. National Occupational Health & Safety Commission (Julie.hill@nohsc.gov.au)

*Keywords*: evidence; reviews; research

*Target group*: OHS policy makers; regulators; researchers; decision makers.

The aim of the project is to establish international collaboration to facilitate the completion of systematic reviews on occupational health and safety (OH&S) issues and interventions. It is hoped that this will provide a better evidence base for policy and practice and promote greater international dialogue and exchange of OH&S data and experiences with the results being available freely on the web

Initially the project will be a feasibility study to investigate options for the establishment of an international evidence based policy and practice (EBPP) collaborative network. The first phase will be complete by mid-2004.

For cross references see also:

TF1: Dissemination of scientific information in Spanish

TF 2: E-journal in French; ISPESL international network for providing assistance and training in OSH for African countries; African Joint Effort Newsletter on the web (www.shefrica.info)

TF3: Training the trainers involved in the elimination of the worst forms of child labour

TF4: Network on mining and child labour

TF6: Analysis of trends of workplace health promotion in Polish enterprises and supporting network strategies; Health Promotion Tool box electronic bulletin board; Quality Assurance for Occupational Health Services; Electronic bulletin board

TF8: Activities to improve small business access to OHS information; Support for a local and a regional network of stakeholders in occupational health

TF 11: Utilizing existing training materials of the Lausanne Institute on the web; Distance education for training researchers in occupational health in Latin America – FOINSAL; Gathering and sharing of training programmes and materials on OSH; Organization of an international consultation on capacity building in OH&S to address access to training programmes and intellectual property issues; Training of occupational health and safety personnel; Training and continuous education in occupational and environmental health in Central America; Graduate training in occupational health; Training programmes and modules; Sharing of training programs and materials in occupational health and safety; Online training in occupational health

TF 13: Establishing a website and database for the developments in indicators and profiles
Indicators are pointers that simplify phenomena and help to understand and monitor complex realities. Profiles are concise subject descriptions that usually also include quantitative indicators. A profile is more than a set of indicators because it provides an understanding and context that cannot be communicated by numbers only. Profiles and indicators of occupational health and safety (OH&S) are used to describe states of affairs, provide early signals for problems in the work life, monitor trends, assess the effectiveness of programmes, and present a baseline against which progress is measured. Data on OH&S indicators, such as work injuries and occupational diseases, are collected in some form in nearly every country, but comparisons across countries are difficult because of differences in legislation, criteria, and reporting systems. Sub-national profiles (province, district, etc.) enable comparisons between different geographical areas or population segments. Strength of a sub-national approach is that contextual parameters (culture, language, legislation, administrative procedures) usually are similar, unlike when comparing different countries. Profiles increase transparency and visibility of OH&S and provide insights into the complexity of OH&S affairs, priorities, and needs of countries.

In 2001, a WHO CC meeting in Chiang Mai, Thailand, established a Task Force to encourage development of OH&S profiles and indicators. In 2003, a WHO CC meeting in Iguassu, Brazil, updated the strategy of the Task Force. At present, some 35 institutions in Africa, Asia, Europe, and the Americas are involved in building OH&S profiles.

Further development of a strategy for collecting national and local profile data in OH&S

Kari Kurppa, Finnish Institute of Occupational Health, Helsinki, Finland (Kari.Kurppa@ttl.fi)

Keywords: indicator, profile, strategy, Internet, national, subnational

Target group: WHO collaborating centres, others

The purpose of the Task Force 13 (TF13) is to increase the awareness about occupational health and safety (OH&S) situation of national and local decision makers by promoting the compilation of profiles and indicators at national and subnational levels. In 2002, at request of WHO/EURO, the Finnish Institute of Occupational Health (FIOH) surveyed the availability and analysed the inter-country comparability of candidate indicators in twenty-two European countries. There were many problems in the availability of the proposed indicators in the required form. Furthermore, the comparability of indicators between European countries was generally poor. On a global scale comparisons of indicators are even more problematic because of larger heterogeneity of cultural, legislative, administrative, socio-economic and other factors.

A Session of WHO CC Meeting in Iguassu, 2003, discussed concerns on data comparability. It was noted that a country profile is valuable as such, irrespective of problems about quantitative comparability across countries. All countries require a written summary of their situation for their own needs. Comparisons between countries, not a main objective of a country profile, can be done on an overall level even if individual indicators are somewhat different.

The comparability of data within a country between different regions and over time is generally much better than the comparability across countries. Data collected within a country enable subnational comparisons and surveillance of temporal changes.

The standardization of data collection methods and harmonization of definitions and criteria of indicators in different countries would be a formidable task due to inherent differences between countries. Therefore, it is difficult to suggest one fixed standard for a set of national indicators. However, the WHO/EURO approach has provided an example for a thematic structure for national profiles. Certain themes, items, and issues are universally relevant to all countries.

A rational strategy for the TF13 is to make the existing and forthcoming profiles as widely available as possible through the Internet. Therefore the TF13 establishes a Web site that organizes the profiles and indicators developed by CCs. The Web site also provides access to contact information, background documents, and useful sources in general. An Internet-based profiling instrument will be developed in order to expedite, and to harmonize to a reasonable extent, the building of OH&S profiles. The twenty-two country profiles from the WHO/EURO project will be made available through the Web site. The Web site will also offer access to national profiles of other countries, and to the subnational, sectoral, and subject-specific profiles, when such products become obtainable.

Many developing countries may have difficulties in writing a comprehensive national profile. In such a case a stepwise strategy could be employed by first writing a 'mini-profile' using information that is readily at hand, and gradually expanding the factual content when more information becomes available.


Contribution for generating and publishing of country profile - Hungary

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Keywords: indicators, data, occupational health, Hungary

Target group: decision-makers in Departments of Health, Department of Labour and Trade Unions, occupational health staff and directors, managers associated with occupational health.

The objective of this project is to present the most important results of Hungarian occupational health in a form comparable to those of other countries as far as possible. The project contains the key information on the organisation, professional links, coverage of the Hungarian occupational health, as well as statistical data characterizing the activity of the service.

Within this work NCPH-NIOH has collected Hungarian OH&S data, using the method recommended by FIOH. Joining of Hungary the EU soon, makes it actual to process these data according to EUROSTAT requirements.

The data collection method of EUROSTAT to be adopted; deadline: 31 December 2003.


Processing of the actual data according to EUROSTAT; continuous process.

The Finnish Collaborating Centre is participating in this project.

Contribution for generating and publishing of country profiles - Italy

Alessandra Pera, ISPESL, Italy (alessandrapera@tiscalinet.it)

Keywords: occupational health, prevention, epidemiological surveillance

Target group: The definition of the Italian Country profile will lead to a better definition of the “standards” in occupational health. This will develop into a body of useful information for decision-makers in the area of safety and prevention.

The study is aimed at defining the Country Profile of our Country as regards the topics of occupational safety and health. The objectives of the activity will be achieved through the study of WHO models for the definition of Country Profiles and national and international criteria and guidelines; comparison with the various European Countries as well as with WHO Collaborating Centres; The setting up of inter-sectorial collaboration at a national and international level; the setting of key indicators of the status of the country in terms of occupational health and safety and the development of studies in the country. A country profile of Italy has been prepared.

Further development of a strategy for collecting national profile data in OH&S: Indicator study and design for worker’s compensation and occupational health systems in Colombia, Chile and Argentina

Julietta Rodríguez Guzmán, Fundación Iberoamericana de seguridad y salud ocupacional (FISO), Colombia (jrodriguezg@fisoweb.org)

Keywords: occupational health, worker’s compensation systems, profile

Target group: decision-makers, managers, occupational health professionals, governments, employers, trade unions

The purpose of this project is to built a diagnoses or profile about worker’s health in Colombia, Chile and Argentina, their OHS service and healthcare capacity, as well as prevention services, after they have undergone through several policy and system reforms; to raise awareness among decision makers in these three countries.

The country profiles and indicators that were built on OHS and worker’s compensation systems are to be used to present proposals for prioritising activities at the national level, to provide early signals of the emerging problems in the work life, specially to the growing informal sector and giving evidence of achievements in the formal sector.

National OH Profiles have been finished and a publication is to be done. A written report will be published, and a magnetic report will be placed online on the web through FISO’s homepage.

Asociación Chilena de Seguridad is collaborating on the project. Funds are in place.

Indicators of chemical exposures in Central America and the Caribbean

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Keywords: Central America, profiles, indicators, exposures, surveillance

Target group: Regional, national, and local authorities; international agencies; employers; workers; trade unions; NGOs; mass media; and general public.

The objective of this project is the prioritisation and surveillance of exposures to toxic, endocrine disrupting, and carcinogenic substances for sectoral, national and regional control in Central America and the Caribbean. The project started in 1982.
Indicator systems have been and are being developed for occupational and environmental exposures and their determinants in Central America and the Caribbean. These include (i) the UNEP Global Environmental Facility project *Regionally Based Assessment of Persistent Toxic Substances (PTS)* for 27 PTSs in 23 countries with 136 million inhabitants; (ii) a Central American data bank of amounts, imports, and human and environmental toxicity of pesticides; (iii) a national estimation system of the extent of occupational carcinogenic and pesticide exposures; and (iv) a Costa Rican database of aquatic system exposure to pesticides.

The following progress has been made thus far:


(ii) Data banks are operational and updated; 3 scientific articles have been published.

(iii) The European CAREX system was modified for feasibility in Central America, with 2 scientific reports for Costa Rica.

(iv) Inventory of pesticide use, wells, geohydrological and climate data; mapping of the distribution of aquifers in Costa Rica and of susceptibility indicators for groundwater contamination; watershed modelling.

Operational data banks; UNEP PTS report; 3 scientific articles; 15 technical reports; CAREX modification for Central America, workshop on groundwater vulnerability have been realized.

**Indicadores de exposiciones químicos en América Central y el Caribe**

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Centros incluidos en el proyecto: Programa Ambiental de las Naciones Unidas (PNUMA); Sistema Centroamericano de Integración (SICA); universidades centroamericanas y caribeñas; otras instituciones científicas, ministerios, Instituto Nacional para la Vida Laboral (Suecia); Instituto Nacional de la Salud Pública (Suecia); Universidad de Montreal; Instituto Finlandés de Salud Ocupacional, Laboratorio de Teledetección y sistemas de Información Geográfica – Universidad Nacional (TELESIG-UNA); U.S. Geological Survey.

**Palabras claves:** América Central, perfiles, indicadores, exposiciones, vigilancia

**Grupos meta:** Autoridades regionales, nacionales y locales; agencias internacionales; empleadores; trabajadores; sindicatos; organizaciones no gubernamentales; medios de comunicación masiva; y el público en general.

**Objetivo del proyecto:** Priorización y seguimiento de exposiciones a sustancias tóxicas, disruptores endocrinos y carcinógenos en América Central y el Cárdoc.

**Año del comienzo:** 1982

Se ha construido y se va a construir sistemas de indicadores de exposiciones ocupacionales y ambientales y sus determinantes en América Central y en el Cárdoc. Estas incluyen (i) el PNUMA Global Environment Facility proyecto Evaluación Regional de Sustancias Persistentes Tóxicas para 27 sustancias en 23 países con 136 millones de habitantes; (ii) un banco de datos de cantidades, registros e importaciones, y toxicidad humana y ambiental de plaguicidas; (iii) una sistema nacional del extensión de exposiciones ocupacionales a sustancias carcinogénicas y plaguicidas; y (iv) un mapa de vulnerabilidad de aguas subterráneas a la contaminación por plaguicidas.

**Avance:**

(i) Un informe regional de PNUMA Evaluación Regional de Sustancias Persistentes Tóxicas (2002)

(ii) Bancos de datos

(iii) Se ha modificado y evaluada la factibilidad para usar el sistema europeo CAREX en Costa Rica, con 2 artículos científicas.

(iv) Inventario de uso de plaguicidas, pozos y datos geohidrológicos y climáticos; un mapa de la distribución de acuíferos en Costa Rica y de indicadores de susceptibilidad de aguas subterráneas; modelos con base en cuencas.

**Productos:** Bancos operativos de datos; el informe PNUMA; 3 artículos científicos; 15 informes técnicos; la modificación y los resultados del sistema CAREX para América Central; taller de vulnerabilidad d eaguas subterráneas.

**National and Local Profiles and Indicators - The Republic of Macedonia**

Prof. Dr Jovanka Karadzinska Bilisimovska, Institute of Occupational Medicine, Republic of Macedonia, (bislimovska_j@hotmail.com)

**Keywords:** country profile, indicators, occupational health, Macedonia

**Target group:** National, local authorities and decision makers, planners and administrators responsible for OH&S form relevant Ministries and agencies, occupational health staff, employers and employees, trade union, NGOs.

The aim of this project is the development of country, local and company profile- models with specific national, local and enterprise indicators on health and safety at work. Establishing an information system in this field will facilitate integrated workplace health policy development, its implementation and evaluation.

The starting point of this project is the adoption of cross-sectoral policy requirements and key principles to facilitate good practice in workplace health, environment and social capital management in enterprises. This is a basis to prepare an action plan on enterprise, local and national level with concrete tasks and activities for all workplace health stakeholders.

The project includes further development of a set of quantitative and qualitative indicators to be used for making integrated workplace health profiles at the national, regional/local and company level.
The indicator set covers occupational, environmental, life style and social health determinants. This data should be used by companies, local authorities jointly with other provincial stakeholders and by national authorities for making annual reports, analysis of current situation and as well as for justifying plans for next period.

Preparing tools (questionnaire and methodology) for the national survey to detect high professional risks, specific occupational hazards and health promotion needs of working population are next steps in the project. They will be used by the National Coordination centres - Institute of Occupational Medicine - to collect information necessary to assess impact of the occupational health hazards and life style, environmental and social health determinants on health and well being of working age population. Pilot implementation of good practice in integrated workplace health management in selected enterprises will present a testing model for the project. Organization of national registry of work-related diseases in integrated workplace health monitoring will contribute to define the country status in terms of occupational health and safety.

The development of our activities in this project gave us a chance to cooperate with neighbouring WHO CC for initiating regional approach in South-east Europe in the future.

The accomplishments so far include:

- The Ministry of Health appointed the Institute of Occupational Medicine, Skopje as the National coordination centres for "Health, environment and social management in enterprises" programme in the Republic of Macedonia
- The final document on National "Health, environment and social management in enterprises" Action Plan, with basic principles, criteria and concrete activities for each stakeholder was adopted by Health Council of Ministry of Health.
- A draft document of national survey methodology (questionnaire and procedures) to detect high professional risks, specific occupational hazards and health promotion needs of working population was adopted at a National Intersectoral Workshop.
- A draft document on a set of quantitative and qualitative indicators to be used for making national, provincial and company integrated workplace health profile was adopted on National Intersectoral Workshop.

**Australian OHS data accounts and country profile**

Helen Burbidge (Helen.burbidge@nohsc.gov.au), Julie Hill (Julie.hill@nohsc.gov.au), National Occupational Health & Safety Commission, Australia

*Keywords: Indicators; data; profile*

*Target group: decision makers, government, OHS professionals and researchers.*

The purpose of the project is to develop a coherent framework for combining and relating various data sources on OHS in Australia that incorporates the magnitude of effect, the severity and the economic costs. An Australian country profile will then be developed using this data and information on the OHS infrastructure in Australia.

The project team will initially identify and assess data sources relating to OHS issues in Australia. Data sources assessed as being of sufficient quality and covering an aspect of the field not better covered by another source will be combined to form the best estimate of Australia’s OHS performance. Indicators are being developed for occupational injuries, fatalities and disease.

**Comparison of occupational illness and injury reporting systems across countries**

Fernando G. Benavides (fernando.benavides@cexs.upf.es), Occupational Health Research Unit, Research Unit on Respiratory and Environmental Health, Barcelona, Spain.

*Keywords: reporting systems, international comparability*

*Target group: Developed and developing countries.*

The purpose of the project is to review and compare existing reporting systems for work-related injury and illness across countries, and to provide recommendations for enhancing the degree of comparability of such systems, as a step towards a more global analysis of work-related injury and illness.

This work is being done in collaboration with another WHO Collaborating Centre in Occupational Health (Southwest Centre for Occupational and Environmental Health at The University of Texas School of Public Health). Initially, the comparability of workplace fatality reporting systems between the U.S. (CFOI) and European Union (ESAW) has been studied. Although comparisons are initially being made between existing reporting systems in developed countries, the outcomes of this research should be useful and applicable to developing countries as well. Funds from various grants support this activity on an ongoing basis. For its commitment, WHO is being asked to share relevant information on similar work-related injury and illness reporting systems from national-level Collaborating Centres, and to provide reviews of the work done by the Occupational Health Research Unit on this topic.

The manuscript on work-related deaths between the U.S. and European Union has been submitted for publication.

**Collection of country profiles and national reporting system of occupational diseases**

Fengsheng He, National Institutes in Occupational Health and Poison Control, China (hefs@public.bta.net.cn)

*Keywords: indicator, profile, country, national*

*Target Group: Centres for Disease Control and Prevention at provincial, municipal, prefectural and country levels*

The purpose of this project is to collect and analyze the country profiles and occupational diseases reporting data.
This is an ongoing project. The data collection was not satisfactory and needs to be improved. Fund have been provided by the Ministry of Health.

Establishment of a website for the development of OH&S indicators and profiles

Kari Kurppa, Finnish Institute of Occupational Health, Finland (Kari.Kurppa@ttl.fi)

Keywords: Internet, Web, homepage, information dissemination

Target group: WHO CCs, politicians, administrators, others

The main operational strategy of the TF13 will be to make the existing profiles, indicators, and related information as widely accessible as possible by using the Internet. The Finnish Institute of Occupational Health will assist the TF13 to establish a TF13 Web-site. The Web site organizes the profiles and indicators that are developed by CCs so that they will be freely accessible to all. The Web site also provides access to contact information, background documents, and useful sources in general. The twenty-two country profiles from the WHO/EURO pilot project will be made available through a TF13 Web site. The Web site will also offer access to national profiles that will be developed in other countries, and to subnational and sectoral OH&S profiles, when such products become obtainable.

