Dear Reader,

A policy on occupational health and safety was recently launched in Namibia. The Minister of Health, Dr Richard Nchabi Kamwi said that ‘a safe and healthy workplace leads ultimately to a highly productive, effective and efficient work environment and thus a measure of success to the country’s economic growth and stability’. The spark for this action was provided with the WHO Global Plan of Action on Workers’ Health, which was endorsed by the World Health Assembly this year. It states as its first objective “To devise and implement policies on workers’ health’. This issue of GOHNET provides national examples of policies that concern workplace health and safety generally, as well as policies and action plans for defined groups, such as healthcare workers, women and bar workers. Articles discuss national research agendas and priority setting in occupational health, as well as the benefits of linking occupational and public health issues.

Consecutive GOHNET issues will deal with the remaining objectives of the WHO Global Plan of Action on Workers’ Health, which are:

- to protect and promote health at the workplace;
- to improve the performance of and access to occupational health services;
- to provide and communicate evidence for action and practice;
- to incorporate workers’ health into other policies.

The Global Plan of Action can be accessed here: www.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf

We would be pleased to learn about any examples of national policies and/or action plans from your country.

Happy reading!

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At the World Health Assembly, countries committed to work towards full coverage of all workers, including those in the informal economy, small- and medium-sized enterprises, as well as agricultural and migrant workers with essential interventions and basic occupational health services for primary prevention of occupational and work-related diseases and injuries. Particular measures are required to establish and strengthen core institutional capacities and ensure adequate human resources for addressing the specific health needs of the working population. The Health Assembly emphasized the importance of ensuring collaboration between all national health programmes, relevant to workers’ health. These include occupational health, communicable and chronic diseases, health promotion, mental health, environmental health and health systems development. In addition, the Member States were urged to address the health and environmental problems of local communities arising from industrial activities, to incorporate workers’ health into the policies for sustainable development, poverty reduction, employment, trade, environmental protection and education; and to develop strategies to ensure re-integration of sick and injured workers into the mainstream of society.

Why WHO developed a Global Plan of Action on Workers’ Health

Based on consultations with countries and international partners, and on the 2005 Global Survey, WHO concluded that the objectives set in 1996 in the “Global Strategy on Occupational Health for All” remain largely valid.

The Global Plan of Action on Workers’ Health 2008-2017 follows up on the WHO Global Strategy for Occupational Health for All, that was endorsed by the 49th World Health Assembly in 1996. A number of high-level meetings, such as the World Summit on Sustainable Development and regional ministerial conferences on health, labour and the environment, have subsequently called on WHO to further strengthen its action in the area of occupational health.

Accordingly, WHO developed the Global Plan of Action on Workers’ Health to provide a policy framework for concerted action to protect, promote and improve the health of all workers. The plan was developed on the basis of countries’ proposals for action at national and international levels, in close coordination with the six WHO Regional Offices, and in consultation with the International Labour Organization, international organizations of employers and workers and the Global Network of WHO Collaborating Centers for Occupational Health. The Action Plan was reviewed by the WHO Executive Board in January 2007 and finalized and endorsed by the 193 Member States of WHO at the 60th World Health Assembly in May 2007.

Objectives of the Global Plan of Action on Workers’ Health

The Global Plan of Action addresses all aspects of workers’ health, including primary prevention of occupational hazards, protection and promotion of health at work, employment conditions, and improving the response of health systems to workers’ health. In addition to the traditional occupational risk assessment and management in the workplace, which is the key area for action, improving workers’ health requires involvement of other public health disciplines, such as chemical safety, environmental health, disease prevention and control, and health systems, as well as close collaboration with labour and other sectors and organizations of employers and workers. The aim of the Global Plan of Action is to improve the health of all workers.

The specific objectives of the plan are:

1. to devise and implement policy instruments on workers’ health;
2. to protect and promote health at the workplace;
3. to improve the performance of and access to occupational health services;
4. to provide and communicate evidence for action and practice; and
5. to incorporate workers’ health into other policies.

The implementation process

The Plan of Action will be implemented at the country, regional and global levels. WHO (Headquarters, the six Regional offices and the Country offices in 144 Members States) supported by the large Global Network of 65 WHO Collaborating Centres for Occupational Health will work with the Member States to implement the actions. (The progress made will be monitored by 2013 and by 2018). For this purpose WHO will develop a set of national and international indicators of achievement.
The Global Plan of Action calls on all countries to establish and implement a national policy framework for workers’ health. This policy should clarify the roles of different actors and strive to further integrate workers’ health activities with occupational safety activities to avoid duplication or gaps in responsibilities. This policy has to be accompanied by specific legislation on workers’ health that needs to be regularly reviewed and updated to support the implementation of the policy.

To put in practice the policy framework, countries also need to develop, implement and evaluate a national action plan on workers’ health. Collaboration between Ministries of Health and Ministries of Labour is necessary. They should collaborate and provide leadership for the national action plans and involve other relevant governmental agencies and major stakeholders, such as ministries responsible for the environment, economic sectors and trade, employer and worker organizations, professional associations, and social security institutions. In order to make this plan functional, it should contain attainable objectives, targeted action, resources, indicators and a timeframe, and transparent accountability should be assigned.

