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.

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

George L. Delclos (gdelclos@sph.uth.tmc.edu) and Sarah Felkner, (sfelkner@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.

Project start date: January 2001

Assessment of safety climate in hospitals and among health care workers

Sarah Felkner, 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.

Project start date: January 2001

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 centers 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.

Project start date: January 2001

Project end date: None

Training materials for latex allergies and safe use of chemotherapy agents
Cesary Palczynski (cpalczyn@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.

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
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, 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.

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-economical 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
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.

One 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).

Another 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 Viet Nam. 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 Delcos, MD, MPH and Sarah Felknor, DrPH, University of Texas School of Public Health (GDelcos@sph.uth.tmc.edu) and Maritza Tenassee, M.D., PAHO (tennasm@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.

Project end date: January 2005
Project start date: February 2003

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 № 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.

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**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
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 Díaz 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).

Project start date: January 2000
Project end date: December 2007

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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 e 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 Díaz 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 destinatari: 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 metodi 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 dosimetro termico autocampionatore per spazio di testa e gascromatografia, forniti di rilevatore a ionizzazione di fiamma e a cattura di elettioni)
• 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).

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

Marliza Tenasssee, 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**

Yuxin Zheng, National Institutes in Occupational Health and Poison Control, China (yxzheng@163bj.com)

*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

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**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.

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**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.

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**Preventing Needle Stick Injuries and Occupational Exposure to Bloodborne Pathogens**

Susan Wilburn (wilburn@icn.ch), International Council of Nurses

Gerry Eijkemans (eijkemansg@who.int)

*Keywords:* Needlesticks, sharps injuries, healthcare workers, injection safety, HIV/AIDS

*Target group:* Nurses associations, ministries of health, occupational health professionals

In September 2003, the WHO and International Council of Nurses (ICN) began a pilot project in three countries including South Africa, Tanzania and Vietnam to prevent HIV and hepatitis infection from occupational exposure to bloodborne pathogens. WHO and ICN joined together with the national nurses’ associations, occupational health professionals, and ministries of health in Tanzania, South Africa and Vietnam, and with WHO Collaborating Centres in South Africa and Vietnam. The goal of the project is to reduce needle stick injuries and transmission of hepatitis and HIV to health care workers. Secondary process measures are to increase reporting of needle stick injuries, improve adequate followup of injured workers including post exposure prophylaxis (PEP), and utilize the data regarding exposures for prevention. The WHO Injection Safety Tool Kit assembled by the Safe Injection Global Network (SIGN) (see www.injectionsafety.org) is being utilized for initial assessment and as a programmatic resource. After one year, an evaluation of the pilot project will determine effectiveness of and need for wider dissemination of the tools and strategies.

*Project start date:* September 2003

*Project end date:* September 2005