An Internet-based profiling instrument will be developed in order to expedite, and to harmonize to a reasonable extent, the building of OH&S profiles.

Generation and publishing of regional and local profiles - Bulgaria

Emilia Ivanovich, National Centres of Hygiene, Medical Ecology and Nutrition, Bulgaria (e.ivanovich@nchmen.government.bg)

Keywords: work, working condition, outcomes, profile

Target group: decision-makers, planners and managers, and occupational health staff in Departments of Health, Departments of Labour, and Trade Unions, company management, local authorities.

The aim is to raise awareness of OH among decision-makers in Departments of Health, Departments of Labour, Trade Unions local authorities, companies and enterprises. Profiles and indicators on occupational health and safety can be used for describing the activities, prioritising activities at the regional level, providing early signals for problems emerging in the work life, and giving evidence of achievements. The methodology has been adopted. Funds are needed. FIOH is collaborating on the project. Active period: 2003-2005.

Occupational health social dialogue - Colombia

M Giraldo, Ministry of Health, Group for the Promotion of Workers’ Health, Colombia (Mgiraldo@minsalud.gov.co)

The aim is to improve knowledge of the health conditions in order to facilitate the social dialogue processes through the regional observatories. This activity requires Intersectorial coordination with the Ministry of Work.

Funding is in place (Fondo de Riesgos Profesionales). The project will be completed between 2002-2005.

Publishing of data on country profiles on OH&S collected by the pilot countries

Kari Kurppa, Finnish Institute of Occupational Health, Helsinki, Finland (Kari.Kurppa@ttl.fi); Gregory Goldstein, WHO (goldstein@who.int)

Twenty-two European countries (Austria, Bulgaria, The Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Norway, Portugal, The Russian Federation, Spain, Sweden, Switzerland, The United Kingdom, and Serbia and Montenegro) have provided country profiles based on a WHO/EURO model.

The indicators were divided into three main categories: a) Indicators of prerequisites of OH&S, b) indicators of working conditions, and c) indicators of OH&S outcomes. The results of the project showed: the availability of data greatly varies between countries; the inter-country comparability of the data is low; quantitative data needs to be complemented with qualitative information; a multi-parameter profile is more informative than the aggregation of several parameters to one single indicator score.

The European country profiles have been published as a document, and will also be made available through Internet from the TF13 Web site. Countries in other continents can consider the findings and experiences gained by the European project.


WHO, ILO, and the Finnish Institute (FIOH) have provided funding for selected African (Kenya, South Africa, Tanzania) and Asian (Nepal, Philippines, Sri Lanka, Thailand, Viet Nam) countries to prepare country summaries on OH&S. The results were presented at an international seminar in Helsinki in October 2001, and have been printed in a publication.

Sectoral and subject-oriented profiles and indicators
Kari Kurppa, Finnish Institute of Occupational Health, Finland (Kari.Kurppa@ttl.fi); Magdalene Chan, Ministry of Manpower, Singapore (magdalene-chan@mom.gov.sg)

Keywords: indicator, profile, national

Target group: decision makers, planners, managers, occupational health and safety professionals.

The objective of this project is to develop a model profile that gives an overview of the OH&S situation in the chemical sector and use this as a tool for benchmarking with other economic sectors within a country and, perhaps, between similar sectors in other countries.

The profiling of the chemical industry in Singapore covers the following activities: Manufacturing of Refined Petroleum Products, Manufacturing of Chemicals and Chemical Products, and Manufacturing of Rubber and Plastic Products. In the selection of the items and indicators for the profile, reference has been made to the approach taken in the compilation of country profiles published in the FIOH People and Work Research Reports 52 (Work and Health Country Profiles of 22 European Countries) and 55 (Proceedings of the Workshop on National and Local OH&S Profiles and Indicators), as well as the Survey on ILO Standards-Related Activities in the Area of OSH in 2002.

Data is collated from the various databases maintained by national authorities, including the Manpower Ministry, economic and statistical agencies and professional bodies, as well as published or available local research material.

The profile will comprise the following:
- Economic and manpower statistics
- OHS legislation and standards
- Human resources in OHS
- Worker exposure and biological monitoring data
- Occupational disease and accident statistics

A CD-ROM sectoral profile is available on the internet. The project is expected to be completed in December 2003.

Development of an OHS Performance Measurement Tool
Magdalene Chan, Occupational Health Department, Ministry of Manpower, Singapore, (magdalene-chan@mom.gov.sg)

Keywords: occupational health and safety performance measurement tool, Universal Assessment Instrument (UAI), standardised sectorial profile

Target group: employers, employees, government agencies and OHS professionals

The objective of this project is to develop an OHS Performance Measurement Tool that is able to give a profile of the OHS situation with regards to a specific economic sector.

The tool is made up of a checklist and a questionnaire. It is designed to be a self-assessment tool. It has to be simple yet comprehensive, robust, verifiable and meaningful. The checklist is developed based on the Universal Assessment Instrument (UAI) which has been tested in selected companies in the USA. The basis of UAI has been published in peer-reviewed journals. It has to be compatible with the current audits of OSHAS 18001 and MOM SMS. The questionnaire is to be used as a verification tool for the results obtained from the checklist.

An OHS profile of the specific sector in terms of OHS performance can be obtained by aggregating the results from companies in the sector. This will be a useful item in the sectoral profile that will provide a means for comparison with other economic sectors within a country, and, perhaps, between similar sectors in other countries.

The OHS Performance Measurement Tool has been developed. The checklist comprises 21 measurement criteria, grouped under five driving factors. The five driving factors are management commitment, employee participation and training, OHS systems and practices, OHS expertise and line ownership of OHS. The questionnaire has 20 items.

A pilot study has begun in the chemical industry. Five companies participated in it. The results obtained from the study are being collated. The testing of this tool may be extended to other industries.

Other centres collaborating on the project: Steven P. Levine, (slih@umich.edu), Ph.D., CIH, Emeritus Professor of Industrial Health, University of Michigan-Ann Arbor, USA; Kim Ng (kim.kl.ng@exxonmobil.com), ExxonMobil Asia Pacific Pte. Ltd., Singapore

Product: OHS Performance Measurement Tool. The deadline of this project is December 2005.

Indicator study and design for worker’s compensation and occupational health systems in Colombia, Chile and Argentina
Julietta Rodríguez Guzmán, FISO, Colombia (jrodriguezg@fiso-web.org)

Keywords: occupational health, worker’s compensation systems, profile

Target group: Decision makers, planners and managers, and occupational health staff the administrative institutions and insurance companies, governments, employers and trade unions in the three countries.

The purpose of the project is to build a diagnosis or profile about worker’s health in Colombia, Chile and Argentina, their OH&S service and healthcare capacity, as well as prevention services, after they have undergone through several policy and system reforms; to raise awareness among decision makers in these three countries.
The country profiles and indicators that were built on OHS and worker's compensation systems are to be used to present proposals for prioritising activities at the national level, to provide early signals of the emerging problems in the work life, especially to the growing informal sector and giving evidence of achievements in the formal sector.

The National OH Profiles have been finished and a written report is to be published, which will also be on-line on the web through FISO's homepage.

The Asociación Chilena de Seguridad is collaborating with us on this project.

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**Publishing of data on country profiles on OH&S collected by the pilot countries**

Kari Kurppa, Finnish Institute of Occupational Health, Helsinki, Finland (Kari.Kurppa@ttl.fi); Gregory Goldstein, WHO (goldsteing@who.int)

Twenty-two European countries (Austria, Bulgaria, The Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Norway, Portugal, The Russian Federation, Spain, Sweden, Switzerland, The United Kingdom, and Serbia and Montenegro) have provided country profiles based on a WHO/EURO model.

The indicators were divided into three main categories: a) Indicators of prerequisites of OH&S, b) indicators of working conditions, and c) indicators of OH&S outcomes. The results of the project showed: the availability of data greatly varies between countries; the inter-country comparability of the data is low; quantitative data needs to be complemented with qualitative information; a multiparameter profile is more informative than the aggregation of several parameters to one single indicator score.

The European country profiles have been published as a document, and will also be made available through Internet from the TF13 Web site. Countries in other continents can consider the findings and experiences gained by the European project.


WHO, ILO, and the Finnish Institute (FIOH) have provided funding for selected African (Kenya, South Africa, Tanzania) and Asian (Nepal, Philippines, Sri Lanka, Thailand, Viet Nam) countries to prepare country summaries on OH&S. The results were presented at an international seminar in Helsinki in October 2001, and have been printed in a publication.


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**Contribution for generating and publishing of country profiles - Viet Nam**

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

*Key words:* country profile, indicators, occupational health, prevention

*Target group:* decision-makers at Ministries, politicians, workers' organizations, employers' organizations, academic institutions

The objective is to describe the national structures and functions of the Vietnamese system for the management of OH&S. The Vietnamese Network on Occupational Health and Safety will contribute to the accomplishment of the task.

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**Contribution for generating and publishing of country profiles - Bulgaria**

Emilia Ivanovich, e-mail: e.ivanovich@nchmen.government.bg) National Center of Hygiene, Medical Ecology and Nutrition, Bulgaria

Project finalised.

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**National occupational health plan - Chile**

Juan Carlos Llano (jlano@minproteccionsocial.gov.co), Mónica Maria Corchuelo, (mcorchuelo@minproteccionsocial.gov.co), Ministry for Social Protection, Santaté de Bogotá, Colombia

*Keywords:* occupational health plan

*Target group:* Government and workers.

The purpose of this project is to elaborate a national occupational health plan based on the diagnosis of the Professional Risk System.

The aim is to elaborate a National Occupational Health Plan and establish a diagnosis of the occupational health situation (occupational health data, Occupational Health Institutions (ARP), Ministry of Social Protection, National Net of Occupational Health Committees). At local level, a work plan will be defined, which will periodically evaluated on the basis of indicators and results.

A national network of occupational health committees has been established.

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**Contribution for generating and publishing of country profile - Poland**

Jacek Michalak (jmzooz@imp.lodz.pl) and Stanislaw Tarkowski (tarko@imp.lodz.pl)

Nofer Institute of Occupational Medicine, Poland
Keyword: training materials
A draft outline of the country profile has been prepared, presented at BSN meeting in Riga 2002, and provided to co-ordinators. The profile is being continuously supplemented according to changes in Polis legislation, new information and other important data.

At present, there is no identified source of financing this task yet. NIOM covers only a part-time job, which caused remarkable slow-down of the work.
Funding is needed. The completion date is yet to be determined.

**Contribution for generating and publishing of country profile**
Magdalene Chan, Occupational Health Department, Ministry of Manpower, Singapore, (magdalene_chan@mom.gov.sg)

*Keywords:* indicator, profile, national

*Target group:* decision makers, planners, managers, occupational health and safety professionals

The objective of this project is to compile a country profile of Singapore with regard to occupational health and safety to facilitate information sharing, comparisons between countries and surveillance across time.

The occupational health and safety profiles and indicators being compiled are broadly classified into three main categories, viz., prerequisites of OH&S, working conditions and OH&S outcomes. In the selection of the items and indicators for the profile, reference has been made to the approach taken in the compilation of country profiles published in the FIOH People and Work Research Reports 52 (Work and Health Country Profiles of 22 European Countries) and 55 (Proceedings of the Workshop on National and Local OH&S Profiles and Indicators).

Data is collated from various databases maintained by national authorities, including Manpower and Health Ministries, economic and statistical agencies and professional bodies, as well as published or available local research material.

The profile will include the following items:

- Economic, health and manpower statistics
- OHS infrastructure and system
- OHS Legislation
- Human resources in OHS
- Worker exposure and biological monitoring data
- Occupational disease and accident statistics
- Work related health problems, such as stress and musculoskeletal problems

A CD-ROM country profile is available on the internet. The project is expected to be completed in December 2003.

**Extension of the profiles to subnational levels (province, district) in the countries**

Kari Kurppa, Finnish Institute of Occupational Health, Finland (Kari.Kurppa@ttl.fi)
Gregory Goldstein, WHO (goldsteing@who.int)

*Keywords:* district, local, profile, province, subnational

National statistics homogenise information to the country level. Yet, subnational divisions may differ in important ways with regard to labour force demography, structure of economy, OH&S services, hazards, outcomes, etc. Health For All by the year 2000 programme has noted that information has been given mainly a central connotation, and the collection of information at the peripheral level is usually done with the needs of the central level in mind. “One has to get away from such thinking.” Strengthening the local role in the management of OH&S requires a closer attention be paid to local information. Subnational profiles enable comparisons between different geographical areas or population segments, thus identifying disadvantaged population groups or regions.

Local administrators can compare separate subdivisions within their administrative territory for monitoring purposes, identifying deviances, and recognizing needs for action. Strength of a subnational approach is that important parameters (culture, language, climate, legislation, administrative procedures) usually are similar, unlike when comparing different countries.

Thailand is developing OH&S profiles in three provinces. China (Shanghai), Bulgaria, and the Republic of Bashkortostan (Russian Federation) are committed to ‘Generation and publishing of regional and local profiles’, pending on funding.

**Extension of the profiles to subnational levels (province, district, commune) - Viet Nam**

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

*Key words:* local, profile, province, district, indicator, occupational health

*Target group:* local decision-makers, local politicians, local stakeholders, academic institutions

The objective is to describe and make transparent the structures and functions of at provincial, district and commune level for strengthening local management of OH&S in Viet Nam. The approach will first be developed and tested in one or two provinces and, if found feasible, later extended to other provinces.

**Generation and publishing of regional and local profiles - The Republic of Bashkortostan, Russia**

Akhat B. Bakirov (bakirov@anrb.ru) and Nadezhda I. Simonova (airat@anrb.ru),
Ufa Research Institute of Occupational Health and Human Ecology, Republic of Bashkortostan, Russia

**Keywords:** local profile, occupational health, medicine, Bashkortostan


The purpose of this project is to present a database on the system of health protection of the population and its indicators in the Republic of Bashkortostan on the basis of a statistical analysis. The project aims to present the information on the real health status of the population, major factors of health promotion and the most effective ways of reforming the health care system to the RB Government and regional administration organs (decision-makers, managers).

The local profile of the Republic of Bashkortostan is related to the national profile of the Russian Federation.

It is a monographic issue of the results of the integrated analysis of real indicators of the population health and health care system. In the project, a great deal of attention will be focused on the problems of health protection of the RB working population of the current and following generations.

The aim and tasks of the project have been defined. The programme and plan of its implementation have been developed. At present, the collection and analysis of necessary information is being done. The Moscow Research Institute of Occupational Health affiliated to RAMS is collaborating on the project. Funds are needed. Primary results are supposed to be obtained in 2003.

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**Extension of the profiles to subnational levels (province, district) in the countries - Colombia**

M Giraldo (mgiraldo@minsalud.gov.co), Ministry of Health, Group for the Promotion of Workers’ Health, Colombia

The aim is to improve knowledge of the health conditions through the regional observatories in order to facilitate the social dialogue processes. This activity requires intersectorial coordination with the Ministry of Work.

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**Extension of the profiles to community level in the countries**

Kari Kurppa, Finnish Institute of Occupational Health, Finland (Kari.Kurppa@ttl.fi)

Gregory Goldstein, WHO (goldsteing@who.int)

**Key words:** local profile, province, district, indicators, occupational health

**Target group:** empowerment, village, rapid assessment, primary health care, public health

Traditional health indicators such as morbidity or disability reveal little about actual community concerns. Such concerns may include employment, poverty, work injuries, pesticide poisonings, ergonomic or other work-related problems, etc. Community activation is a strategy to provide some OH&S services to informal sector and improve OH&S in rural villages. Locally acceptable light methods are needed. Rapid assessment procedures (RAP) can be used to that effect. RAPs are mixed techniques that fall in the continuum of casual conversations and academic methods. They apply principles of knowing the difference between what is worth knowing and what is not, and ‘appropriate imprecision’ to avoid a degree of precision that is unnecessary. Information from RAP exercises is used to write a community OH&S profile which is a basic technique for community development. RAP is an approach, which provides information, and in the very process of acquiring information can alter the situation. Obvious hazards may be corrected immediately, often by simple means, such as pesticides containers lying on ground unguarded. The aim is to empower communities to manage OH&S on their own, as much as they can.

A pilot project in three provinces in Thailand is preparing village OH&S profiles. As part of the process, actions for improving OH&S at work sites have been undertaken, and education conducted on controlling local hazards. After considering the experiences from the pilot, other countries are informed and encouraged to contribute to the effort.

The Task Force 2 'Intensive Partnership in Africa includes a task for Preparation of community profiles on OH&S in Africa, pending on funding. This task can utilize the experience and results of the work undertaken by TF13.

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**Extension of the profiles to community level - Viet Nam**

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

**Key words:** local profile, province, district, indicators, occupational health

**Target group:** villages, communities, public health system, local decision-makers, local stakeholders

The project describes the OH&S situation, problems and awareness at the village level in Viet Nam as a baseline for starting improvements by local resources. The goal is to empower primary health care and grass-root actors to manage OH&S problems by using the means that are at disposal of a community.

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**Preparation of regional profiles in occupational health and safety**

Deoraj Caussy, SEARO (CAUSSYD@who.sea.org), PAHO, EURO

Funds are required. The date of completion is yet to be determined.

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**Report form for basic information on occupational health**

Ministry of Public Health, Director of the Division of Occupational Health, Thailand
The Thai government funds the project.

**Generation and publishing of regional and local profiles - China**
Taiyi Jin, Fudan University School of Public Health, China (tyjin@shmu.edu.cn)
Funds are needed.

**Publishing of data on profiles on OH&S in three pilot provinces of Thailand**
Director of the Division of Occupational Health, Ministry of Public Health, Thailand
The Thai government funds the project.

**Organizing small seed funding for countries to collect the survey information**
Gregory Goldstein, WHO (goldsteing@who.int)
WHO and Finnish Institute (FIOH) have provided funding to assist selected African (Kenya, Tanzania) and Asian (Nepal, Philippines, Sri Lanka, Thailand, Viet Nam) countries to carry out subnational profiles. The results were presented at an international meeting sponsored by FIOH and WHO in November 2002, and will be published by the end of 2003.