In order to guarantee proper implementation the establishment of intersectoral coordination mechanisms in the area of workers’ health with participation from the ministries of health and labour or analogous bodies, organizations of workers and employers and other major stakeholders, such as ministries of environment, economy, finance, social security and relevant professional associations, with a clear definition of leadership and responsibilities should be considered.

One of the key factors for proper implementation mechanisms is the creation of effective mechanisms for funding and resource mobilization for protection and promotion of workers’ health, including national insurance schemes for prevention of occupational diseases and accidents, national funds for workers’ health, mutual trust funds, and earmarked state budget allocations.

At policy level measures are required to reduce the gaps between different groups of workers in terms of levels of risk and health status including a special focus on national policies and programmes reducing occupational risks in high-risk sectors such as mining, construction, agriculture and fisheries, and underserved populations such as workers in the informal economy, migrant workers and children.

The role of the public health sector

The public health sector has an important role to play in securing workers’ health. Within the health sector coordination with other relevant public health programmes such as those dealing with environmental health, control of communicable diseases, prevention of chronic diseases and injuries, and promotion of mental health, should be established. Workers’ health policies and action plans should be linked to national strategies on health, labour, economic development, and those of other relevant actors.

Special attention focuses on the prevention of occupational and work-related diseases and conditions, which are of priority according to the national situation. These may include asbestos-related diseases, hepatitis B in healthcare workers, silicosis, occupational cancer, injuries, musculoskeletal disorders, noise-induced hearing loss, and skin diseases, as well as, HIV/AIDS, other major (emerging) infectious diseases, and the adverse health outcomes of work-related stress. Also, specific action is needed for health care workers, including the adaptation of existing laws and regulations on workers’ health to the special nature of healthcare work and of the environment in which it is carried out, the establishment of occupational health services for healthcare workers and the incorporation of workers’ health issues into the planning of human resources for the health sector. WHO will carry out global campaigns for the elimination of asbestos-related diseases and for immunization of all health care workers against Hepatitis B.

Regional frameworks and actions

Regional frameworks are useful for the development of national policies and action plans. Some examples in the WHO regions are:

- The regional plan on workers’ health for the Americas has been adopted by the AMRO governing body, and is in full implementation. It has been selected as one of the operational instruments for occupational health of the Free Trade Agreement of the Americas (FTAA) unification process. From the beginning, full collaboration with ILO has
been sought, and AMRO and the ministers of labour of Central American countries have signed agreements of collaboration. All other regions are in the process of development or implementation of their regional plans;

• The WHO Regional Committee for Africa adopted in 2004 a resolution on occupational safety and health urging Member States to further integrate occupational health and safety into health policies and national health care strategies. A number of actions, such as developing national strategies and action plans, national profiles, and programmes for occupational health of healthcare workers, have been developed in many African countries as follow-up action to this resolution; and

• The next step in the regional initiatives has been the work in Asia. A regional development framework for occupational health in Asia as developed in 2005 (WPRO and SEARO).

National planning processes have been carried out in many countries. The policy frameworks and plans can be comprehensive, such as in the case of Singapore as illustrated in this GOHNET. It can also cover specific sectors as shown in the article on the health sector, or can be specific on one area of development such as research (the case of NORA and the article on priority setting). It can also address specific populations, such as women or child workers.

The establishment of policies and action plans at national level shows a political commitment and provides an excellent base for the implementation of the actions as outlined in the Global plan of action.

The coming GOHNET issues will highlight the different specific objectives of the Global Plan of Action. This issue is devoted to objective 1: to devise and implement policy instruments on workers’ health.

National occupational health programmes for healthcare workers

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The WHO Global Plan of Action on Workers’ Health (see editorial in this issue of GOHNET) which was endorsed by the World Health Assembly in May 2007 recognized the particular responsibility of Ministries of Health for the occupational health of workers in their sector -- the health sector. The Global Plan of Action calls on countries to develop national occupational health programmes for healthcare workers.

This article will review the work of WHO in collaboration with three countries with the aim of initiating the development of national programmes for healthcare workers’ health in United Republic of Tanzania, Vietnam and Venezuela.

The WHO Occupational Health Programme launched a pilot project in 2003: Protecting healthcare workers - preventing needlestick injuries, with the support of the WHO Collaborating Centre the US National Institute for Occupational Safety and Health (NIOSH), which resulted in the creation of a toolkit available in Spanish and English on the WHO website (for English see http://www.who.int/occupational_health/activities/pnitoollkit/en/index.html and Spanish http://www.who.int/occupational_health/activities/pnitoollkit/es/index.html), and scaling up of activities in Southern Africa, Latin America and Asia.

As a result of the implementation of the pilot project in United Republic of Tanzania and Vietnam,
and growing recognition of the need to protect health workers in general, both countries decided to broaden the work from a focus on protecting healthcare workers from exposure to bloodborne pathogens to considering all of the occupational hazards and health needs of health-care workers.