**Extension of the preparation of country profiles to all other Collaborating Centres**
Kari Kurppa, Finnish Institute of Occupational Health, Finland (Kari.Kurppa@ttl.fi); WHO Collaborating Centres in Occupational Health
The models for OH&S profiles developed by pilot countries will be made available to all WHO Collaborating Centres and other interested bodies. The access to such information will be offered through a TF13 Web site.

For cross reference see also:
TF 2 : Preparation of community profiles on OHS in Africa
TF5 : Health Care Workers
TF 6 : Environmental health assessment for selected areas
TF8 : Support for a local and a regional network of stakeholders in occupational health
TF11 : Further development of a strategy for collecting national profile data in OH&S; Contribution to the development of a strategy for collecting national profile data in OH&S; Contribution for generating and publishing of country profile
In order to allocate the scarce resources in a reasonable way, studies of cost-effectiveness of interventions in occupational health and safety are needed. This information can also be utilized in order to convince the decision-makers in investing in occupational health and safety.

**Economic estimation of “Net-Costs” for Prevention of Occupational Low Back Pain**

This is a joint project by three WHO Collaborating Centers in Occupational Health (University of Massachusetts at Lowell in the United States, TNO Work and Employment in The Netherlands, and the National Institute of Occupational Health in India) and by the Institution of Public Health Engineers, India.

Dr. Supriya Lahiri (Supriya_Lahiri@uml.edu), University of Massachusetts at Lowell, USA; Dr. Birgitte Blatter (b.blatter@arbeid.tno.nl, TNO Work and Employment, The Netherlands; Dr. Habib Saiyed (saiyedhn@yahoo.com), National Institute of Occupational Health (NIOH), India

**Keywords:** cost-effectiveness, musculoskeletal disorders, back pain, net-costs, economic analysis

**Target Group:** Employers, worker representatives, decision makers

The purpose of the project is to extend the current WHO cost effectiveness study of low back pain interventions (which focused on health benefits alone) more comprehensively, in order to address “net costs”. The costs include costs of interventions, and cost savings due to changes in productivity and to prevention of illness.

A net-costs economic model will be developed based upon literature reviews of interventions for low back pain within the United States and Europe in select industries. A framework for data collection in select industries in India will be developed and piloted. A small international meeting in Delhi in July is planned to review the progress of the project, to learn about the situation in India, to firm up the data collection framework, and to plan for the use of the framework in case studies.

Completion in 2004. Funding is in place.

**Evaluation of the Cost-effectiveness of Interventions to Reduce Occupational Back Pain**

Supriya Lahiri (Supriya_Lahiri@uml.edu) in collaboration with Charles Levenstein (Charles_Levenstein@uml.edu), University of Massachusetts at Lowell, USA

**Keywords:** cost-effectiveness of interventions, occupational, generalized cost-effectiveness model, ergonomic stressors, occupational back pain

**Target group:** Occupational health staff, employers, employees, ministries in developing countries decision makers, trade unions.

The purpose of this project is an Evaluation of the Cost-effectiveness of Interventions to Reduce Occupational Back pain. It will evaluate the cost-effectiveness of specific interventions for the prevention of occupationally induced back pain, a risk factor measured in the WHO Global Burden Comparative Risk Assessment Analysis.

So far we have identified from the literature the best practices of relevant interventions in the prevention of occupational back pain, its incidence on injury reduction, and the cost of compliance. Used models developed by the WHO-CHOICE initiative to evaluate the effectiveness of interventions for all the 17 WHO subregions in terms of DALYs gained. Preliminary cost-effectiveness estimates were computed to evaluate the alternative interventions.

**Evaluation of the cost-effectiveness of interventions to reduce occupational exposure to Silica**

Supriya Lahiri (Supriya_Lahiri@uml.edu), Charles Levenstein (Charles_Levenstein@uml.edu), Work Environment Program, University of Massachusetts at Lowell, USA, and Beth J. Rosenberg, Tufts University School of Medicine

**Keywords:** cost-effectiveness, interventions, occupational exposure to Silica

**Target Group:** Occupational health staff, employers, employees, ministries in developing countries, decision makers, trade unions.

The goal of the final project is to evaluate the cost-effectiveness of specific interventions for the prevention of occupationally induced silicosis, a risk factor measured in the WHO Global Burden Comparative Risk Assessment Analysis.

A literature study was performed to identify different interventions to reduce silica exposure, its effect on incidence of silicosis and the cost of compliance. A simulation model developed by the WHO-CHOICE initiative was used for two subregions AMROA and WPROB1 to estimate DALY’s gained by using specific interventions. The cost-effectiveness estimates for specific interventions were evaluated.

**Understanding and performing economic assessments at the company level**

Jos C.M. Mossink, TNO Work and Employment, The Netherlands; edited by Deborah Nelson, WHO (now: imel@ou.edu), OU in Norman, OK, USA
This document is the second in a series of occupational health documents entitled: Protecting Workers' Health. Improvement of safety and health of workers can bring appealing economic benefits for both companies and societies as a whole. It is difficult, however, to convince employers and decision-makers of the profitability of improving working conditions. An effective way is to make financial or economic estimations.

This publications describes a hands-on approach that can be used in making economic assessments. It was finalised and published in early 2002.

Cost-effectiveness of treatment and guidance of work-related diseases and of chronic diseases interfering with work demands

MHW Frings-Dresen, Coronel Institute for Occupational and Environmental Health, The Netherlands (m.frings@amc.uva.nl)

Keywords: treatment, effectiveness, chronic diseases, RSI, work-relatedness

Target group: occupational health staff, employers, employees, decision-makers, trade unions.

The objective of this project is to explore the cost-effectiveness of multidisciplinary treatment in comparison with care-as-usual for (work-related) chronic diseases.

(Work-related) chronic diseases are increasing. It is known that for return to work of chronic patients a monodisciplinary treatment is not effective. In this study the cost-effectiveness of multidisciplinary treatments will be explored by a randomised control design for (work-related) chronic diseases in comparison with care-as-usual.

Outcome-measures are return to work, costs, level of disability in daily life and in working situation.

A literature study is performed to the state of the art of effective elements in return to work programmes for patients with chronic (work-related) diseases. Next, the inclusion of RSI-patients in a multidisciplinary programme will be started. An article has been published in a Dutch journal.

The project is being run in collaboration with the Faculty of Economy, occupational health services and reintegration centres and WHO-institutes. Funds are in place. The date of completion is December 2005.

Role of primary care physicians and nurses in addressing occupational health issues

Andrew Curran, Health and Safety Laboratory, UK

Keywords: primary care, general practitioners, occupational health nurses, education

Target group: Occupational Health Professionals (including GPs), Planners, Central and regional government departments

This project aims to explore the reasons for the low profile of patients’ occupational health in the primary care setting. The scope of this project is to collect both qualitative and quantitative data in the UK to answer the following questions:

- Why do GPs and practice nurses not take greater account of occupational issues in their day to day contact with patients of working age?
- Why have patients' occupational health issues failed to gain a higher priority amongst primary care managers and planners?
- What are the professional, social and economic pressures, which give occupational health a low priority?

A comprehensive range of information sources will be used to inform a literature review of the topic area. In order to collect qualitative information regarding primary care, we will hold a series of focus groups for stakeholders, consisting of GPs, practice nurses and primary care managers/planners. This qualitative approach will be supplemented by the collection of quantitative data reported on self-administered questionnaires mailed to the target groups in order to address the stated objectives. The questionnaire will be developed from the outputs of the focus groups. This information will be used to verify the issues raised in the focus groups and confirm that all the relevant issues have been drawn out by the study. A final report will be produced, and we propose that a paper should be submitted for peer review, and a final report will appear on HSEs website.

This is a collaborative project between HSL, the Sheffield Occupational Health Advisory Service and the General Practice Research Unit at the North West Lung Centre.

Selection of interventions, study design, application

Marisol Concha (gsamcb@gw.achs.cl), Gustavo Contreras and María Paz Figueroa, Asociación Chilena de Seguridad (ACHS), Chile (gsamcb@gw.achs.cl)

Funds will be provided by the host country. The completion date is December 2003.

Translation of the brochure 'Understanding and Performing Economic Assessment at the Company Level' into Italian

Alberto Zucconi, IACP (azucconi@iacp.it)

This document was published in English in the Protecting Workers' Health series (2).
Translation of the brochure 'Understanding and Performing Economic Assessment at the Company Level' into Bulgarian

Emilia Ivanovich, National Centre of Hygiene, Medical Ecology and Nutrition, Sofia, Bulgaria (e.ivanovich@nchmen.govtment.bg)

This document was published in English in the Protecting Workers’ Health series (2). The translation has been accomplished. Financial support is being sought for editing.

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Development of economic appraisal of occupational health and safety in Polish enterprises

Izabela Rydlewska–Liszkowska (iza_ez@imp.lodz.pl) and Stanisław Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

**Keywords:** economic appraisal, costs, benefits, effectiveness, investing in health, SMEs  
**Target group:** SMEs, local authorities and other institutions investing in occupational health

The purpose of the project is the identification, analysis and assessment of data on costs and effects/benefits of investing in occupational health.

The description of the economic appraisal determinants at the enterprise level in Poland will include the ways of collecting data (direct and indirect costs, net benefits), methods of calculating and valuation costs and benefits, selecting indicators of effectiveness, and limitations of interpretation of the results. The project scope contains also conclusions as to how to relate economic appraisal results to financial and production indicators in enterprises.

Progress achieved: identification of available data on costs, method of calculation and valuation costs, selection the appropriate sources of information at the enterprise level.

Guidelines will be prepared as to how to proceed in making assessment taking into account existing limitations.

The project funding is in place and the project is due to be completed in 2004.

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Training materials for cost effectiveness analysis of occupational health and safety at workplace as the component of occupational health management

Izabela Rydlewska–Liszkowska (iza_ez@imp.lodz.pl) and Stanisław Tarkowski (tarko@imp.lodz.pl), Nofer Institute of Occupational Medicine, Poland

**Keywords:** economic appraisal, enterprise finance, decision making, training

The purpose of the project is the preparation and publication materials for training the employers in order to support them in decision making in the employees health area.

The training materials will present essential information on benefits of cost effectiveness analysis for Polish employers, the process of making assessment (major steps), selecting information, calculations variables, case study examples.

Progress achieved: Description of the role of cost effectiveness analysis in finance management and employers motivating in Poland has been prepared (introductory part of materials).

The project is being conducted in collaboration with the University of Economy, Katowice, Poland.

The products will include materials for training including theoretical and practical information on cost effectiveness analysis of occupational health programmes in enterprises.

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For cross references see also:  
TF 4 : Contributing information on interventions to reduce silica exposure  
TF 6 : Training and public communication in the application of ergonomics in industry  
TF 8 : Economic appraisal of occupational health and safety in small enterprises
WHO has initiated the development of the methods for defining global burden of disease. The objective is to find gaps in information and knowledge and to develop further the methodology and improve the data collection so that it will better meet the information requirements for preventive actions. The method includes the assessment of exposures, evaluation of exposure-outcome association and calculation of the population attributable fraction (PAF). The effort recognizes the uncertainties in exposure assessment and wide variation in the outcome definitions and registration practices between the countries. The development work aims at better possibilities to prioritize activities and target selected measures in a cost-effective way.

WHO comparative risk analysis of the contribution of occupational risk factors to the global burden of disease

Marilyn Fingerhut, WHO (fingerhutm@who.int); Marisol Concha, ACHS, Chile (gsamcb@gw.achs.cl); Laura Purnett, University of Massachusetts at Lowell, USA; Kyle Steenland, NIOSH, USA; Tim Driscoll, formerly NOHSC, Australia

Keywords: global burden of disease, risk assessment, DALYs, attributable fraction

The objective of this project was to estimate the contribution of selected occupational risk factors to the overall global burden of disease, using standard WHO methodology. The project has been completed. Comments were received from many CCs on the six comparative risk assessment analyses of occupational health risk factors. The Finnish Institute of Occupational Health, NIOSH, and the ILO were particularly helpful.

This effort by researchers at WHO/HQ and Collaborating Centres was published in summary in October 2002 in the WHO World Health Report. The full scientific papers will be contained in a WHO book in 2003 and articles will be submitted for publication in a peer-reviewed occupational health journal.

The global attributable fractions for mortality and morbidity due to selected occupational exposures are listed below:

<table>
<thead>
<tr>
<th>Occupational Risk Factor</th>
<th>Attributable Fraction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low back pain</td>
<td>37</td>
</tr>
<tr>
<td>Hearing Loss</td>
<td>16</td>
</tr>
<tr>
<td>COPD</td>
<td>13</td>
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<td>Asthma</td>
<td>11</td>
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<tr>
<td>Unintentional injuries</td>
<td>10</td>
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<tr>
<td>Lung cancer</td>
<td>9</td>
</tr>
<tr>
<td>Leukemia</td>
<td>2</td>
</tr>
</tbody>
</table>

Many important outcomes could not be included in the WHO study due to the absence of adequate global data, for example, infectious disease, coronary heart disease, reproductive disorders, intentional injuries, musculo-skeletal disorders of the upper extremities, and most cancers.

National surveillance of incidence of occupational and work related disease by samples

M Giraldo, Division of Occupational Safety and Health, Ministry of Health, Colombia (mgiraldo@minproteccionsocial.gov.co)

There is a sub registry and sub diagnostic for occupational disease in the Colombian health system. The project will lead a detailed follow up model for the identified cases (diagnostics). At the moment it is in the process of consolidation and analysis of cases diagnosed in 2001. Complementarily, a national surveillance model has been proposed to follow up the occupational diseases, to identify some particular cases, to make them become an obligatory report. Funding is needed. The project will be completed between 2002-2005.

International Surveillance of Seafarers’ Health and Working Environment

Olaf Jensen, Research Unit of Maritime Medicine, University of Southern Denmark (ocj@fmm.sdu.dk)

Keywords: seafarers, injury, exposures, survey, self-report

Target groups: seafarers, ship owners, their organisations, seamen’s doctors, national maritime authorities, international organisations as IMO, ILO and ITF.

The purpose of the project is: 1) to describe the working, living and health conditions of seafarers and the injury incidences and related determinants in an international context 2) to raise awareness among seafarers, ship owners and their organisations about possible deficiencies in standards of occupational conditions. 3) To achieve equal international standards for safety, work and living conditions for all seafarers.

The project has been developed since 1998. It is a surveillance system by use of self-completed questionnaires filled out by the seafarers before or after the health examination (health examinations are mandatory for all seafarers) The anonymous questionnaires contain the same questions for all, translated to the seafarers’ languages.
Pilot studies (1999-2000) in 5 countries have shown that the method can work in practice. The next questionnaire study was carried out in 2001 among 11 countries with 6,593 questionnaires in total. The theme part of this questionnaire round was safety on board: self-perceived safety, knowledge of safety representative, exposure to chemical substances, the use of safety equipment against chemical exposures and self-perceived health was examined. As permanent part of the questionnaire, injuries during the latest tour of duty were examined. The results remain to be analysed and published. The main part of the project was financed through support from The ITF Seafarers’ Trust. Two new rounds of data collection are planned for 2003-2006 and an application for financial support has been submitted to the ITF.

Other centres collaborating on the project are the Institute of Maritime and Tropical Medicine, Poland; Instituto Social de la Marine, Sociedad Española de Medicina Maritima Spain; Seafarers International Research Centre, Cardiff University; Ukrainian Research Institute of Maritime Medicine; Croatian Institute of Occupational Health, University of Rijeka; Semashko Seamen's Hospital, Arkhangelsk; Department of Occupational Health, Fudan University, Shanghai; Klinik Rajawali Lestari Kondominium, Jakarta, Indonesia; Arguelles Medical Clinic Inc., Manila, Philippines, Drs. Stoner, Morton, Greeff & Rosendorff, Cape Town, South Africa.

The following products have been realized:
- 2 papers submitted for publication and other papers are under preparation.

Other contributors are Harry Caussy, SEARO (CAUSSYD@whosea.org); ILO and PAHO.

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**National surveillance of the incidence of occupational diseases in the Czech Republic**

Pavel Urban, Center of Industrial Hygiene and Occupational Diseases, National Institute of Public Health, Prague, Czech Republic (pavel.urban@szu.cz)

**Keywords:** occupational diseases, incidence, burden of disease

**Target group:** experts, planners, managers, and decision-makers in occupational health, trade unions

The objective of the project is to gather in a standardized manner the information on the incidence of occupational diseases in the Czech Republic and to share the data with WHO/HQ and ILO for the purpose of the global burden of disease assessment.

The Czech National Registry of Occupational Diseases has been operating since 1991 as a comprehensive nationwide information system covering all cases of acknowledged occupational diseases. About 20 pieces of information are collected on each case, such as identification data of the patient, his or her age, gender, address, occupation, duration of exposure, diagnosis, item in the List of occupational diseases, information on the workplace where the exposure to an occupational hazard occurred, and others. The quality and completeness of the data stored in the Registry are continually checked by trained personnel.

As an output of the project, yearly reports on the incidence and structure of occupational diseases are passed on to WHO/HQ and ILO. This project involves a long-term commitment.

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**National surveillance of incidence of occupational and work-related disease by samples - Strengthening of the health sector and other systems in diagnostic capacities and the identification of work-related illnesses**

Juan Carlos Llano (jllano@minproteccionsocial.gov.co) y Ana Pilar Pereira (apereira@minproteccionsocial.gov.co), Ministry for Social Protection, Colombia

- Diagnostic of work-related illnesses in 2001-2002
- Massive campaigns to generate more knowledge about work-related illnesses
- Strategies for increasing capacities for health workers in the 5 major cities of the country
- Decree to facilitate compensation of professional health risks by health insurances
- Campaign for the prevention of carpal tunnel syndrome
- Establish financial plan to estimate the implication of including the diagnosis of professional illnesses

Funding still required.

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**National surveillance of incidence of occupational and work-related disease by samples - Fortalecimiento del sector salud y demás actores del sistema en la capacidad diagnóstica y de identificación de enfermedades profesionales**

- Diagnóstico de situación de EP en el 2001 y 2002
- Campañas de difusión masiva de para generar un mayor conocimiento del tema de enfermedad profesional
- Estrategias de capacitación para personal de la salud en las 5 principales ciudades del país
- Decreto que favorezca el recobro entre en aseguradoras de salud y riesgos profesionales.
- Campaña preventiva del Síndrome del Tunel de Carpo
National surveillance of the incidence of occupational diseases in the Czech Republic
Pavel Urban, Center of Industrial Hygiene and Occupational Diseases, National Institute of Public Health, Prague, Czech Republic (pavel.urban@szu.cz)

Keywords: occupational diseases, incidence, burden of disease
Target group: experts, planners, managers, and decision-makers in occupational health, trade unions

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As an output of the project, yearly reports on the incidence and structure of occupational diseases are passed on to WHO/HQ and ILO.

The project is funded by the Czech Ministry of Health, and is intended to be a long-term commitment.

National surveillance of incidence of occupational and work-related diseases by samples
Dick Spreeuwers, Coronel Institute/Netherlands Centres of Occupational Diseases, The Netherlands (d.spreeuwers@amc.uva.nl)

Funding is in place, except for a study socio-economic consequences of occupational and work-related diseases. The scheduled completion date is beginning of 2004.

Surveillance of incidence of occupational and work-related diseases in Serbia and Montenegro by samples
Bogoljub Perunicic, Institute of Occupational and Radiological Health, Serbia and Montenegro (perunb@Eunet.yu)

Funding is needed. The project is scheduled to be completed by December 2004.

Preparation of a guideline for calculating the burden of disease at the national level
WHO/HQ

Documents are in preparation for occupational lung diseases, carcinogens, injuries and hearing loss. The task is to be finalised by 2004.

Piloting the guideline for calculating the burden of disease in Bulgaria
Emilia Ivanovich, National Centres of Hygiene, Medical Ecology and Nutrition, Bulgaria (e.ivanovich@nchmen.government.bg)

Keywords: global burden, diseases, occupational diseases
Target group: decision-makers, planners and managers, occupational health staff in Departments of Health, Departments of Labour, and Trade Unions

The objective of this project is to raise awareness among decision-makers in Departments of Health, Departments of Labour, Trade Unions of the necessity of strengthening of Occupational health policy at all levels and investing in preventive measures and improving the working conditions. The aim is to find gaps in information and existing knowledge, to develop further the methodology and improve the data collection so that it will better meet the information requirements for preventive actions. The methodology has been adopted. The guidelines will be piloted by 2005.

Morbidity profile of occupational diseases in Colombia, Chile and Argentina
Julietta Rodríguez Guzmán, FISO, Colombia (jrodriguezg@fiso-web.org)

The objective is to participate in the preparation of a guideline for calculating the burden of occupational disease at the national level. Pilot test the WHO global burden guidelines in Colombia, Chile and Argentina. Funds are being searched. The scheduled completion date is December 2003.

Pilot to evaluate the burden of occupational disease in selected enterprises
Nguyen Ngoc Nga, National Institute of Occupational and Environmental Health, WHO Collaborating Center on Occupational Health, Vietnam (n.n.nga@fpt.vn)
The objective of this project is to put the guideline of WHO'STC into practice to build the capacity for an occupational health network in Vietnam through a pilot research on the burden of occupational diseases; and to raise awareness among employers, managers, policy-makers, MOH, MOLISA of the existing risks for workers, the magnitude of the problem and necessity of preventive measures. Fund has been secured by WHO.

Assessing the burden of diseases and injuries and economic losses due to occupational factors in Vietnam

Nguyen Thi Hong Tu, Ministry of Health, Viet Nam (hongtu@netnam.vn)

Keywords: burden of disease, injury, economic loss, occupational disease

Target group: decision-makers at Ministries, academic institutions, medical university, trade union, employers’ organization, and employees’ organization

The purpose is to develop simple analysis and calculation models of burden of diseases and injuries and economic losses due to occupational factors that can be used in workplaces.

The project is in place and funds have been secured by WHO, Vietnam Government.

Global burden of disease, Design and Chilean profile

Marisol Concha, Asociación Chilena de Seguridad (ACHS), Chile (gsamcb@gw.achs.cl)

Funds will be provided by the host country. The scheduled completion date is December 2003.

Piloting the guideline

Jorma Rantanen (jorma.rantanen@occuphealth.fi) and Kirsti Tuominen (Kirsti.Tuominen@ttl.fi), Finnish Institute of Occupational Health, Finland

Funding is in place.

Piloting the guideline

Takesumi Yoshimura, University of Occupational and Environmental Health, Kitakyushu, Japan (yoshitk@med.uoeh-u.ac.jp)

Funding is needed.

For cross references see also:

TF14 : Cost Effectiveness of Silicosis Prevention Initiatives
TF15 : Morbidity profile of occupational diseases in Colombia, Chile and Argentina
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<table>
<thead>
<tr>
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<th>Name</th>
<th>Contact Person</th>
<th>Address</th>
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Introduction

1. The Sixth Meeting of the Network of the WHO Collaborating Centres in Occupational Health was held on 21–22 February 2003 in Iguassu Falls, Brazil, as originally agreed in the Fifth Meeting, held in Chiang Mai, Thailand, in November 2001. The ninety-three participants in the meeting included representatives from forty-five Collaborating Centres, ILO, ILOI, IOHA, IEA, WHO headquarters and the WHO regional offices of PAHO, SEARO, WPRO, and AFRO. This was the first time the Network Meeting was arranged to immediately precede the World Congress of the International Commission on Occupational Health. Most Network Meeting participants also attended the ICOH Congress and the members expressed enthusiasm about this type of arrangement.

Professor Marco Maroni, Chairman of the Planning Committee of the Network of the Collaborating Centres, opened the meeting and wished all the participants warmly welcome. He reminded the Meeting of the Network’s previous phases of development, starting from a small meeting in 1992, and further increasing the number of Collaborating Centres during the years, so that the number now is more than 60.

He also introduced Dr. John Howard, Director of the US National Institute for Occupational Safety and Health (NIOSH), who will take over the Network Chair for the next three-year period. Dr. Marilyn Fingerhut, who very successfully coordinated the Network activities in the WHO Headquarters in Geneva in 2001–2002, will continue as the Network Coordinator while working at NIOSH in Washington.

Dr. Jacobo Finkelman, PAHO/WHO, mentioned in his welcome address that since the last Network Meeting in Thailand, we have seen a lot of development in our field; measures have been taken that have made our workplaces safer. All this has been partly based on various alliances, networks, and the involvement of all those in the work who can bring about changes at the workplaces. We still face several major challenges, however, such as occupational health and safety problems in the informal sector, especially as the informal sector is expanding. The majority of the occupational diseases diagnosed are in the informal sector, and they are, unfortunately, beyond the reach of occupational health and safety services. Also, the unemployment of young people is a problem in many countries. The life expectancy, for example, is one of the concepts that reveals the inequalities in health in various regions.

Dr. Sonia Maria Jose Bombardi of Fundacentro, Brazil, wished all participants warmly welcome on behalf of the host country. She also stressed that collaboration is valuable for all countries and Collaborating Centres. She hoped that all the participants would have some time to enjoy the nature in Iguassu Falls.

Professor Bengt Knave, President of ICOH, stressed in his welcoming address the importance of having the WHO Collaborating Centre Meeting in conjunction with the ICOH2003 Congress, as the collaboration between the two organizations has been fruitful. The WHO provides a forum for the national institutions in the field of occupational health and safety, and ICOH complements the picture by bringing together individual occupational health and safety experts. At the same time, he also wished all participants to ICOH2003 Congress, starting right after the WHO Meeting.

Dr. Maged Younes, WHO/HQ, presented the welcome address of the WHO. He also pointed out how important the role of the Network of Collaborating Centres in Occupational Health has been from the very beginning of its establishment in 1990. He emphasized the critical role of the Collaborating Centres for the Occupational Health Programme of the WHO. The occupational health network has been taken as an example in the WHO also for other topics. He continued by pointing out the crucial role of Dr. Marilyn Fingerhut in revitalizing the occupational health programme within the WHO programmes. The Occupational Health Network also provides a good basis for working together with the ILO, which is a necessary prerequisite for conducting successful occupational health and safety programmes worldwide. He welcomed the new members to the Collaborating Centres Network. ICOH was also thanked for all its support in carrying out the activities. Professor Jorma Rantanen was referred to as the defender of the priority position of occupational health on the agenda of the WHO. Dr. Younes gave deserved merit to the staff of the WHO Occupational Health Office. Last but not least, he thanked all the Collaborating Centres for the work they are doing for the benefit of the health of the workers throughout the world.

2. The Chairs of the Meeting as well as of the Task Forces were appointed as noted on the Agenda. The Task Forces were asked to appoint Task Force Rapporteurs who were requested to give a 5-minute report in the Concluding Session. Ms. Suvi Lehtinen, Finland, was elected Rapporteur of the whole meeting. The Agenda of the Meeting is attached as Annex 1, and the List of Participants as Annex 2.

Overview of WHO, ILO, and NGO Programmes

3. Dr. Marilyn Fingerhut, NIOSH, briefly described the structure of the two-day meeting. She also presented the Compendium that compiles all the on-going projects among the Collaborating Centres, agreed upon in Chiang Mai,
Dr. Fingerhut encouraged the partnerships in carrying out the activities to meet the challenges posed by the Global Strategy on Occupational Health for All. There are now 60 fully designated Collaborating Centres, and 13 are in the process of being designated. It was also reported that we now have three Collaborating Centres in Africa, which was proposed in the previous Network Meeting.

New websites have been created, such as www.who.int/oeh, www.sheafrica.info, and http://osha.eu.int. There are new GOHNET issues, one on maritime health and one on stress. New training programmes have been prepared on CD-ROM, Hazard Prevention and Control in the Work Environment: Airborne Dusts course was prepared in collaboration between the Swedish National Institute for Working Life, the Finnish Institute of Occupational Health, and the University of Cape Town. Its feasibility will be tested in practice in Johannesburg and Cape Town, South Africa in March 2003. The WHO Introduction to Occupational Health Training Programme, developed by the University of Illinois, has been piloted in Turkey, South Africa and Ukraine. A demonstration training session and the final draft CD-ROMs are available for all Collaborating Centres.

In summary, about 85% of the Collaborating Centres are participating in one or more projects to implement the Global Strategy on Occupational Health for All.

Several new publications have come out. The first publication in the Protecting Workers’ Health Series was Pesticides. Three new publications have now been added: Work Organisation and Stress, Understanding and Performing Economic Assessments at the Company Level, and Psychological Harassment in the Workplace. A booklet on Musculoskeletal Disorders is in press, and the book on Basic Occupational Health will be printed before the end of 2003.

Marilyn Fingerhut introduced the four areas of joint efforts of the WHO and the ILO. The WHO/ILO Joint Effort on OSH in Africa was described in detail. Additional information is available at www.sheafrica.info. The African Network now has more than 100 institutions or experts as partners in the Network. The collaboration with e.g., Child Labour, Prevention of Silicosis, Training, and Internet Task Forces needs to be ensured, as these topics overlap with each other. The Joint Effort in Africa has been successfully collaborating with the Fogarty Foundation grant programme. The International Occupational Hygiene Association, IOHA, and the training programmes in occupational hygiene in Africa have been working together, so that each of the 13 African students in occupational hygiene now have a mentor for their long-distance learning.

The prevention of Silicosis Programme is proceeding well and there will be many presentations describing the country situations in the ICOH2003 Congress.

The Global Burden of Disease initiative has been successful: the October 2002 WHO World Health Report includes several work-related occupational risk factors on the global burden of disease. The figures should be used to describe the global and national situation of the burden of disease, and also to target preventive measures in each country.

Dr. Fingerhut also described several other activities that had been carried out during the past two-year period.

4. **Dr. Jukka Takala**, ILO, reported on the programmes of the International Labour Office (ILO) for the development of occupational safety and health worldwide. He reported that it has been estimated that there are 2 million fatalities every year, the number of occupational accidents occurring every year is some 270 million, and the estimated number of occupational diseases is about 160 million. Both the global context and the national issues have an influence on the occupational health and safety situation in the countries. More than 50% of all workers are working in agriculture, and more than 70% work in the informal sector. This is a big challenge for the occupational safety and health experts.

The ILO objectives in general aim at decent and safe work. The ILO Global SafeWork Programme consists of four major objectives: protecting workers in hazardous occupations, extending protection to the informal sector, promoting the workers’ health, and showing that protection pays. Dr. Takala reported on labour standards. They form an important basis for the occupational safety and health work in the countries, but the development of the inspection systems is also important. Knowledge management, networking, technical cooperation and inter-agency collaboration were also mentioned as crucial elements in the development of working conditions and occupational safety and health.

Most of the ratifications of conventions are made in Europe, Africa comes second, while Asia lags behind. The responsibility of the governments lies in making policies, of employers in ensuring safe and healthy working conditions, and of workers in co-operation when health and safety are being improved at the workplace.

Dr. Takala mentioned that 37 Codes of Practice have been produced, and the countries report that they are being used effectively. He also reported on knowledge management, which is an important issue for any country. In order to ensure the user-friendliness and effectiveness of various information materials, the national languages need to be used in addition to English. He reported that gradually all the ILO materials will be available through the Internet. More CIS Centres have been proposed, as well as more translation of materials into several languages. He also mentioned the collaboration between WHO, ILO, and UNEP in producing international chemical safety cards that have already been translated into 20 languages. These products are practical tools in the prevention of occupational exposure.

The ILO Programmes form the global framework, but the practical work is being done at the national level in national programmes. Therefore, this is seen as an important emphasis in the ILO Programmes. The governments need to do their own share in ensuring the workers’ health and safety.
5. **Professor Bengt Knave**, International Commission on Occupational Health, ICOH, discussed in his presentation the core of the ICOH activities which are carried out within the work of the 35 Scientific Committees working actively on various topics of occupational health and safety. More than 1800 participants are expected to attend the ICOH2003. Professor Knave also referred to the next Congress to be held in 2006 in Milan. It will be the 100-year anniversary of ICOH. There are three bids for organizing the Congress in 2009 (Fukuoka, Seoul, Cape Town) and Mexico has already made a bid for 2012. Many collaborative efforts are underway. IOHA and ICOH are preparing a joint declaration on occupational hygiene, WWCS and ICOH are working together on computer issues and information dissemination. ICOH is also looking for new members. The Board of ICOH has set several task forces to work on specific topics. Fees and the official working language of ICOH are on the agenda of the Board. Professor Knave concluded by stating that ICOH is ready and willing to support the other International Organizations in their work.

6. **Dr. David Zalk**, International Commission on Occupational Health, IOHA, described the activities of the IOHA. There are 23 countries represented in the membership of IOHA. He also reported on the collaboration with WHO, especially in the Task Forces of the WHO Collaborating Centres’ Network, in the PACE Programme, in the African Initiative, and in the Silicosis Prevention Programme, just to mention a few. The IOHA has contributed to many of the Task Forces in various forms, including training of occupational safety and health personnel. He also mentioned that the next IOHA Scientific Conference will be held in 2005 in South Africa. Dr. Zalk described several ongoing projects, such as Southern African MPH Training Programme, China University opportunity, IOHA Certification Committee, Occupational health and safety management standard implementation, work with international bodies, and work with the European Commission. He also told about a “Tool kit” developed by IOHA for ILO. The toolkit allows enterprise managers and workers to identify easily the control technology needed for the chemical process in the enterprise tool kits. The toolkit is now being tested in practice.

7. **Dr. Kazutaka Kogi**, International Ergonomics Association, IEA, described the activities of the IEA. He welcomed the collaboration between IEA and the WHO with its Network. IEA is an association of 38 federate associations worldwide. He referred to the World Health Report which showed ergonomics to be a cause of work-related morbidity and mortality. Training for ergonomics professionals is under development. Research, education and training are carried out within IEA both in industrialized and developing countries. The next IEA Congress will be held in Seoul, Korea in August 2003. Two ways of collaboration with the WHO Collaborating Centres were recognized. One is the development of training and the other consists of various projects to support the WHO Task Forces. Dr. Kogi also expressed his gratitude for being able to attend this Meeting, and looked forward to contributing also to other forthcoming meetings of the Network.

### Activities of the WHO Regions related to the Global Strategy and the 2002–2005 Global Work Plan

8. **Dr. Maritza Tennassee, AMRO/PAHO**, presented the activities in the Region of the Americas. Labour inequalities exist in many areas of the Region. The Regional Workers’ Health Plan is being implemented in the countries of the Region as agreed upon at the highest political level. A new work culture, personal and collective development, public participation, improvement of working conditions are the new initiatives for future work. Dr. Tennassee mentioned that the transfer of technology and industrialization are still the source of major problems in many Central and Southern American countries. The problems related to the transfer of technology concern more than 250,000 workers in five Central American countries. Risk profiles are being produced on biological, ergonomic, physical and psychological factors. A participatory process was adopted in the decision-making concerning the practical projects, encouraging the countries to commit themselves to carrying out the initiatives. The occupational health standards are implemented at several levels: regional and sub-regional, national, local, and workplace levels. The collaboration is focused on research, training, and dissemination of information. Dr. Tennassee also mentioned the use of the healthy workplace toolkit, which aims at providing easy-to-use approaches to workplaces. She reported on the successful implementation of the toolkit in the Dominican Republic and Guatemala. The III Summit of the Americas integrated occupational health into the document, as agreed.