**Why healthcare worker health and safety?**

The healthcare workforce is necessary to provide health services for populations. Healthcare workers are essential in the promotion of good health, prevention of diseases and injuries and the delivery of service, for example, providing universal access to antiretroviral drugs for people with HIV/AIDS, a major goal of WHO and health systems worldwide. Until the late 1980s in Australia, the United States, and Europe, and more recently in the developing world, occupational health and adequate employment conditions for the healthcare workforce have been neglected. The first International Commission on Occupational Health (ICOH) sponsored conference on occupational health of healthcare workers occurred in 1992. According to the 2006 World Health Report on Human Resource for Health, a global shortage of healthcare workers exists reaching crisis proportions in 57 countries in the world among which 36 of the countries are in Africa (1). This shortage of healthcare workers globally, compounded by the AIDS epidemic in Africa, has led to increasing attention to the employment conditions and occupational health of healthcare workers. The 2006 World Health Report called for supporting and protecting healthcare workers as a primary goal of the WHO and health ministers through the Global Health Workforce Alliance (http://www.who.int/workforcealliance/en/index.html).

The healthcare setting is complex and hazardous with many biological, chemical, physical, ergonomic and psychosocial hazards. Among the hazards healthcare workers face are HIV, hepatitis, and other bloodborne pathogens; tuberculosis, SARS, and other airborne pathogens; disinfectants, anesthetic agents, hazardous chemotherapeutic drugs and other chemical hazards; regular lifting of unsafe loads (ergonomic hazards), and workplace violence. Protecting the occupational health of healthcare workers requires a multidisciplinary approach where occupational health professionals partner with infection prevention and control and others to implement successful programmes.

In United Republic of Tanzania, the Protecting healthcare workers - preventing needlestick injuries project linked with the Making Medical Injections Safer project to incorporate occupational health principles and strategies for preventing needlestick injuries into the injection safety programme. In 2006, the occupational health of healthcare workers was incorporated into the plan for HIV prevention and treatment and the plan broadened to incorporate assessment, prevention and control of other hazards to health workers.

The Ministry of Health in United Republic of Tanzania defines a healthy work environment as one that facilitates optimal physical and mental health in relation to work and adaptation of work to the capabilities of workers in light of their state of physical and mental health.

Taking advantage of the opportunity of the development of guidelines for HIV post-exposure prophylaxis, the government of Zanzibar in the United Republic of Tanzania decided to incorporate the broader concept for healthcare workers adapting the Joint ILO/WHO guidelines for health services and HIV/AIDS, and occupational health management systems for their guidance document (2). This guidance includes the following general objectives for healthcare worker occupational health.

**Environmental Risk Management**

Environmental risk management is a process that involves hazard identification, risk assessment, risk control, monitoring and evaluation of situations at work to ensure the health, safety and welfare of workers.
a) Hazard identification

Risk management starts with the identification of situations, activities, and tasks in the work places, which may put healthcare workers at risk of exposure to bloodborne pathogens. Hazard identification should be carried out as follows:

- Visiting health facilities and conducting interviews with authorities and healthcare workers about implementation of risk management and importance of hazard identification;
- Reviewing the occupational health and infection control literature related to health care settings;
- Rapid walk-through of health facilities to identify materials, procedures and activities, including all possible sources of exposure;
- Identifying departments/sites with hazardous activities, including amount of waste generated and its handling up to its final disposal; and
- Selection of locations that warrant in-depth investigation and rectification.

b) Risk assessment

Risk assessment involves evaluation of the level and nature of the risk of exposure to healthcare workers and determination of the measures to eliminate or minimize the risk as follows:

- Recording the number of workers exposed to bloodborne pathogens through (sharps), needles, soiled linen, splashes of blood, or other body fluids;
- Recording the level/degree of the risk including working space and work postures;
- Assessing factors which contribute to exposure and its recurrence;
- Assessing knowledge of healthcare workers regarding HIV, other bloodborne pathogens, and safe work practices;
- Determining whether equipment used is likely to increase or reduce the risk of exposure.
- Analysing data and information gathered;
- Identifying appropriate control measures; and
- Recommending measures to the appropriate management structure.

c) Risk control

The goal of risk control is to follow the hierarchy of controls, selecting the most effective control measures to minimize exposure of healthcare workers to chemical, biological, physical, ergonomic, and psychosocial hazards, as well as to prevent injuries. The recommended risk control measures include:

- Availability, easy accessibility and utilization of policy, guidelines, standard operating procedures (SOPs), and job aids;
- Elimination of dangerous and hazardous activities, equipment and materials;
- Substituting hazardous activities/equipment/material with less harmful ones;
- Modifying or re-engineering activities/equipment/material that cannot be eliminated/substituted or replaced;
- Reducing exposure by removing hazardous sources;
- Recommending suitable spatial and correct working positions;
- Recommending appropriate personal protective equipment;
- Information sharing in a user friendly manner; and
- Education and training of healthcare workers.

d) Monitoring and evaluation

Health facility management should identify a person or a group of people to carry out monitoring and evaluation of hazardous work practices and correct them as indicated. The following issues should be considered:

- Effectiveness of workplace policies and procedures;
- Effectiveness of information and training programmes;
- Level of compliance with standard precautions;
- Accurate recording and analysis of incidents;
- Identification of the causes of exposure to blood or other body fluids;
- Evaluation of incident debriefing;
- Effectiveness of action taken and follow-up.
In Vietnam, the development of the national plan of action on occupational health of health workers began with the development and promulgation of a circular on health and safety in healthcare workers. The Department of Preventive Medicine in the Ministry of Health is leading this effort. It assembled a working group consisting of representatives of the WHO Collaborating Centre for Occupational Health - the National Institute for Occupational & Environmental Health in Hanoi; the Trade Union representing health workers, the School of Public Health Occupational Health programme; provincial occupational health staff; and other departments within the Ministry of Health. Consultations with the Ministry of Labour and the National Institute of Labour Protection took place. The plan will be implemented through 2010 with the overall objective of:

**Ensuring healthcare workers full access to high quality occupational health services to reduce the incidence of occupational diseases and injuries, and to improve health and life quality of healthcare workers.**

Specific objectives include:

**Objective 1:** Complete legislation system of occupational health and safety and healthcare for healthcare workers.

**Objective 2:** Communicate and raise awareness and responsibility on occupational health and safety, prevention of occupational diseases and injuries at health establishments.

**Objective 3:** Strengthen capacity of occupational disease and injury examination, diagnosis and management for occupational health workers at central, provincial, district and health establishment levels.

**Objective 4:** Eliminate occupational diseases and accidents through pilot models on occupational disease and accident prevention for medical staff.

In Venezuela, the Ministry of Health began planning for a national programme for healthcare workers in collaboration with the Ministry of Labour’s implementation in the health sector of the revised occupational health and safety law. The occupational health and safety law was revised in 2005 for promulgation in December 2006. At the same time, WHO in collaboration with the WHO Regional office of the Americas (AMRO/PAHO) and NIOSH, and Corporalud (the Aragua state corporation for health) initiated a project in Venezuela on Protecting healthcare workers - preventing needlestick injuries as a pilot for the Latin America region.

The national programme for healthcare workers in Venezuela is based on the philosophy that the same rights that apply to workers in general should also be guaranteed to the workers in the health sector. One goal of the programme is to promote a culture of safety and prevention of risks within the healthcare workplace with active participation of healthcare workers in prevention. Regular monitoring of conditions of work for the purpose of prevention and providing services for workers, who are victims of occupational illnesses and injuries, are two important goals.

A key component of the occupational health programme in Venezuela to ensure the active participation of the workers, is the establishment of joint labour-management occupational health committees at the worksite in all sectors. The Ministry of Health assists with the creation of the committees for the health sector and the implementation of the work of the local committee in risk mapping and the implementation of programmes.

Implementation of the national programme will occur in 4 phases:

1. **Planning phase** to develop a multidisciplinary team of safety to elaborate the project and services which should include:
   - Mission, vision, function, organigram and inter-linkages for action;
2. Assessment phase to include the assessment of the number and distribution of health-care workers in need of occupational health services, existing tools, resources, and personnel available for occupational health programmes, and the assessment of working conditions and hazards to determine the needs.

3. Implementation phase to
   a) create occupational health services in health centers for healthcare workers:
      • develop the clinical site;
      • contract with multidisciplinary occupational health personnel, and
      • equip the service.
   b) design strategies for prevention and elect delegates to the occupational health and safety committees at the worksite.

4. Monitoring and follow-up for continuous performance improvement, including
   • establish indicators for the occupational health programme;
   • develop and implement an information system to manage activities and surveillance of occupational hazards, injuries and illnesses; and
   • establish a system for audit and inspection for the management of occupational health and safety.

The WHO Global Plan of Action on workers' health includes a recommendation that ministries of health develop national programmes for the occupational health of healthcare workers. In the coming year, WHO will build upon the example from United Republic of Tanzania, Vietnam, and Venezuela to provide models for countries. Please forward examples of national and state programmes for the occupational health of healthcare worker to ochmail@who.int, Attention: Susan Wilburn.

References

Singapore turns a corner in workplace safety and health

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INTRODUCTION
Singapore's industrial accident rates have seen a steady drop over the past few decades, more significantly from the 1980s to 1990s. However, with the turn of the millennium, the figures have been stagnant at around 2.2 accidents per million man-hours worked (see chart below). Three major highly publicized industrial accidents that claimed 13 lives in 2004 was an added impetus for a re-think of the current directions for workplace safety and health. The result: a new framework for the promotion of workplace safety and health (WSH) in Singapore.
**A NEW WSH SINGAPORE PLAN**

Singapore’s WSH scene went through a major makeover on 10 March 2005 with announcement in parliament of a new WSH framework to improve WSH standards and safety outcomes. A target to halve the number of work-related fatalities, which stood at 4.9 per 100,000 workers in 2004, to 2.5 per 100,000 workers by the year 2015 was set by the Minister of Manpower under whose purview WSH falls.

From a regime of compliance to prescriptive rules, the new framework focuses on creating a mindset change in all stakeholders to employ initiative to eliminate or reduce inherent workplace risks. This is enshrined in three key principles of the new framework as shown in the table below:

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<th>Three Principles</th>
<th>Desired Mindset Change</th>
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<td>To</td>
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<td>Reduce risk at source by requiring all stakeholders to eliminate or minimize the risks they create</td>
<td>Identifying and eliminating risks before they are created</td>
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<td>Greater industry ownership of WSH outcomes</td>
<td>Proactive planning to achieve a safe workplace</td>
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<td>Prevent accidents through higher penalties for poor safety management</td>
<td>Poor safety management is costlier</td>
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The Workplace Safety and Health Act

To support the new WSH framework, the old Factories Act was replaced with the Workplace Safety and Health Act (WSHA) which was enacted on 1 March 2006.