9. **Dr. Harry Caussy**, WHO/SEARO, reported on the activities of the South-East Asia Region. There are two Collaborating Centres in the Region, one in Thailand and the other in India. Although only 10 countries are included in the Region, a quarter of the world’s population live there. The prevalence of occupational diseases is high. There is a need to strengthen the infrastructure in these countries. Dr. Caussy continued by introducing the questionnaire methodology that has been used to describe the status of occupational health in the Region. Policy, infrastructure and capacity building were surveyed in the Region in order to target future measures more effectively. Physical exposure was found to be the most prevalent. Legislation and inspection mechanisms need to be developed. Strengthening of the infrastructures will be enhanced by creating more centres of excellence that work for the development of occupational health and safety in the countries. Surveillance guidelines are also sorely needed. The formulation of national and regional plans of action is a high priority. Furthermore, developing a uniform teaching module will be a priority in the near future.

10. **Mr. Thebe Pule**, WHO/AFRO, reported on the perspectives of the African Region in the field of occupational health and safety. He stressed the need for more capacity in occupational health and safety in the Region; this is the number one priority. In the Regional Office, occupational health is placed under healthy environments. Evidence-based policy guidance, adequate methodology for prevention, and support for building capacity to implement national health and environment action plans are the goals of the investments in manpower development in the Region. The two sectors, health and labour, should be encouraged to collaborate. In the years 2004–2005, 39 countries chose ‘protection of the human environment’ as an area of interest. Raising of awareness, developing policy and legislation (creating a positive
11. Dr. Hisashi Ogawa, WHO/WPRO, described the activities of the Western Pacific Region. The Region covers 37 countries and areas, including small Pacific Islands. In the WPRO Region, several activities related to the WHO Collaborating Centres’ Work Plan 2002–2005 have been going on. Task Force 6: Health promotion activity was implemented by Vietnam, Mongolia, Malaysia, Singapore, Vietnam and the Philippines. A regional workshop was organized in October 2002 in Kuala Lumpur. Also, contributions to Task Force 4 have been made by China and Japan, to TF 8 by Vietnam, to TF 11 by China and Vietnam, and to TF 12, as the Healthy Workplace Initiatives data base is being established.

12. Professor Marco Maroni presented the report of the EURO Region on behalf of Dr. Bertolini. He reported that the Third Meeting of the Network of the European Collaborating Centres in Occupational Health was organized in Nancy on 30 September–1 October 2002. The Meeting recognized the priority position of occupational health on the agenda of the European Regional Office. Therefore, occupational health will be added again specifically to the agenda from 2004 on. In the Network Meeting, four core elements for the European Occupational Health Programme were agreed upon. It was agreed that the leading institution for the Basic Occupational Health objective is the Finnish Institute of Occupational Health, Agriculture and Rural Health will be developed under the leadership of the ICPS, Milan. The third core element is Health, environment and safety management at the workplace under the leadership of the Nofer Institute of Occupational Medicine, Lodz, Poland, and the fourth core element Changing world of work under the leadership of the ISPESL, Italy. Each core element will be developed in more detail, so that as many Collaborating Centres as possible can contribute to the implementation of the programme elements.

13. Professor Jorma Rantanen, Finnish Institute of Occupational Health, presented the proposal for the WHA Resolution on Occupational Health. It had already been discussed in the Network Meeting in Chiang Mai, and a draft Resolution had been prepared during the Meeting. It was decided that the WHO/Headquarters will proceed with the initiative. Professor Rantanen introduced the revised draft Resolution, in which also the action plan, decisions and recommendations of the Johannesburg Summit have been taken into account. In addition, the Millennium Summit Declaration and Mr. Kofi Annan’s statement concerning the priority value of occupational health, both on the national and international agenda, have been taken into consideration. Professor Rantanen continued by explaining why occupational health should be given a high priority. A large number of occupational accidents and diseases occur every year, there are vulnerable groups in the working population, and there are underserved groups of workers who deserve more attention. High-risk sectors, such as mining, construction, and agriculture also need more attention, and new epidemics call for immediate action. At the same time, only 10–15% of workers have access to occupational health services. There is a growing body of evidence from industrialized countries showing a positive correlation between health and safety at work and productivity and socio-economic development. If provided for underserved workers, basic occupational health services are likely to contribute positively to the elimination of poverty.

After the Chiang Mai Meeting, it was agreed that the proposal should be an initiative of the Collaborating Centres. Therefore, it was suggested that, following discussion and reconfirmation at this Network meeting, the Occupational Health Resolution be finalized by the Collaborating Centres. It was proposed to be taken up on the agenda of the Executive Board in November 2003 and in the World Health Assembly in May 2004.

14. The new website proposal of the Network was introduced by Dr. P.K. Abeytunga, Canadian Centre on Occupational Health and Safety, Canada. He described the plan on the portal for the WHO Collaborating Centres. The aim is to get all the materials as easily accessible as possible. News and events, legislation, training, etc., were some of the headings under which the information will be compiled. There is also a possibility for each country to create its own pages. These pages will be maintained by the countries themselves. In some of the countries, there are several Collaborating Centres and they all can be listed and described on the pages. The portal is being created in three languages, English, French, and Spanish. The providers of information in the Network portal have been selected so that reliability has been ensured. The portal includes also a powerful search service. The system, when ready, allows people to search according to categories, countries, and so on.

15. Dr. Daniel Hryhorczuk, Director, Great Lakes Center for Occupational and Environmental Safety and Health, USA, described the survey and collection of training manuals that had been carried out within the framework of Task Force 11. The continuum of e-learning includes e-mail correspondence, web-based portals, literature searches, training materials on the web, web-based short courses, just to mention a few. There are web-based forums in many countries to facilitate information search and the learning process. International portals can be found (CCOHs, Bilbao, ILO, NIOSH, FIOH, etc.). A lot of materials are available also from academic portals, as well as from professional society portals. In addition, there are several commercial portals. Literature searches can be done from large databases, such as Medline and Toxnet. OSHA silicosis training is a good example of a good government source. ATSDR and EPA Pesticides provide information on chemicals. Electronic libraries, e.g. on specific topics such as construction safety and health, can be utilized. Webcasts are a combination of slide presentations with audio and video. Case studies are available on the web and can be found e.g. at ATSDR. The US National Library of Medicine provides short courses on the web. Academic short courses are provided e.g. by the University of Illinois School of Public Health. There are also several online
Dr. Kari Kurppa, Finnish Institute of Occupational Health, Finland, gave a presentation on country and local profiles and indicators in work and health. This method has been introduced as a tool to encourage countries to collect relevant information on the use of the workplace as a setting for the protection and promotion of the health of employees. Employers and their families are also included. The method can be used as a source of information for workplace health policy making, and to demonstrate the workplace health impact on public health. The survey carried out in the European Region showed that the comparability of the indicators between the countries is poor, e.g. in occupational diseases, coverage of occupational health services, and competence criteria of occupational health personnel. There are only a very few indicators that are directly comparable between the countries. Dr. Kurppa also mentioned provincial profiles that have been made in Thailand, Vietnam, Nepal, Sri Lanka, Tanzania, and the Philippines. Subject-oriented profiles will target the information to a specific topic in a specific country. These profiles will provide a good basis for others to learn and develop their own local systems. He also mentioned, as an example, the Sri Choom Village profile from northern Thailand. It provides village memory and an overview, puts the issues into the local context, uses qualitative indicators, recognizes the needs and resources at the local level, provides a summary of the occupational health and safety issues, and is available at the village health post.

In the discussion, the question of the priority position of occupational health was taken up. The central role of the working population in the development of the whole society was emphasized, and it therefore deserves more attention. Concerning the comparability of indicators between countries, it was stressed that it is also important to know the differences between the countries. The need for short training modules on specific topics was recognized. It was also recognized that the meeting of the Network participants should be given more time, because discussion is vital, and reflecting upon the ideas and experiences is a cornerstone in the development of activities in each country.

Dr. Marilyn Fingerhut described the work of the Task Force Working Sessions. The Task Forces look for commitment of the Collaborating Centres to implement the action plan assignments by 2005. This is the time to make an interim review about the goals and achievements of the Task Force. One hour has been assigned to each Task Force. The work can be continued, if needed, in another hall.

Task Force Working Sessions

In the Fifth Network Meeting, held in Chiang Mai, Thailand, a work plan for the years 2002–2005, comprising 15 Task Forces (TF), was agreed upon. It was then agreed that the mid-term review of the tasks be undertaken in Iguassu Falls in February 2003. The final deadline for the tasks is the end of 2005. Simultaneously, the Network of the European Collaborating Centres in Occupational Health agreed in its Meeting, held in Nancy, France, on 30 September –1 October 2002, that four specific programme elements be developed for the European Region. These were expected to be in line and provide support for the implementation of the Global Work Plan 2002–2005.

TF 1. Guidelines

Chairs: Ms Evelyn Kortum-Margot and Dr Gerry Eijkemans  Rapporteur: Dr. Andrew Curran

The progress of the projects in the Network Work Plan was reviewed. It was pleasing to note that excellent progress was being made in the majority of the projects, with opportunities for additional collaboration being offered in two cases.

The Task Force reviewed the status of proposed outputs from the projects listed. It was agreed that it is important to understand the difference in status between ‘Guidelines’, ‘Guidance’, ‘Recommendations’ and ‘Legislation’. It was also recognized that the translation of documents may inadvertently lead to a change in status, depending on the context in which it is read. It is clear, however, that the final form of any output should be driven by the needs of its intended audience. As outputs will be badged with the WHO logo, it will be important to ensure that a rigorous quality review procedure is in place and a global perspective taken. This should include a review of the evidence base (cf. publication peer review process), alignment with WHO policy, intent and language, and the inclusion of a standard introduction to explain the standing of the document. The Task Force agreed that once established, this process should be subject to review to ensure its fit for the purpose.

The Task Force members were pleased that the ‘bottom-up’ approach, whereby the impetus for guidance documents came from an offer by a Collaborating Centre, is producing excellent results. In the future, the growth of the Collaborating Centre Network may enable ‘top-down’ activity to be considered also, i.e. the Collaborating Centres involved in this process and WHO should identify some topic areas that are high priorities and suitable for this process. The Task Force is also seeking a Chair from a Collaborating Centre to move these issues forward.

In summary,

- Good progress is being made with the activities in the Work Plan
- A change in name should be considered, as ‘Guidelines’ is an unsuitable term
• The peer review process should be standardized
• All guidance should have a strong evidence base
• Consider options for a more strategic approach through 'guidance needs analysis'.

21. **TF 2: Intensive Partnership in Africa**

Chair: Dr David Rees, Co-chair: Dr Gerry Eijkemans Rapporteur: Dr Mohamed Jeebhay

Progress has been made in most of the activities.

The activities under this Task Force can be divided into 4 themes:

- Training and professional development (most projects concentrated here)
- Information and communication
- Programme development
- Occupational health and safety profiles.

Since this Task Force was created in close coordination with the African Joint Effort, and the function of the African Joint Effort (AJE) is defined as an "alliance" on occupational health in Africa, all projects and activities in this Task Force contribute to the success of the AJE. The AJE has been moving on steadily. Over 100 partners have joined; Different activities in the 4 areas of the AJE have been carried out, such as training, research, information dissemination, etc. (For further information on the AJE, please consult www.sheafrica.info)

Some of the highlights of this Task Force were:

**Training:**

- ISPESL training is developing a Northern African Francophone Network on training and research, together with the IRST of France and the Instituto Nacional de Trabajo of Spain; support in available on request. (Iavicoli)
- University of Michigan/Fogarty programme to support research and training in occupational and environmental health in Southern Africa; Strong, ongoing programme that has expanded from South Africa to SADC (Jeebhay, Robins).
- FORST: ongoing, training programme in French-speaking Africa (Fayomi). This project is receiving support from collaborators in France, Switzerland and Canada.
- MPH Diploma in Public Health in Occupational Hygiene, South Africa: ongoing (Zalk, Rees)
- Modules and training on basic OHS in Tunisia. Modules exist and training courses are organized on a yearly basis (Rachida).
- Training course on pesticide management (Liesivuori). The course has been organized.
- Training of occupational health and safety experts in Africa. Ongoing project (Jeebhay).

**Information:**

- AJE Newsletter and website (www.sheafrica.info) is up and running well (Eijkemans).
- Clearing house (NCOH) is under construction. Many documents have been collected already (Rees).
- e-journal in French: ongoing (Mokrane).
- The African Newsletter on Occupational Health and Safety is well established and published as three regular issues annually. The Newsletter is also available through Internet at: http://www.occuphealth.fi/e/info/anl (Lehtinen).

**Programme development:**

- bi-regional programme Sweden-Africa. The programme is aiming at building centres of excellence. It is an important project in terms of resources, and will start in 2003. (Rees, Jeebhay)

**OHS Profiles**

- Community profiles, starting, with Kari Kurppa and David Rees. Many possibilities foreseen for this component in the AJE, in various countries (Rees).

**New projects:**

- The Hazardous Child Labour Network, Africa component. This has been started by IPEC, and is aiming at creating synergy with the AJE (Susan Gunn)
- HSE Laboratory collaboration in occupational allergy with NCOH and University of CapeTown (Curran, Jeebhay, Rees).

22. **TF 3: Child Labour and Adolescent Workers**

Chairs: Dr Susan Gunn, Dr Gerry Eijkemans Rapporteur: Dr Stavroula Leka

No particular problems were identified with the TF projects. However, the Chairs have asked the Collaborating Centre members to e-mail them and update them on their progress.
The main goal of the TF until 2005 is raising awareness on child labour and adolescent workers. The goal will be met through a number of actions:

- **Sharing information**
  TF members will share information among themselves and with other TFs on available guidelines and intervention tools via their regional/national websites.

- **Increasing awareness**
  The TF will be committed to increasing public awareness on OSH for young workers (including families and community leaders), policy makers, and practitioners and trainers in related fields. TF CCs will exchange experiences and share 'success stories' that can be used to achieve this goal.

- **Estimating the magnitude of the problem**
  Each Collaborating Centre will share existing national data on the problem, such as statistics on fatalities, accidents and selected diseases of young workers. Additionally, the ILO and the WHO will work towards improving global statistics on fatalities, injuries and diseases due to starting to work at an early age.

- **Occupational hazards list**
  A list of occupational hazards for young people will be prepared and distributed among Collaborating Centres for review and identification of gaps. Special emphasis will be given to psychosocial issues as well as ergonomic risks. The control banding approach will be explored, weighing hazards according to age categories (e.g. under 15, 15–18). The TF will remain committed to stressing the importance of psychological and social factors affecting the health of young workers and encouraging research in this field.

- **Peer review**
  NIOSH and Canada have agreed to act as peer reviewers of studies and tools on hazardous child labour in selected sectors.

- **Collaboration among CCs**
  IOHA, IEA and ILO will collaborate on reviewing agricultural checklists to identify all hazards, to classify them by ‘action phrases’ (e.g. no tolerance, limited exposure, protected, supervised) and to phrase them in an understandable and user-friendly manner (e.g. red, yellow, green).

23. **TF 4: Elimination of Silicosis**

Chair: Dr Igor Fedotov, ILO, Dr Greg Goldstein, WHO
Rapporteur: Dr Greg Goldstein, WHO

Participants: Rees, Sayed, Kisting, Jeebhay, Takala, Levenstein, Juengprasert, Howard, Rest, Ogawa, Malmberg, Burton, Urban, Basanets

Dr. Fedotov introduced the elements of the ILO/WHO International Programme on the Global Elimination of Silicosis. The immediate objective is to develop national action programmes, and to mobilize technical assistance for them. Details of this programme are contained in a paper to be presented in the ICOH2003.

There was discussion of a web-based tool to support national action plans. What should be the focus? There is already a wealth of tools and practical advice on primary prevention on the web, and one suggestion was that the tool should focus on policy development and the provision of successful national programmes. An important example might be "sandblasting without silica" which is a current priority for primary prevention in many countries.

The Task Force wanted more emphasis on primary prevention. Steps in this direction include the development of a training module and other practical tools. IOHA is making an important contribution in the area of primary prevention. The recent publication of the European Agency on recognition schemes for companies undertaking primary prevention may have some application to the issue of silicosis.

There was considerable discussion on the ILO standard set of diagnostic X-rays, including the present efforts underway to digitize X-rays. Further work is needed on improving training in reading X-rays, and the availability of improved diagnostic facilities in many countries. The demands for training are increasing and should be addressed for occupational physicians, radiologists and pulmonologists in developing countries, to increase the capacity of control efforts. These professionals can contribute to initiatives for the early detection of silicosis, using the ILO classification of radiographs of pneumoconiosis, and the surveillance of workers at risk.

Another issue was the use of CT in diagnostics; this is an area of increasing interest in several countries.

_Research on the cost-effectiveness of interventions can make an important contribution to reducing the barriers to the wider introduction of primary prevention._

The relation between silicosis and TB is increasingly recognized, and better links between national TB initiatives and silicosis control programmes should be promoted. Such a linkage may help to position silicosis as a priority health issue.

Participants in the group generally reaffirmed their commitments in the global work plan, and several will send updates or corrections for inclusion in the compendium.
24. **TF 5: Health Care Workers**

Chair: Dr George Delclos, Dr Gerry Eijkemans  
Rapporteur: Dr Sarah Felknor

The Task Force was chaired by George Delclos. The purpose of this meeting was to review the goals and progress to date, and make any necessary mid-course corrections in the 2001–2005 time period. It was agreed that George Delclos would continue as Chair of Task Force 5 and Sarah Felknor would serve as Rapporteur for this session.

The first agenda item was the review of the status of the previously defined tasks. All tasks reported on were either completed or in progress, and there was no report available for three projects. A new project was added to the task list under the direction of Margaret Quinn at the University of Massachusetts at Lowell: Sustainable Hospitals. There was great interest in this demonstration project that identifies alternative substances for hospital use to reduce occupational and environmental exposures generated by hospitals.

The second agenda item was to review and confirm the goals of the Task Force. It was agreed that the overall goal is to provide assistance to WHO. Task support from the committee falls into three general areas under the protection of health care workers:

- Training
- Materials compilation and guidelines
- Workplace assessment and evaluation.