The new Act, unlike its predecessor which covered only high-risk workplaces such as construction and shipbuilding, is based on the premise that every worker in every workplace deserves to be protected against safety and health risks. Though currently the WSHA covers high-risk workplaces, it will be extended in phases to eventually cover all workplaces. The next phase of extension of the WSHA on 1 March 2008 will include six sectors that have high accident rates or where the potential consequence of any accident is serious. The six selected sectors are:

- Services allied to the transport of goods, such as logistics or freight forwarding;
- Landscape care and maintenance service activities, such as trimming of roadside tree branches;
- Water supply, sewerage and waste management, such as refuse disposal;
- Hotels and restaurants;
- Healthcare activities such as hospitals; and
- Veterinary activities.

The WSHA also marks a shift from a prescriptive legislative approach to a performance-based liability regime. This performance-based regime is articulated under the WSHA in the following ways:

- Defining general duties of care for the various stakeholders – employers, occupiers, principals, workers, etc. All stakeholders have a part to play in ensuring the safety and health of their workers and other people affected by their work. WSH is no longer the sole duty of the occupier;
- Requiring all employers to proactively identify and mitigate risks and hazards at the workplace before they occur. This is unlike the old regime which was characterized by knee-jerk reactions to accidents; and
- Increasing penalties to reflect the cost of poor safety management.
To further strengthen the new WSH framework, two key subsidiary legislations, the WSH (Risk Management) Regulations and the WSH (Incident Reporting) Regulations, were introduced together with the WSHA. The former introduces the concept of risk management by requiring all employers to conduct proper risk assessments and implement control measures to eliminate or reduce risks at the workplace. The latter requires all workplaces to report work-related accidents, dangerous occurrences or occupational diseases. Doing so facilitates the collection and analysis of accident statistics for all workplaces, and the identification of critical areas for the expansion of the Act in future.

Workplace Safety and Health 2015 – a 10-YEAR ROADMAP

Another offshoot of the new WSH framework is the WSH 2015, a 10-year national strategy for WSH in Singapore that will guide the efforts of all stakeholders, namely the Government, employer associations, unions, trade associations, WSH professionals, professional bodies as well as education and training institutions to achieve better WSH outcomes. The WSH 2015 document is the result of consultations held with over 1,500 members from various industries, associations and unions as well as an international panel of experts in the field of WSH. The ultimate destination for this roadmap: Singapore in 2015 that is internationally renowned for best practices in workplace safety and health. We highlight some of the key points in this report which was launched in early 2007.

Role of Stakeholders in WSH 2015

To realize Singapore’s vision for WSH 2015, a shift in the roles of key stakeholders was perceived to be vital. The following are the recommendations made in WSH 2015 on the roles of key stakeholders:

Government - The Government’s primary role should be to oversee the general direction of WSH, as well as to regulate and ensure compliance on the ground. As one of the largest employers in Singapore, the Government should also lead by example and set the tone for creating a strong WSH culture at its own workplaces.

WSH Council – Development of WSH standards, promotional and training activities as well as for accreditation and certification should be industry-led and this role should be assumed by a WSH Council, supported by the tripartite partners.

Tripartite Partners - Trade and labour unions should actively promote WSH awareness among workers and arrange for their members to undergo WSH training. Likewise, trade and business associations should proactively inculcate in employers the importance of good WSH practices and standards, and cultivate a safety culture among their members.

Professional and Educational institutions - Professional institutions should play an active role in supporting the WSH efforts through the provision of continuing education and training to their members. Educational institutions will need to work closely with the industry and the Council to integrate WSH into the academic syllabuses of relevant courses, such as engineering, medicine or architecture. They should also spearhead research into the relevant WSH areas.

Employers, Employees and WSH Professionals - The top management of companies should drive the development of a strong WSH culture by allocating adequate resources to safety and health, as well as WSH training. For the employees, there should be an improvement in their capabilities and competencies in WSH across various sectors. For WSH professionals such as WSH officers, rather than stipulating the set of duties that WSH officers need to carry out (e.g. conduct inspection, investigate accidents, organize promotional campaigns, etc.), the expected standard of performance for such duties would be articulated and WSH officers would be required to meet these standards. In the case of WSH auditors, they have an important role to play in the shift towards industry self-regulation. WSH auditors should help the industry check for WSH compliance, as well as detect and highlight systemic WSH weaknesses.

Targets for WSH 2015

The WSH 2015 document identifies three strategic outcomes for the attainment of excellence in WSH.

Target 1 - Drop in occupational fatality and injury rates

The target for 2015:

- To decrease work-related fatality rate by 50% from 4.9 fatalities per 100,000 workers; and
- To reduce work-related injury rate by 50% from 800 injuries per 100,000 workers.
**Target 2 - Companies embrace WSH**

Companies embrace WSH as an integral part of business, one that ensures their competitiveness and profitability. There should be incorporation of proactive assessments and control of risks at all levels during business operations and business proposals such as tenders and contracts should incorporate WSH performance as a requirement.