The final agenda item was discussion of a request from WHO to help develop guidelines for protecting health care workers (HCW). After much discussion on the role of WHO guidelines and the intended target groups of such a document, it was agreed that the following steps would be taken in 2003–2004, and that the University of Texas would coordinate these activities in collaboration with PAHO:

- Develop an inventory and compile existing guidance documents globally. This will include a survey of WHO Collaborating Centres and is expected to be completed by the end of 2003.
- White papers will be solicited and scientific referees will be identified to help organize the documents by topic, audience and intended use. This activity will be conducted in late 2003 and early 2004.
- A subgroup of Task Force 5 will reconvene to review the materials and make recommendations to further develop the documents. It is expected that this meeting will take place in early 2004.
- WHO will commission the final guidance documents based on the input and materials from Task Force 5.

The meeting was adjourned after discussion of this item.

25. **TF 6: Health Promotion at Work**

Chair: Dr Alberto Zucconi  
Rapporteur: Dr Stavroula Leka

Five new centres have joined the TF. Most projects are progressing well and will meet their targets by 2005. Progress on some tasks has not been reported, but all TF Collaborating Centres were asked to update the progress to the TF Chair through email.

The main goal of the TF until 2005 is the production of an inventory of resources, good practices and the development of toolkits for healthy workplaces and the provision of educational and training materials. The TF has also set the goal of interlinking with other TFs that are compatible with TF6 objectives. The goals of the TF will be met in the following ways:

- **Completion of projects**
  The projects will be completed by 2005.

- **Toolbox for Health Promotion and Electronic Bulletin Board**
  These have already been developed but their usage will be further advanced.

- **Interlink with other TFs**
  The TF Chair will contact Chairs of TFs 7, 11, 12, 14 and 15.

- **Promotion of health promotion**
  A need to brainstorm on how to promote health promotion was identified. TF members will address this need through online brainstorming on the electronic bulletin board. The Chair will e-mail all Collaborating Centres to encourage them to participate in the bulletin board discussion.

- **Future needs**
  A need to explore the cost-effectiveness of Health Promotion was identified. This may lead to the development of appropriate tools and will be one of the future goals of the TF.

26. **TF 7: Psychosocial Factors at Work**

Chairs: Dr Stavroula Leka, Ms Evelyn Kortum-Margot  
Rapporteur: Prof. Frank Pot
Name of the task force

The name of the TF has been changed from 'Mental health and stress at work' into 'Psychosocial factors at work', to include, among other things, issues like psychological harassment.

State-of-the-art (see Compendium February 2003)

As some projects were not represented, only part of the projects could be discussed.

- "Raising awareness of psychological harassment at work" has been published by WHO as No. 4 in the series Protecting Workers’ Health.
- "Work organisation and stress" (lead organization University Nottingham) is in print for the series Protecting Workers’ Health.
- "Raising awareness on stress at work through a brochure". There was some misunderstanding about this project that was agreed on in Chiang Mai to be a candidate for the series Protecting Workers’ Health. The lead organization is not the University of Nottingham, but TNO Work and Employment (Mrs. Irene Houtman). The target groups as formulated are correct. However, it should be added that the brochure is meant for developing countries. A draft outline for the brochure is ready. The Collaborating Centres from developing countries will be asked to comment on a draft brochure.
- There are 2 projects on "guidelines for management" (University of Nottingham, Ministry of Health, Colombia). If both have ambitions for a global brochure, coordination by the Chair is necessary.
- The projects of the Nofer Institute, Poland, "Protection of policemen against effects of occupational stress" and "Protection of workers’ health against psychosocial factors" are progressing well.

General conclusions

It should be clarified whether the projects aim at local, regional or global deliverables. For global deliverables, coordination is necessary and WHO has to decide in consultation with the Chair which products are candidates for publication by WHO. The lead organizations of these products should comment on each others' drafts.

As it can be expected that WHO publishes several brochures on psychological factors, in particular on psychological stress at work, a common framework of definitions and approaches (individuals, organizations, systems approach) would be useful. Stavroula Leka offered to provide WHO and the lead organizations with such a framework.

The content of the brochures should not only focus on ‘raising awareness’ but also on prevention, intervention and training.

27. TF 8: Promotion of Occupational Health and Safety in Small Enterprises and the Informal Sector

Chairs: Prof. Fengsheng He, Dr Greg Goldstein Rapporteur: Dr Julietta Rodríguez Guzmán

List of participants: Gerry Eijkemans, Benjamin Fayomi, Igor Fedotov, Jacobo Finkelman, John Howard, Emilia Ivanovich, Taiyi Jin, Kazutaka Kogi, Suvi Lehtinen, Stavroula Leka, Leslie Nickels, Shengli Niu, Alessandra Pera, Thebe A. Pule, Kathleen Rest, Habibullah Saiyed, Maureen Shaw, Jukka Takala, Alberto Zucconi

Review of advances in actual projects

<table>
<thead>
<tr>
<th>Projects discussed in the order of the Compendium/Information available</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand: Division of OH and Disease Control, Ministry of Health Thailand: Completed. Published in Thai, available for translation into other languages.</td>
<td>Completed</td>
</tr>
<tr>
<td>Application of preventive technologies: Completed, Available for translation into other languages.</td>
<td>Completed</td>
</tr>
<tr>
<td>Italy: Not started, but being negotiated and advancing under the arrangements of an agreement between Italy and Brazil. China would like to collaborate.</td>
<td>To be started</td>
</tr>
<tr>
<td>In process, covering Indonesia, South Africa, Japan, Thailand, Brazil.</td>
<td>On-going</td>
</tr>
<tr>
<td>NIOSH, USA: under development, to be completed in 9 months.</td>
<td>On-going</td>
</tr>
<tr>
<td>The Netherlands ergonomic society: Funding not needed, in progress, so that guidelines will be aimed at occupational health practitioners.</td>
<td>On-going</td>
</tr>
<tr>
<td>Africa. Going on, jointly with ILO.</td>
<td>On-going</td>
</tr>
<tr>
<td>Australia: No information available at the meeting.</td>
<td>To be contacted</td>
</tr>
<tr>
<td>CINBIOSE: Funding in place, Starting under CINBIOSE, in cooperation with PAHO, IRET, IADB, including Nicaragua, Honduras, Guatemala and El Salvador.</td>
<td>On-going</td>
</tr>
<tr>
<td>China: Not properly categorized to be included in this task force.</td>
<td>To be taken to another Task Force</td>
</tr>
<tr>
<td>Country</td>
<td>Status</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>China</td>
<td>On-going</td>
</tr>
<tr>
<td>Japan</td>
<td>Funded. Just started with check-sheets and case studies.</td>
</tr>
<tr>
<td>Kiev</td>
<td>No information available at the meeting.</td>
</tr>
<tr>
<td>UK</td>
<td>On-going, looking for partners to extend the project</td>
</tr>
<tr>
<td>UK</td>
<td>On-going</td>
</tr>
<tr>
<td>FISO</td>
<td>Funding in place. On-going project for micro and small-scale enterprises in a combined model for OHS strategy implementation and management for worker’s compensation administrators of Colombia, Chile and Argentina.</td>
</tr>
<tr>
<td>UK</td>
<td>Completed, documents available in the net.</td>
</tr>
<tr>
<td>FIOH</td>
<td>Completed, available in Finnish, to be translated into general descriptions upon request.</td>
</tr>
<tr>
<td>FIOH</td>
<td>Analysis being completed</td>
</tr>
<tr>
<td>Colombia</td>
<td>Looking for funds.</td>
</tr>
<tr>
<td>Thailand</td>
<td>No information available at the meeting</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>No information available at the meeting</td>
</tr>
<tr>
<td>Brazil</td>
<td>Pilot study about the Brazilian informal sector, particularly working with vehicles pulled by draft animals, in several municipalities.</td>
</tr>
</tbody>
</table>

Discussion

Review of definition of goals for the Task Force

- Must be looked for so that all efforts are taken in the same direction to support the development of OSH in medium-sized and small enterprises. The objective should be the promotion of OSH in medium-sized and small enterprises and the informal sector, as well as the design and development of models to meet such promotion.
- Also to define priority topics, such as enhancement of policy and regulations, so that the models can be implemented; and to include the gender approach, considering that the informal sector is dominated by female workers.
- Includes the differentiation between the informal sector and medium-sized and small enterprises, so that the efforts and projects are well understood.

Strategies

- Once the common goals are separated for the issues mentioned, and the common goals are defined, they must correspond to the projects that are being carried out.
- All those Collaborating Centres that have not given information should be contacted before being excluded from the list.

Other recommendations

- Each project should have a title that would reflect its content and indicate the country of origin.
- The WHO document on the informal sector that has recently been completed, should be circulated to all members of the Task Force.
- The PAHO’s informal sector definition should be considered, as it was broadly discussed, and assumes exclusion from social protection as prior criteria; initiative should be taken to promote healthy work in the informal sector.

28. TF 9: Prevention of Musculoskeletal Disorders

Chairs: Prof. Barbara Griefahn, Ms Evelyn Kortum-Margot  Rapporteur: Dr Joan Burton

In Chiang Mai, it was hoped that funding could be obtained for various projects, but this was not accomplished. The work done to date has been carried out by organizations and institutions using their regular resources, in addition to their regular work.
A comprehensive guideline has been developed: *Preventing Musculoskeletal Disorders in the Workplace*, which will be printed soon. It is hoped that once this WHO document comes out, it will support efforts to obtain funding from various sources.

In Chiang Mai, the Task Force decided to develop an inventory of computer-based programmes on preventing MSDs. This was attempted, but the results indicated that while there are many such programmes in existence, very few of them have been validated. The Institute for Occupational Physiology at the Dortmund University has a complex computer programme which is being currently validated (with the Federal Institute of Occupational Health, Germany); it is based on a multicentre study of orthopaedic patients and the effect of dynamic work.

Participants in the meeting made various offers of assistance:

- Dr. Lilia Zvyagina, Institute of Maritime Medicine, Ukraine, has a programme she will send to the co-chair
- Dr. Laura Punnett, University of Massachusetts, will send updated information to the co-chair
- Professor Nikolai Izmerov, RAMS Institute of Occupational Health, Russian Federation, is working with the University of Illinois at Chicago to put on a course in Moscow beginning 12 March 2003 on MSDs in various industries. This will be added to the Compendium.
- Dr. Per Malmberg, National Institute for Working Life, Sweden, is developing a consensus document for MSDs in the upper extremities, "rules of thumb" – he will provide information to the chair.
- Dr. Pavel Urban from the Czech Republic has a National Registry of Occupational Diseases, of which 50% are MSDs, mostly cases of carpal tunnel syndrome. He will provide the data to the co-chair.

**Recommendation**

Dr. Malmberg suggested that since it is not practical to compile a list of computer programmes alone (due to lack of validation) the inventory should be expanded to include the many printed documents that are being developed, and include an assessment of the various publications in terms of quality.

The group discussed the complexity of this issue, the fact that MSDs are many diseases, not just one, and that preventive activities must be specific to the various industries and tasks. The question of who is responsible for implementing prevention and transferring the knowledge to workers was discussed, and it was agreed that governments and employers all have responsibility.

**Decisions**

- No formal decision could be made to alter the goal of the Task Force due to the lack of attendance by participating members. Only two people present at this meeting were at the meeting in Chiang Mai (Per Malmberg and Barbara Griefahn).
- It was not regarded as practical to develop an inventory of computer-based ergonomic programmes due to the general lack of validation.
- The key issue to be discussed now is Knowledge Transfer, i.e. to get the research information and knowledge to the workers in an understandable and practical form.

**29. TF 10: Preventive Technology**

Chair: Dr Marilyn Fingerhut, Dr David Zalk  
Rapporteur: Dr Kathleen Rest

**Existing projects**

- Many projects are continuing, e.g. translation and diffusion of ILO Toolkit in many countries
- An objective for existing efforts is to further disseminate the NIWL/FIOH/South African Dust Control course for widespread use, including conducting the course in China
- Others, need to be checked

**New initiatives**

- There is lots of enthusiasm for focusing efforts on the control banding approach
- Seen as an important and promising preventive tool both for developing countries, where the initial focus could be on large enterprises, and industrialized countries, where the focus could be on small and medium-sized enterprises.

**Concrete action steps**

- Several Collaborating Centres will work together to develop a proposal for EC funding in response to an offer that focuses on small and medium-sized enterprises. This is an opportunity for funding for control banding.
- The Collaborating Centres will encourage university faculties to get their hygiene students involved in control banding. Training opportunities for the faculties and/or students may be available. This training will be beneficial for students in their future work, but also may get them involved in research needed to demonstrate and validate the control banding approach in workplaces.
- The IOHA and IEA will work together to develop the application of the control banding approach to ergonomics.
- There is interest in linking OSH management systems and control banding systems. The ILO and WHO will pursue this line of action.
30. TF 11: Training Programmes and Modules
Chair: Dr Daniel Hryhorczuk Rapporteur: Ms Sarah Felknor

Participating Collaborating Centres (34 at the Task Force meeting)
University of Illinois at Chicago; IACP; ISST; National Institute of Occupational Health and Poison Control Chinese Centre for Disease Control and Prevention; NIOSH; University of Massachusetts Lowell; University of Texas; Institute for Occupational Health, Ukraine; Institute of Maritime Medicine, Ukraine; National University Singapore; URETE/LUSTE; Occupational and Environmental Health Unit, University of Cape Town; Health and Safety Lab UK; Institute of Occupational Health Birmingham; Institute AMC Amsterdam; ILDO; Industrial Accident Prevention Association; CCOHS; Institute of Maritime and Tropical Medicine, Poland; Department of Occupational Health Fudan University China; ILO; Institute of Work, Health and Organizations UK; IOHA; Institute of Public Health Chile; International Centre for Pesticides and Health Risk Prevention; Occupational Health Department Public Health Institute Chile; WHO/AFRO; WHO; PAHO; IEs.

Progress report
Work (projects) of the Training Task Force falls into the following general themes:

- Provision of graduate and post-graduate training
- Development and implementation of short courses and training materials
- Distance learning
- New training partnerships
- Dissemination and sharing of training materials. Progress has been reported on most of the individual projects.

Two examples of progress on specific projects were reported to the Task Force:

- CCOHS: A system for sharing and dissemination of training materials.
  - Webpage with standard forms (under control of authorized user)
  - Immediate entry of data
  - Searchable: training topics, organizations, type of training
- Singapore-Vietnam partnership on 3-day course for physicians on asbestos.

Changes to work plan
Developing a system for gathering and sharing training programmes (University of Illinois) will be subsumed under the work of Task Force 12: Internet resources and networks.

The training-related tasks from Task Force 12 will be moved to Task Force 11. These include an Inventory of available training materials on the web (University of Illinois) and Contributing to the inventory of training materials (NIOSH); these two projects will likely be combined into a single collaborative project. There were no deletions.

Additions to work plan

Dissemination
- Goal: Task Force 11 will coordinate the parameters for training materials input into the CCOH web portal being developed by Task Force 12. A sub-committee of Task Force 11 was created for this purpose. One of the tasks of this sub-committee will be to discuss issues related to intellectual property and copyright as they relate to WHO. ILO provided helpful guidance on this issue. This will include discussion of criteria for inclusion as an approved user, user feedback, and evaluation. June 2003/Subcommittee members
- Goal: Interface with other task forces that have training components.
- Goal: Include all Centres participating in Task Force 11 in email list. March 2003/UIC

Graduate Level Training (classroom and distance)
- Goal: programmes to continue work and add to CCOHS web page. On-going 2003–2005/ All Approved Centres

Course Syllabi (including short courses, lecture or other materials)
- Goal: programmes to continue work and add to database of existing non-Internet-based training materials (similar to distance training database) 2003–2005/ All Approved Centres
- Goal: A second sub-committee was created to develop a template for curricular information for trainers, including the target groups, objectives, methodology, materials. March 2003/ The Netherlands, Ukraine, Texas, UIC, Lowell, IACP, Italy

Distance Learning
- Goal: Adapt web courses to CDROM format. On-going/ CCOHS, all training Centres that are sharing materials

Partnerships
31. **TF 12: Internet Resources and Networks**

Chair: Dr P.K. Abeytunga, Co-chair: Dr Greg Goldstein  
Rapporteur: Dr David Rees

- In the first part of the meeting the objectives of this Task Force were discussed. After some debate there was consensus that the Global Collaborating Centre portal, to be developed by the Canadian Centre for Occupational Health and Safety, is the major purpose of the Task Force. The reasons are that this is a very large project that will support all of the Task Forces, and that all Collaborating Centres will need to concentrate on this project. Only a couple of other projects will be retained in this Task Force (these are directly related to website development and do not have a natural home in another Task Force). One to be retained is the project 'Website for the Cooperation Italy-Brazil in Occupational Health and Industrial Hygiene'. This means that most projects in this Task Force need to be elaborated to other Task Forces, and it was decided that the responsible persons for the project should suggest a new Task Force, but that all training-related projects should be in Task Force 11.

- There was some discussion about the structure and capabilities of the portal and the organization of information from the various Collaborating Centres. See www.whoocchealthccs.org. All are asked to comment on the prototype within 3 months.

- A few specific questions came up:

  - There will be a disclaimer, e.g. 'Information is from respective sources and not necessarily endorsed by WHO.' The portal should include the Network Plan and Projects.

  - Data security and confidentiality will be attended to where appropriate.

  - Content management will be made convenient (to facilitate input from the Collaborating Centres).

- The progress made in the individual projects was not reviewed.

32. **TF 13. National and local profiles and indicators**

Co-chairs: Dr Kari Kurppa, FIOH, Dr Greg Goldstein, WHO, Dr Jukka Takala, ILO  
Chair: Dr Kari Kurppa  
Rapporteur: Dr Greg Goldstein

- The Collaborating Centre Task Force 13 (TF13) has two main goals:
  - development and distribution of tools that facilitate the preparation of OH&S profiles for different purposes, and
  - encouraging the building of profiles that allow quick understanding of the OH&S situation to international, national and local decision makers and actors.

- The harmonization of national profiles and the standardization of indicators was discussed. Legislative, administrative, cultural and other differences between countries pose problems for inter-country comparability of the indicators. The Chair briefed the Session about a trial to compile national OH&S profiles in 22 European countries. The results indicated that few indicators permit direct comparison between countries. Concern was expressed about these difficulties. It was nevertheless felt that national profiles, despite their inaccuracies and comparability problems, increase the transparency and visibility of occupational health and safety and provide valuable insight into the state of occupational health and safety affairs, priorities, and needs of the countries.