**Target 3 - Singapore is renowned as a Centre of Excellence for WSH**

Skilled and capable workforce and employers who are able to manage WSH risks, complemented by a pool of competent WSH professionals and credible WSH training facilities, is the visualized WSH landscape for Singapore.

**Strategies for WSH Success**

The attainment of the targets outlined above is dependant on the development of a set of strategies that are geared towards:

- engaging and securing the commitment of stakeholders across all levels; and
- wide-ranging in its scope or nature of intervention.

The WSH 2015 outlines four strategies that will drive the process towards a safer and healthier workplace. These four strategies are:

1. **Build strong capabilities to better manage WSH**

   All stakeholders must be well equipped to manage/support workplace safety and health issues before they can take responsibility to drive WSH reforms and raise WSH standards. The Government will therefore seek to provide the following:

   - Make available reliable and broad-based WSH statistics to help track the progress of WSH improvements and to calibrate the necessary interventions and policy responses to address issues of concern;
   - Develop a comprehensive competency framework to enhance the industry’s ability to identify and manage risks and hazards;
   - Strengthen the competencies of WSH professionals such as safety and health officers and auditors, and enhance the image and professionalism of the industry;
   - Enhance the capabilities and avenues for aid for Small and Medium Enterprises (SMEs) to conduct proper risk assessments and implement effective control measures;
   - Identify and develop world class training providers to enhance the quality of training of WSH professionals;
   - Develop the capabilities of businesses to draw useful lessons from near misses and accident investigations conducted internally to identify shortcomings so as to prevent or pre-empt other similar incidents from happening in the future; and
   - Render compliance assistance through the development of codes of practices and guidance materials to inform and advise businesses of common risks and control measures that can be employed.

2. **Implementing an effective regulatory framework**

   Alongside the promotion of a self-regulatory framework for greater industry ownership, an effective regulatory framework that is continually reviewed to ensure relevance to the industry is also vital for the implementation of the WSHA. To curb the escalation of risks and hazards, industry trends and developments should be keenly followed and targeted interventions and enforcement measures should be taken where necessary. Some of the essential routes are:

   - To prioritize efforts and focus on areas that matter most, resources should be deployed strategically and intervention measures such as engagement or enforcement should be tailored to meet the specific needs of each risk area identified;
   - Identifying systemic lapses that can potentially cause more accidents in the future both at the industry and company level and facilitating the sharing of such information to relevant businesses exposed to similar risks; and
   - Industry associations and professional bodies should set and continually raise norms for acceptable WSH standards and endorse the WSH competencies of fellow members.

3. **Promoting the benefits of WSH and recognizing best practices**

   Businesses should be made aware that
WSH makes good business sense while the workforce should be encouraged to adopt good WSH practices. Some of the areas that can be tapped on to realize this strategy are:

- A WSH outreach programme led by industry partners that seeks to engage and educate large organizations and SMEs as well as the workforce;
- Secure the commitment of senior management in large organizations to be leaders in WSH, to create a catalytic effect on the WSH performance of the industry they are in. They can also leverage on their commercial influence to shape the WSH culture of their suppliers and sub-contractors along the value chain;
- Carry out research on accident costs and establish tools to measure such costs to motivate employers to achieve good WSH outcomes. Such tools can also be used to help companies assess the usefulness of WSH control measures;
- Develop a grading scheme for safety and health management to allow companies to understand the deficiencies of their own systems. An audit checklist for the grading system will be developed to help auditors assess the quality and effectiveness of the WSH management systems. Companies will be encouraged to use the grade awarded as a criterion in their selection of vendors. Insurance companies can also use this scheme to determine insurance premiums;
- Engage and influence companies to consider WSH performance as a criterion in evaluating contracts. This will have a ripple effect in influencing the behaviour of downstream stakeholders;
- Review the WSH recognition framework to inspire widespread participation and improvement in WSH standards of not only the large organizations but also SMEs;
- Enhance the avenues for the collation and distribution of pertinent WSH information and best practices.

4. Developing strong partnerships locally and internationally

The Government recognizes that the collective effort, cooperation and strong partnership of all key stakeholders and expert inputs are essential to accomplish the WSH 2015 vision. Areas that can be explored under this strategy are:

- The existing Workplace Safety and Health Advisory Committee (WSHAC) which boasts a wide spectrum of industry representation should act as the engine to drive the implementation of the WSH 2015 Strategy by the industry. The WSHAC should act as a platform where the industry can participate actively in WSH issues. Through a timely conversion to a Council status, it can take on the leadership role in promoting WSH and spearhead the development of competency standards, and raise and manage funds for the promotion and development of industry capabilities for WSH;
- To convene regular meetings with the International Advisory Panel to tap on the expertise of the panel members. This will aid in benchmarking Singapore WSH Standards against international ones;
- Cultivate close collaboration with various stakeholders such as the Government, unions, trade associations, developers, insurance companies, financial institutions, embassies, media, local NGOs and the community through avenues such as dialogues and seminars to better achieve the WSH targets; and
- Keep abreast of the latest developments in WSH and new WSH hazards and risks identified in other countries through international collaborations. To make contributions towards the development of international and regional WSH standards and research through active participation in international WSH forums such as the International Labour Organization (ILO) and the World Health Organization (WHO).

Guided by the four strategies, a detailed action plan has been developed and can be viewed on our website www.wsh.sg.

The WSH 2015 is Singapore’s first National Strategy for Workplace Safety and Health, and is built on the foundation of the new WSH framework and WSH Act.

The strong commitment of all stakeholders towards the realization of the WSH 2015 vision, spells a promising start for the new leg of the WSH journey that Singapore is embarking on. We envision in 2015, a Singapore where WSH is at the core of all businesses, where a deep-seated WSH culture is all pervasive and where every worker goes to work assured that he will return home to his family, safe and sound.

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Occupational illness and accidents at work are a heavy burden on both workers and employers in Europe. Every year there are four million accidents at work which represent enormous economic costs for the European economy. A considerable share of these costs falls upon social security systems and public finances.

The European Strategy for Health and Safety at Work 2007 – 2012 wants to increase health and safety at work in the European Union, contributing to improved quality and productivity at work. It will pursue the positive trends of the previous Community Strategy 2002 – 2006 which are bearing fruits. Over the period 2002–2004, the rates of fatal accidents at work in the EU–15 has fallen by 17% while the rates of workplace accidents leading to absences of more than three days has fallen by 20%. Despite major advances over the past five years, there is still considerable room for improvement. The costs of accidents at work and work-related ill health do not fall equally on all players. Loss of income due to absence from work costs European workers around EUR 1 billion a year. Employers face costs linked to sick pay, replacement of absent workers and loss of productivity – many of which are not covered by insurance.

Small and medium-sized enterprises are particularly exposed, accounting for 82% of all occupational injuries and 90% of all fatal accidents. Sectors such as construction, agriculture, transport and health all present higher than average risks of accidents at work, while young workers, migrants, older workers and those with insecure working conditions are disproportionately affected.

Specific illnesses are on the rise, including musculoskeletal diseases – such as back pain, joint injuries and repetitive strain injuries – and illnesses caused by psychological strain.

The European strategy for 2007-2012 aims for an ongoing, sustainable and uniform reduction in occupational accidents and illnesses: a reduction of 25% of the total incidence rate of accidents at work per 100,000 workers in the 27 countries of the European Union. In order to achieve this ambitious goal, the following main objectives or instruments are proposed:

- Putting in place a modern and effective legislative framework; improving and simplifying existing legislation without reducing the existing levels of protection and enhancing its implementation through non-binding instruments such as exchange of good practices; awareness-raising campaigns and better training;
- Encouraging the development and implementation of national strategies adapted to each Member State. These national strategies have to be adjusted to the specific context of each Member State and should target the sectors and companies most affected and fix national targets for reducing occupational accidents and illness;
- Mainstreaming of health and safety at work in other national and European policy areas (education, public health, research) and finding new synergies. In order to illustrate what mainstreaming could mean, a good example is mental health. At the present time, problems associated with poor mental health constitute the fourth most frequent cause of incapacity at work. The WHO estimates that depression will be the main cause of incapacity by 2020. The workplace can be an appropriate place in which to prevent psychological problems and promote better mental health. Public Health and Social Affairs can create positive actions between their policies;
- Promoting changes in behaviour: Integration of health and safety at work in the education programmes at all educative levels, including a specific programme for young entrepreneurs in OSH management, migrant work-
改善职业健康：一项由加拿大研究者和工人代表共同开发的行动计划

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In 1998, a meeting of researchers and worker representatives was sponsored by the Women’s Bureau of the Canadian Ministry of Health, in order to exchange information on women’s occupational health. Participants (list below) conceived of an action plan that was subsequently translated into French and Spanish and has been used in many countries in Europe and Latin America. It has recently been endorsed again by the current health and safety and status of women advisors of the three Québec unions, by the Canadian Federation of Nurses Unions, Canadian Auto Workers and the British Columbia Federation of Labour. We present the highlights here. For the full text including definitions of terms, rationale for each section and proposed legislative changes in the Canadian context, please see http://www.invisiblequifaitmal.uqam.ca/en/presentation/planaction.asp.

For some of the information on which the action plan is based, see the special issues on women’s occupational health of the journals Environmental Research (vol. 101 no. 2) and New Solutions: A Journal of Environmental and Occupational Health Policy (vol. 17 nos. 1-2) as well as the recent literature review published by WHO at http://www.who.int/gender/documents/Genderworkhealth.pdf.
The Action Plan

Musculoskeletal disorders

The goals

- to prevent musculoskeletal disorders, women’s most common compensated occupational health problem; and
- to reduce women’s morbidity from musculoskeletal disorders.

The means

- Risks in women’s traditional jobs should be identified and prevention programmes should be established for such hazards as repetitive movements, prolonged standing and for conditions that may potentiate exposures such as level of job control, supervisor support, flexibility in work scheduling; and
- Ergonomic standards should be developed that include parameters of work found in many women’s jobs, such as repetitive movements and prolonged standing.

Stress and violence

The goal

- to reduce exposure of women to stress and violence.