- It was noted that the circumstances differ greatly from one country to another. Hence there is no one model for a national profile that could be recommended to all. A rational strategy at this stage is to make existing profiles available to others. The results of the approach that has been piloted by WHO/EURO will be made widely available. Details about the structures and contents of the profiles can be discussed in forthcoming meetings when more experience has been gathered from different regions.

- The Session noted that writing a comprehensive national profile might be difficult in many countries. In these cases a stepwise strategy could be employed by first writing a 'mini-profile' using information that is readily at hand, and gradually expanding the factual content when more information is available.

- The Session agreed that more attention needs to be paid to subnational level (province, county, district, community) and sectoral profiles. Such instruments address local occupational health and safety conditions, direct attention to local development needs, empower local authorities and actors, and can be compared with other similar entities within a country. Thailand, Vietnam, Estonia and Finland are already involved in developing subnational profiles. Singapore and Finland are starting to profile specific sectors of their economic activity.
TF13 work is carried out in the participating countries with national focal points being responsible for the quality and up-to-dateness of the information. The Session agreed that TF13 is a collaborative effort of autonomous Collaborating Centres that form the core of the undertaking. However, some countries do not have WHO Collaborating Centres. It was noted that there is no reason why such countries could not contribute to the work as well. All countries will be encouraged to participate.

The implementation strategy of TF13 is primarily based on the use of Internet as a media that summarizes the ongoing work and keeps the Collaborating Centres up to date with new developments. The Chair informed the Session that FIOH will establish a TF13 Website to that effect. The Web-pages organize profiles and indicators developed by the Collaborating Centres so that they will be available to all. Web-pages will also provide access to contact information, background documents, and to useful sources on indicators and profiles in general. A Web site links profile developers around the world to a decentralized task-oriented network in which the information flow is mainly horizontal.

It was proposed that an Internet-based profiling instrument be provided by TF13 in order to expedite the development of occupational health and safety profiles. The tool would be a structured information collection form that facilitates the gathering of facts. The form could be downloaded or filled in at TF13 Website. The Session discussed technical issues that need to be considered when developing such Internet tools. Dr Takala agreed to develop a draft for this tool and a strategy for its implementation in consultation with Dr Abeytunga and Dr Clevenstine.

Based on discussions in the Session, the TF13 co-chairs will draft a policy statement of the goals, objectives, architecture, and operational principles for the development of indicators and profiles. The draft will be sent for comments to the committed Collaborating Centres.

TF 14: Cost-Effectiveness of Interventions

Chair: Dr Marilyn Fingerhut and Prof. Frank Pot  Rapporteur: Prof. Frank Pot

Participants

Those who were already members of the TF: Frank van Dijk (representing Monique Frings-Dresen), The Netherlands, Frank Pot, The Netherlands, Marilyn Fingerhut, Marisol Concha, Chile

Those who wish to become members of the TF: Alberto Zucconi, Italy, Jukka Takala, ILO, Habibullah Saiyed, India, Emilia Ivanovich, Bulgaria

Those who only want to be informed: Hideki Igisu, Japan, Magdalene Chan, Singapore, Shengli Niu, ILO, John Howard, USA, Linda Forst, USA, Tom Soranan, UK, Olav Jensen, Denmark, Sarah Felknor, USA, Mohammed Ben Laiba, Tunisia, Maged Younes, WHO

Name of the Task Force

Considering the different meanings of various concepts such as ‘cost-benefits’ and ‘cost-effectiveness’ it was decided to change the name of the task force from “cost effectiveness of interventions” to the more general name of “economic evaluation of interventions”.

State of the art (see Compendium February 2003)

- “Evaluation of the cost-effectiveness of interventions to reduce occupational back pain”. The study as mentioned in the Compendium has been completed. Possible extension with Wintertür donation via WHO.
- “Evaluation of the cost-effectiveness of interventions to reduce occupational exposure to silica”. The study as mentioned in the Compendium has been completed. Possible extension with Wintertür donation via WHO.
- The possibility has been discussed to combine both extensions in the field of road construction in India with cooperation from an Indian association of engineers and in collaboration with the Collaborating Centre of India.
- “Understanding and performing economic assessment at the company level” has been published by WHO in the series Protection of Workers’ Health. How this brochure is presented to the potential readers and how it is distributed was not clear. WHO was asked to develop a policy on this. The brochure can be downloaded from the WHO website. Alberto Zucconi offered to translate the brochure into Italian, and Emilia Ivanovich offered to translate the brochure into Bulgarian. Marisol Concha offered to translate the brochure into Spanish, but a Spanish translation already exists. According to Evelyn Kortum-Margot, also a French translation already exists. WHO will send the electronic version to Zucconi, Ivanovich and Concha for translation, and to Jukka Takala (ILO) who wants to compare the recommendations with those of ILO. The translations should be sent to WHO (Evelyn Kortum-Margot, kortummargote@who.int) for revision and publication.
- “Cost-effectiveness of treatment and guidance of work-related diseases and of chronic diseases interfering with work demands” is slightly delayed.
- The project “Role of primary care physicians and nurses in addressing occupational health issues” is progressing well.
- “Selection of interventions, study design, application”. Part ‘injuries’ will be completed in 2004, and part ‘noise’ in 2005.
- Chile and Singapore have started cost-benefit projects in small enterprises.

General conclusions

- How can we better share experiences on cost-benefits, cost-effectiveness, etc.?
- One possibility is to place instruments, good practices and approaches in the Tool-Box of ILO via Jukka Takala (takala@ilo.org).
• Another possibility is to collect research results, instruments, good practices and approaches on the WHO Collaborating Centre website that is being constructed by the Canadian Collaborating Centre (Task Force 12) www.whoocchealthccs.org via P.K. Abeytunga (abey@ccohs.ca). Abeytunga will be asked to provide this opportunity, either by adding to the list of categories the category ‘economic evaluation’ or by proposing how this issue could be part of one or more of the categories ‘topics’ and/or ‘good practices’ and/or ‘research’. This should be done in close collaboration with ILO.

• To start with, information available from the Collaborating Centres could be collected.

33. **TF 15: Global Burden of Disease**

Chair: Professor Jorma Rantanen, Dr Marilyn Fingerhut   Rapporteur: Dr Laura Punnett

The compendium lists 14 projects, of which 6 have produced or will produce Guaranteed Results. Of the remaining 8, 2 have been cancelled, 3 are still looking for funds and will be listed as proposals for the next period, and there is no information on 3. WHO staff will attempt to follow up directly with investigators.

A major part of the activity of this Task Force has involved the work on the WHO GBD document now in press. In addition to the document itself, the methodology is being applied now in several individual countries. In his introduction, Professor Rantanen presented estimates on the occupational burden of disease and work life expectancies in Finland.

The TF members discussed potential new activities that could follow on this effort. The following discrete but inter-related tasks were agreed upon. In particular, there will likely be overlap between 1 and 3. Each activity will be coordinated by the *-indicated TF members.

• Evaluate the GBD methodology and generate recommendations for future use, with or without modifications. In this activity we would seek input from colleagues in the ICOH Epidemiology Committee – K Kurppa and L Punnett are members – as well as from the ILO and the International Epidemiology Association.
  - J Rantanen, with collaboration from M Fingerhut, J Rodriguez G, L Punnett, M Concha

• Development of methods for estimating work life expectancy
  - FIOH/J Rantanen and M Nurminen

• Describe and promote other, new methods to fill in gaps in existing information, such as national statistics on work-related morbidity and mortality, but not limited to these. Such methods range from more exposure-driven quantitative analyses, such as the ones being utilized now by FIOH researchers; adding appropriate questions to national surveys carried out under the auspices of various ministries, including questions on social status or education as well as health; and qualitative evaluations of occupational hazards, such as Rapid Assessment or RAPS, to be presented by K Kurppa at the ICOH Congress on 26 February 2003.
  - M Tenassee, M Concha, J Rodriguez G, J Takala, O Solar, K Kurppa

• Explore reasons for discrepancies between WHO GBD calculations and other estimates of work-related disease, such as those of ILO. Possible reasons include both sources of error in each methodology and differing case definitions for target conditions in the various countries. We will begin by compiling the case definitions for each country; other activities will proceed later.
  - M Concha to seek funding.


34. **EURO Working Group on Basic Occupational Health**

Chair: Professor Jorma Rantanen   Rapporteur: Dr Brigitte Froneberg

**Introduction**

The Task Force was introduced by Professor Jorma Rantanen of FIOH on the basis of discussions and outcomes of the Meeting of WHO/EURO Collaborating Centres in Occupational Health, which was held in Nancy, France, on 30 September–1 October 2002. He emphasized the importance of a well-established infrastructure for occupational health services (OHS) as a key element in transferring research knowledge to practice and in adapting such practices to the local conditions and needs. The necessary infrastructures should include legislation, a competent authority responsible for the enforcement, a national programme for the development of OHS, and service infrastructures with optimal service provision models. It is also crucial to start from basic OHS, human resources, information systems, support and advisory services, training of OHS experts, employers and employees, and tripartite collaboration. The provision of basic OHS should be an initial action and it should be further developed stepwise towards comprehensive OHS.

The core content of Basic OHS was listed as surveillance of working conditions, risk assessment, surveillance of workers' health, provision of information on health and safety to workers and the management, advice on actions for preventive and control measures, and maintenance and training of first-aid readiness.

**Discussion**
Numerous obstacles were recognized in the implementation of the basic OHS, such as lack of awareness of and knowledge on the needs and benefits related to OHS, fear of increased costs to the companies, shortage of trained human resources, an insufficient infrastructure, fragmentation and incontinuity of the work life, and separation of the health and labour sectors. The increasing trend for outsourcing OHS even in the larger enterprises leads to decoupling of the OHS and company activities.

The discussion supported the presented Basic OHS concept and the core content and proposed remedies against fragmentation and shortage of resources. The remedies were, e.g. self-empowerment strategies for enterprises with the help of workplace health promotion and better access to information and knowledge management, as well as closer collaboration between OHS and public health services (PHS).

Stepwise actions were proposed for the implementation of OHS in line with national circumstances and priorities. Other recommended actions were: expansion of the coverage of OHS, customer-tailored guidelines, branch-oriented OHS, strategies for service provision for the informal sector, adaptation of training of professionals according to national needs, collaboration of OHS and PHS, and the development of self-empowerment strategies for workers and the management.

Proposed tasks

The Group identified the following tasks that could be assigned to special Network Members, and the outputs to be produced by the next Collaborating Centres' Network Meeting in Milan in 2006. The International Conference on Occupational Health Services, scheduled for January 2005 in Helsinki, will discuss the themes listed below and check the progress of the assignments.

<table>
<thead>
<tr>
<th>Action</th>
<th>Output</th>
<th>Assignment/OBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Production of country profiles according to models of FIOH and ILO</td>
<td>Country profile document</td>
<td>Several countries have already drawn up a profile. The rest are invited to do so.</td>
</tr>
<tr>
<td>2. Definition of country priorities by using country indicators</td>
<td>List of national priorities for actions. Report in Milan 2006</td>
<td>Each Collaborating Centre will provide a national list and send it to the coordinator.</td>
</tr>
<tr>
<td>3. Model for a National Programme on BOHS</td>
<td>Model programme outline and model cases</td>
<td>The pilot countries assigned in March/April 2003.</td>
</tr>
<tr>
<td>4. Model content for basic OHS</td>
<td>Description of the model content as a guideline for good basic occupational health practice. Document available in Milan 2006</td>
<td>FIOH and Lausanne</td>
</tr>
<tr>
<td>5. Model options for service provision and particularly the options for SSEs, micro-enterprises and the self-employed</td>
<td>Analysis and description of various OHS provision options and their feasibility. Guidelines for organization of BOHS infrastructures</td>
<td>To be assigned.</td>
</tr>
</tbody>
</table>

35. EU Working Group. Rural Health and Health in Agriculture

Chair: Professor Marco Maroni  
Rapporteur: Dr Claudio Colosio

Participants: Teresa Mammone, Manuela Tiramani, International Centre for Pesticides and Health Risk Prevention

CC/OMS involved at present: International Centre for Pesticides and Health Risk Prevention (ICPS), Milan, Italy (Coordinator), National Institute for Occupational Safety and Prevention (ISPESL), Italy.

Most of the human population of the world (about 70%) live and work in rural areas, and face a widening gap in life quality as a whole, compared to urban populations. In rural areas income is lower, living conditions are poorer, and welfare benefits are usually very poorly provided or are totally lacking. Also sanitary facilities in rural areas are fewer than in urban areas, and the possibility of access to public health services of the rural population is significantly lower than in urban areas. As a consequence, the health status of the rural population, compared to urban dwellers, is poor.

The most significant feature is that the workplace and living place of rural workers very often coincide: agricultural workers usually work close to their home or directly at home, and bring home their working tools, including in some
The programme for the promotion of occupational health among agricultural workers should be carried out step by step.

To attain the above objectives, three main actions are necessary:

- **Accidents.** Since the rate of accidents and fatalities in agricultural work is very high all over the world, actions aimed at accident prevention in this sector are needed in all rural areas.
- **Provision of occupational health services and health surveillance to workers.** Even in countries where occupational health services cover over 90% of the workers, the occupational health services of agricultural workers are deficient. Particular attention should therefore be paid to small farms and small enterprises.
- **Building sound national and local systems for data collection** is a priority mainly in developing countries and countries in transition. However, also industrialized countries have relevant weaknesses, for example, in the collection of data on occupational diseases and cases of occupational pesticide poisoning.
- **Enforcing legislation** is an urgent objective in developing countries and countries in transition.
- **Safe use, storage and disposal of pesticides.** This objective is aimed at workers, the environment, and the quality and safety of food.
- **Child labour** is a typical problem of developing countries, but may be present also in the industrialized world, particularly in family-based enterprises.
- **Immigration.** This is a major problem in industrialized countries, where immigrants are employed (often illegally) in agriculture, and have to do the dirtiest and most dangerous jobs.
- **Aging of the workforce.** This is a typical problem of the industrialized world, where retired people are often employed in agriculture.
- **Training of local rural health experts.** Training and education is a fundamental activity to be carried out in each of the priority areas, as local rural health experts are scarce. A key problem here is the dependency of less developed countries on industrialized ones. Therefore, the best way to support these countries is to establish training and education programmes for local technical personnel, dealing with the main environmental and health problems in their own region.

To attain the above objectives, three main actions are necessary:

- Assisting rural communities to identify their needs and priorities through the definition of country/area Rural Health Profiles
- Developing national programmes of surveillance, research and education
- Investigating the health impact of agricultural practices on farmers, their families and other rural residents.

The programme for the promotion of occupational health among agricultural workers should be carried out step by step.

- The first action to be realized in the future is the promotion/creation of a global/local network in Rural Health, starting from the existing experiences and the NGOs already active in the field, such as IAAMRH, EURIPA, and WONCA. In some countries or areas there are already some programmes on occupational rural health, mainly in Asia but also in Europe. The recent International Conference on Rural Health in the Mediterranean and Balkan Countries, held in Bari, Italy, in November 2002, is a significant example of activity aimed at building a rural health network.
- A second step will be the preparation and publication of specific recommendations targeted at different geographical areas.
- To meet the need for updated recommendations on Health Surveillance on Agriculture and Pesticide Workers, the manual “Health Surveillance of Pesticide Workers”, published in 1994 by WHO, ICPS and ICOH, will be revised and updated. The Scientific Committee on Pesticides of the International Commission on Occupational Health has again offered support for this activity.
- The manual, the recommendations and the training materials prepared should be made available to a large public. The best way to do this is to publish these materials on the web.

Based on the above considerations, it is evident that the rural health project is an essential part of the WHO Global Programme on Occupational Health and can be linked with other CC/OMS running projects. Therefore, the work within the Rural Health project must be enlarged through the collaboration of many WHO Collaborating Centres located in different parts of the world.

Some events already planned include:

- The International Conference on Rural Health, Ayuttaya, Thailand, July 2003. Dr. Wilawan Juengprasert is one of the organizers of the event.
- The Second International Conference on Rural Health in the Mediterranean and Balkan Countries (Belgrade, Serbia and Montenegro, May 2004). ICPS collaborates in the organization of this Conference.
- The Third International Conference on Rural Health in the Mediterranean and Balkan Countries (2005, Valencia, Spain). ICPS collaborates in the organization of this Conference.

36. **EURO Working Group on Integrated Health, Safety and Environment Management (HESME)**
The Chairman introduced the subject and presented a review of activities that were undertaken last year. HESME is one of the four priorities within the Action Plan of the European Network of WHO Collaborating Centres in Occupational Health, agreed on during the Network meeting in Nancy, France, in 2002. The Nofer Institute of Occupational Medicine was requested, and agreed to undertake the main responsibility for, and coordination of the programme. The programme is based on earlier intergovernmental and WHO consultations which provided policy guidance for the implementation, based on the Ministerial Declaration from the 3rd European Conference on Environment and Health in London, 1999.

The activities implemented during 2002 were of a national and international character, and were undertaken in close cooperation with the WHO Regional Office in Europe. They were focused on disseminating information and involving partners. Advanced discussions were held with social insurance institutions on their role in promoting and supporting HESME. The HESME concept has been integrated within the WHO project Healthy Cities during the conference “Healthy Enterprise in Healthy Cities”, held in Lodz, on 16–17 May 2002.

The HESME at the national level has been actively implemented in Poland and Turkey, where advanced discussions were held with the representatives of employers.

In their discussion, the participants of the working group emphasized the need for systematic approaches to potential partners for promoting and implementing HESME. Guidelines should be prepared and used for specific settings. There is a need to coordinate and integrate the activities of other networks, such as the Health Promotion at Work Network.

The Group reached the following conclusions:

- Further success depends on gaining the support of potential partners: enterprise managers, employers, trade unions, local level politicians, and decision makers, etc.
- The focus should be especially on the promotion and implementation in specific settings, such as industry, transport, trade, etc.
- Strong efforts are needed to promote, at the company level, the integration of health protection and promotion at work, work safety, and the environmental health impact.
- Further development and improvement of guidelines and indicators for HESME are needed.

### 37. EURO Working Group on Changing World of Work

Chair: Dr Maria Grazia Cassitto Rapporteur: Dr Per Malmberg

The Chair of the working group, Sergio Iavicoli was unable to participate in the meeting; Maria Grazia Cassitto was appointed as Chairperson and Per Malmberg served as Rapporteur.

Andrew Curran, Alessandra Pera, Shengli Niu (ILO), Chiara Rengo, Pavel Urban and Evelyn Kortum-Margot (WHO).

**Objective**

The participants of the Meeting agreed that the objective of the working group was to identify and examine problems coherent in the following areas:

- Exposure to health-threatening chemical, physical and psychosocial risk factors is not compatible with sustainable work life. However, the concept of sustainable work life is wider than that of simply avoiding risk factors.
- In the changing world of work, it is increasingly important to continuously develop the workers’ competence for their present and future work tasks, including social skills, and the ability to both cooperate and work independently. At least in Europe, the demographic situation is such that a shortage of labour can be expected in many sectors in the near future. There are therefore increasing demands to develop work organizations to ensure long-term sustainability of the work force, and to adjust workplaces so as to enable the integration of workers who have limitations due to, for example, ageing, language difficulties or diseases. Some examples of key words are: Work ability, Continued learning, Workplace interventions, including workplace adaptation and management standards. Furthermore, the activities outlined above would also provide an environment for improved work performance and efficiency, helping to consider the needs and interests of the client rather than provider with the objective of achieving change through partnership.

Research in these areas is conducted in many universities and in occupational health and safety institutes. The occupational health sector nevertheless has the unique role of being present both in the workplace and in the scientific community. In addition, the occupational health and safety sector has an important mission to transform and implement state-of-the-art knowledge into good working practices. The working group found it a challenging task to contribute to the discussion on the role of the occupational health and safety sector in the wide concept of sustainable work life.
Outcome

The working group agreed that an important outcome of the group's activity could be a position paper following the collection and review of available information. In this position paper, changes in health risk factors due to the changing world of work, as well as the other determinants for sustainable work life will be discussed. The output of, for example, Task Force 7 on psychosocial factors at work will be important, but it was agreed that the main ambition of the position paper should be to describe an abstract "societal" level rather than to develop in detail issues like changes in different health risk factors. Instead, the position paper would refer to other reports in the field, including different WHO task force outputs.

The work group discussed the working methods, and it was suggested that it could be of interest to explore the possibility of merging with the newly formed occupational health and safety institute network in Europe and, more specifically, with the expert group on "emerging issues". This could potentially result in endorsement of the final report by the European OSH institutes.

The work group decided to exchange material using e-mail and to meet again at the European Network Meeting of the WHO Collaborating Centres in Occupational Health, in Stockholm in 2004.

Work Plan of the Collaborating Centres' Network for the years 2003–2005

38. The Work Plan 2003–2005 consists of the decisions and commitments made by the 15 Task Forces and 4 European Working Groups on how to proceed with the implementation of the tasks by the end of 2005, described under items 20–38.

39. Administrative issues

40. Mr. Fernando Vasconcelos, Ministry of Health, Brazil, addressed the Network Meeting. He mentioned that the tasks of the Ministry of Health cover the whole spectrum of health, including occupational health. The collaboration among the various actors in the field of occupational health and safety is important. Occupational health cannot be isolated from the other sectors, it is important for it to be closely integrated with other activities in order to maximize the impact on work life and on society at large.

41. A new Planning Committee was proposed to be composed of the Task Force Chairs, representatives of WHO Regional Offices, ILO representative, and representatives of the NGOs (ICOH, IOHA, IEA). This was accepted by the Meeting. The terms of Reference of the new Planning Committee would be to carry out the Global Work Plan 2003–2005. This was accepted.

Institutes with a long history of sustained major commitments to the WHO Global OCH Programme were proposed to act as an Advisory Committee. These institutes are:

Finland, FIOH; US NIOSH; Sweden, NIWL; Italy, ICPS

The proposal was approved by the Meeting.

42. It was proposed that the Planning Committee, Advisory Committee and the WHO Secretariat would meet in 2005 in Africa. This proposal was approved by the Meeting. The first meeting of the newly elected Planning Committee was organized in Iguassu Falls on Saturday, 22 February 2003.

43. The next full Network Meeting was proposed to be organized in August 2006 in Milan in connection with the ICOH2006 Congress. Between the two meetings, electronic communication will be used in the process to formulate the preliminary draft of the work plan. This was approved by the Meeting. In the Seventh Network Meeting, the achievements and accomplishments of the Work Plan 2003–2005 will be evaluated, taking into consideration the interactivity of the various Task Forces.

44. Dr. Andrew Curran of the HSL, UK, promised to act as the Co-chair for Task Force 1: Guidelines.

45. The draft WHA Resolution was discussed on the basis of the presentation given by Professor Jorma Rantanen. The proposal was open for discussion. It was emphasized that the linkage between a healthy work life and elimination of poverty needs to be taken up in the Resolution. It was noted that the matter was already discussed in Chiang Mai, but it was stated that the Resolution is difficult to get into the WHA. All the Collaborating Centres need to work to support the Resolution at the national levels. The final draft needs to be ready by November 2003 when it goes to the Executive Board. It then reaches the Ministries of Health by December 2003. New approaches are to be taken into consideration in the wording of the Resolution. It was agreed to include Dr. Sekobe's text from the WHA 2002, and to refer to Dr. Marc Danzon's statement on the priority position of occupational health in the European Regional Office. It was also agreed that the list of EB members be distributed to all Collaborating Centres, so that the Centres can support the Resolution in their own countries.

46. The added value of the Network to the Collaborating Centres themselves was discussed. The Network should perhaps concentrate more on a few specific topics rather than try to cover too broad a scope. The participants of the Meeting
felt it important to be a part of a team consisting of experts from various parts of the world who have long experience and good knowledge in occupational health and safety. This allows the members to see the world through the eyes of others. The Network makes it possible to utilize the work that has been done somewhere else.

47. The Meeting participants expressed their heart-felt gratitude and appreciation to ICOH and to the Fundacentro, Brazil, for the co-organization of the Sixth Network Meeting in Iguassu Falls, Brazil.

48. Dr. John Howard presented the closing address. He emphasized the importance of the global portal, as it will increase cohesion among the Collaborating Centres. He thanked all the participants of the Meeting for their active input and constructive contribution at the Meeting.
## Annex 1

<table>
<thead>
<tr>
<th>Day 1: Friday 21 February</th>
<th>Room A - Plenary</th>
<th>Day 2: Saturday 22 February</th>
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</thead>
<tbody>
<tr>
<td><strong>8:00-8:30 COFFEE</strong></td>
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<tr>
<td>Session 1: Opening of the Meeting</td>
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<td>Session 6: Parallel Task Force Working Sessions</td>
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<td>Session Chair: Marco Maroni</td>
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<td>8:30-9:30</td>
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<tr>
<td>Network of WHO CCs in Occupational Health: Marco Maroni</td>
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<td>Room A: TF 9: Prevention of Musculoskeletal Disorders, Barbara Griefahn</td>
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<td>Introduction of the new Network Chair and Network Coordinator</td>
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<td>Room B: TF 3: Child Labour and Adolescent Workers, Gerry Eijkemans</td>
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<tr>
<td>Welcome by:</td>
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<td>Room C will be available for informal meetings of Task Force members who are not engaged in Task Forces 9 and 3.</td>
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<tr>
<td>Brazilian Minister</td>
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<td>9:30-10:30</td>
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<td>Jacobo Finkelman, PAHO/WHO Representative</td>
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<td>Room A: TF14: Cost Effectiveness of Interventions, Marilyn Fingerhut</td>
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<td>Official from Fundacentro</td>
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<td>Room B: TF 8: Promotion of OS&amp;H in Small Enterprises and the Informal Sector, Greg Goldstein</td>
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<td>Bengt Knave, ICOH</td>
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<td>Room C: EURO Working Group: Changing World of Work, Maria Grazia Cassitto</td>
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<td>Maged Younes, WHO/HQ</td>
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<td>9:40-10:10</td>
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<td>10:30-11:00 COFFEE BREAK</td>
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<tr>
<td>The WHO Occupational Health Programme: Marilyn Fingerhut</td>
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<td>Session 7: Parallel Task Force Working Sessions</td>
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<td>10:10-10:20</td>
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<td>Room A: TF12: Internet resources and Networks, P.K. Abeytunga</td>
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<td>ILO: Jukka Takala</td>
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<td>Room B: TF15: Global Burden of Disease, Jorma Rantanen</td>
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<td>10:20-10:30</td>
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<td>Room C will be available for informal meetings of Task Force members who are not engaged in Task Forces 12 and 15.</td>
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<td>ICOH: Bengt Knave</td>
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<td>IOHA: David Zalk</td>
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<td><strong>10:40-11:10 COFFEE BREAK</strong></td>
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<td>Session 3: NGO and WHO Regional Programmes in relation to the 2002-2005 Global Work Plan - Session Chair: Per Malmberg</td>
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<td>IEA: Kazu Kogi</td>
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<td>PAHO: Maritza Tenasseee</td>
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<td>SEARO: Harry Caussy</td>
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<td>AFRO: Thebe Pule</td>
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<td>Discussion</td>
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<td>12:00 - 1:00 LUNCH Bourbon Hotel</td>
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<tr>
<td><strong>Day 1 : Friday 21 February</strong></td>
<td><strong>Room A - Plenary</strong></td>
<td><strong>Day 2 : Saturday 22 February</strong></td>
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| 1:00-3:00                      | Session 4 : WHO and CC Programmes in relation to the 2002-2005 Global Work Plan (cont'd)  
Session Chair: Wilawan Jungprasert | 1:00-3:00  
Session 8 : Parallel Task Force Working Sessions |
| 1:00-1:10                      | WPRO, Hisashi Ogawa  
1:10-1:20 CC WHA Resolution, Jorma Rantanen  
1:20-1:40 Presentation on Website Proposal, P.K. Abeytunga  
1:40-1:50 Discussion  
1:50-2:10 Presentation on Collection of Training Manuals, Dan Hryhorczuk  
2:10-2:20 Discussion  
2:20-2:40 Presentation of National Profiles and Indicators, Kari Kurppa  
2:40-3:00 Panel Discussion  
2:50-3:00 Practical Orientation on work of Task Force Sessions, Marilyn Fingerhut | 1:00-2:00  
Room B: TF 6: Health Promotion at Work, Alberto Zucconi  
Room C: TF 2: Intensive Partnership in Africa, David Rees |
| 3:00-3:30 COFFEE               |                      | 2:00-3:00  
Room B: TF7: Mental Health and Stress at Work, Stavroula Leka  
Room C: TF10: Preventive Technology, Marilyn Fingerhut |
| 3:30–6:30                      | Session 5 : Parallel Task Force Working Sessions  
Room A: TF 13: National Profiles and Indicators, Kari Kurppa  
Room B: EURO Working Group: Basic Occupational Health, Jorma Rantanen  
Room C: TF 11: Training Programmes and Modules, Daniel Hryhorczuk | 3:30–6:30  
Session 9 : Conclusions of the Meeting  
- Chair: Michel Guillemin  
  - Summary Reports (5 Minutes/Rapporteur) from Task Force meetings, Day 1 and 2  
  - Final Discussion of Progress and Strategies for 2002–2005 Work Plan  
  - Business Meeting for all participants - Chair: Maged Younes  
  - Discussion on Terms of Reference of Network Planning Committee  
  - Location and dates for Seventh Network Meeting  
  - Discussion on WHA Resolution  
  - Added value of Network  
  - Other  
  - Concluding Remarks by Network Chair: John Howard  
  - Adjournment of Network Meeting |
| 3:30–4:30                      | Room A: TF 13: National Profiles and Indicators, Kari Kurppa  
Room B: EURO Working Group: Basic Occupational Health, Jorma Rantanen  
Room C: TF 11: Training Programmes and Modules, Daniel Hryhorczuk | 5:30  
- Discussion on Terms of Reference of Network Planning Committee  
- Location and dates for Seventh Network Meeting  
- Discussion on WHA Resolution  
- Added value of Network  
- Other  
- Concluding Remarks by Network Chair: John Howard  
- Adjournment of Network Meeting |
Room B: TF1: Guidelines, Evelyn Kortum  
Room C: Demonstration course on Training Module, Linda Forst and Leslie Nickels | |
| 5:30–6:30                      | Room A: TF 4: Elimination of Silicosis, Igor Fedotov  
Room B: TF 5: Health Care Workers, George Delclos  
Room C: EURO Working Group: Rural Health Agriculture, Marco Maroni | 6:30  
- Summary Reports (5 Minutes/Rapporteur) from Task Force meetings, Day 1 and 2  
- Final Discussion of Progress and Strategies for 2002–2005 Work Plan  
- Business Meeting for all participants - Chair: Maged Younes  
- Discussion on Terms of Reference of Network Planning Committee  
- Location and dates for Seventh Network Meeting  
- Discussion on WHA Resolution  
- Added value of Network  
- Other  
- Concluding Remarks by Network Chair: John Howard  
- Adjournment of Network Meeting |
| 6:30 Welcome Reception and Dinner at the Bourbon Hotel | | 6:30 Dinner at the Bourbon Hotel |

**Day 3 : Sunday 23 February**

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<tr>
<th><strong>6:30–9:30 Coffee</strong></th>
<th><strong>9:00–9:30 Coffee</strong></th>
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<tbody>
<tr>
<td>Room A: 9:30–11:00-Meeting of Planning Committee - Chair: John Howard</td>
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Sixth Meeting of the Network of the WHO Collaborating Centres for Occupational Health
Iguassu Falls, Brazil, 21-23 February 2003

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Topics discussed

1. Introduction

Dr. John Howard opened the Meeting of the Planning Committee and wished all participants welcome. Dr. Marilyn Fingerhut introduced the issues to be discussed in the present Planning Committee Meeting. These were

- Role and tasks of the Planning Committee
- Role and tasks of the Advisory Committee
- How to proceed with the work of the Task Forces?
- Procedures by the PC Meeting in 2005 and the Network Meeting in 2006.

2. Role and tasks of the Planning Committee

It was stated in the discussion that the WHO Occupational Health Programme has a small office in Geneva. The role of the Office is to coordinate the activities and to keep things running. The role of the Planning Committee (consisting of the Chairs of the Task Forces, representatives of the Regional Offices, representative of the ILO, the Advisory Committee, and the representatives of the Occupational Health Programme in WHO/HQ) is to provide broad support for the implementation of the Network activities.

The Planning Committee guarantees that each Task Force moves on. It is important to organize the information flow between the Task Force Chairs and the officers in Geneva, so that the Occupational Health Programme is always well informed about the advances in the Task Forces. The new portal of the Network will facilitate the dissemination of information in the future.

3. Role and tasks of the Advisory Committee

The Network Meeting appointed four Institutes to advise the WHO/HQ on how to further develop the Network activities. They are: NIOSH, USA; FIOH, Finland; NIWL, Sweden, and ICPS, Italy. During the years, these four Institutes have supported the WHO Occupational Health Programme financially and in kind. It was agreed that the experience gathered during the years should be utilized in the further development of occupational health worldwide.

The meetings of the Advisory Committee can be arranged either in connection with other events organized both in Europe and in the US, or as telephone meetings.

4. How to proceed with the work of the Task Forces?

It turned out in the discussion that many of the Task Forces would need a meeting in between the Network Meetings. This is financially very difficult unless the meetings can be organized in...
connection with other events that the members of the Task Force in question plan to attend in any case.

It was agreed that in principle the Task Forces need to raise their funding themselves. In some exceptional cases, it is possible to apply for some funding from the WHO. The application should be sent simultaneously to Dr. Marilyn Fingerhut and Dr. Gerry Eijkemans. It was also stated that the WHO-funded appropriate country programmes can be utilized in the implementation of the Task Force objectives. In addition, in some cases national aid agencies provide funding for some projects (e.g. Swedish SIDA). These should be used and utilized, whenever possible.

It was mentioned that in some cases there have been problems with some of the Collaborating Centres as they do not reply to the e-mails of the Task Force Chairs. It was agreed that as one of the aims of the work is to share information and stimulate collaboration, the Centres should be kept on the mailing lists even if they do not always react immediately to the mails.

The achievements and accomplishments of the Task Forces will be checked in the Planning Committee Meeting, scheduled for September 2005.

The Task Force has two Chairs, one from the Collaborating Centres and one from WHO/HQ, Geneva. The Chairs are responsible for ensuring that the work proceeds smoothly. It was agreed that each Task Force needs to send its amendments and corrections to the Compendium to Geneva by 30 March 2003.

The question was raised whether a mid-term report be needed; it was concluded that the European Network will hold its next meeting in June 2004 in Sweden. By that time the mid-term reports of the Task Forces should be available. A review of the Task Force activities could be done in connection with the Fourth European Network Meeting. A meeting of the Advisory Committee could also be organized in that connection.

A more definitive set of criteria for including projects in the Work Plan of the Network was requested.

Also, it was asked whether the WHO Occupational Health Programme has a clear procedure for reviewing the publications produced within the Network activities. Dr. Fingerhut informed that there is such a procedure. It was agreed that the procedure will be informed to all Task Forces and Collaborating Centres.

5. Procedures by the PC Meeting in 2005 and the Seventh Network Meeting in 2006

The Network Meeting approved that the next Planning Committee Meeting be organized in connection with the IOHA Congress in 2005. The IOHA Congress dates are 17–18 September 2005, and it will be organized in South Africa. The dates of the Planning Committee will be fixed as soon as possible.

The Network Meeting decided that the Seventh Network Meeting be organized in connection with the ICOH2006 in Milan.

6. Closing of the Meeting

Dr. John Howard thanked all the participants of the meeting for active participation and closed the meeting.