The means

- Legislative measures should be taken to prevent people from being required to work alone.
- Research and prevention strategies should be developed to document and counter the effects of sexual and psychological harassment, rigid, unpredictable work schedules, workplace aggression and violence; and
- These approaches should be based on a systemic analysis of stress and violence, rather than a prescriptive set of rules and behaviours; and
- Incidents of violence against service workers, including caregivers, should not be considered to reflect on their professional competence. Incidents should be promptly identified and named and procedures for post-traumatic counselling and prevention should be initiated.

Toxic exposures

The goal

- to reduce exposure of women to toxic agents such as organic solvents and pesticides.

The means

- Since most of the scientific information in the area of toxic exposures is based on men, research should be undertaken to study the effects of toxic exposures among women workers;
- Agricultural workers should be included in all occupational health and safety legislation. Women agricultural workers should have their status recognized;
- Research should be done on the effects of chronic low-level mixed exposures on women (and men). Laboratory and epidemiological methodologies should be developed;
- Interactions between toxic exposures and work organization should be studied; and
- The consequences of neurotoxin-induced mental health changes on family and social life should be investigated.

Atypical work

The goal

- to guarantee access of women with atypical work sites or schedules to the full protection of the compensation and prevention systems.

The means

- Measures should be taken to prevent irregular, unpredictable work schedules over which the employee has little control;
- Measures should be taken to favour regular, permanent employment; and
- Since the public sector is a major employer of women, degradation of working conditions in this sector should be stopped and measures should be instituted to guarantee adequate staffing and proactive scheduling of work, with respect to workers’ needs for a fulfilling family life and their children’s need for family time.

The whole person at work: work, personhood, family and quality of life
The goals

- to keep work human and to respect humans at work;
- to protect home and family concerns; and
- to protect the right to a personal life.

The means

- Life quality issues should be included as part of all occupational health interventions. Such issues should be integrated into workplace design and work organization as well as workplace policies;
- Occupational health and safety research should include issues relating to life outside the workplace;
- Research and intervention should take into account that the relation between service providers and their clients involves the whole person and is profitable to employers. The complexities and special demands of this relationship should be studied; and
- The invisible work of the caring professions should be recognized and its hazards should be identified through research and countered through prevention programmes. Workers should not be asked to use their own resources to supply gaps in care and service.

Reproductive health

The goal

- to reduce exposure of women to risks for their reproductive health.

The means

- Occupational health prevention and compensation programmes should address risks to male and female reproduction, including male and female fertility, sexual functioning and menstrual health;
- Programmes should be developed to protect the health of pregnant women exposed to working conditions and the health of their foetuses, as well as to protect nursing women and their babies. Such programmes should build on the Québec protective reassignment law, and protect the right to a safe return to work;
- Working conditions in women's jobs that pose a risk for them, their foetuses or nursing infants in general (and to varying degrees) pose a risk for all workers. Prevention programmes should address these risks;
- The right to nurse infants should be protected; and
- Research should be done to identify occupational risks to sexual functioning of women and men.

Controversial illnesses

The goal

- to support women whose reports of work-related illnesses are often questioned.

The means

- When a substantial number of workers complain of a problem this should be sufficient to drive a thorough investigation; and
- Given the possibility of complex chemical interactions, failure to find that a threshold limit value of a particular chemical has been passed should not prevent serious investigation of a workplace problem.

Getting women involved

The goals

- to ensure real involvement of women in protection of their health and safety;
to get women into occupational health and safety at all levels in the unions;
■ to provide social support for women faced with occupational health problems; and
■ to influence the culture in trade unions, open up to new definitions and conceptions of occupational health problems and how to deal with them.

The means

- All workers, for example, home workers (teleworkers), domestic workers, agricultural workers, teachers, and small workplaces should be included in all governmental prevention programmes;
- There should be a requirement for joint union-management health and safety committees in all workplaces including the small workplaces and the service sector. Worker representatives should have access to released time so as to be able to consult the membership and discuss problems;
- Women’s committees in the unions should work with these health and safety committees to make sure that women’s participation is assured and that issues for women workers are included;
- Education and training should be available to health and safety committee members;
- Unions should link occupational health concerns to community and environmental health concerns, an interest for women and their families;
- Unionisation in the service sector and of the small and marginal workplaces where many women work, should be encouraged by legal measures, taking into account the difficulties involved in unionising immigrant women;
- Social support should be provided for injured and ill women workers, particularly those with controversial diseases, for example in the form of support groups; and
- Social support should be provided for women who have difficulties in reconciling pregnancy with their working conditions.

Occupational health services

The goal

■ to provide care and encouragement for women with occupational health problems.

The means

- Workers’ health clinics should play a role in setting up support for women workers with controversial health problems, difficulties in obtaining protection from hazards during pregnancy, or difficulties in obtaining compensation. They should collaborate with women workers and researchers to identify occupational health problems; and
- Information on occupational health risks should be provided to women in contexts (workplaces, community groups) that allow them to take action.

Workers’ compensation

The goal

■ to attain equity in access to compensation.

The means

- Decision-makers should be given training in non-sexist practices in order to enable them to make fair disposition of compensation and rehabilitation cases. Legislation should be screened for provisions leading to systemic discrimination against women workers.

Research

The goals

■ to allow researchers access to information from working women;
■ to allow women’s voices to be heard by those involved in occupational health research; and
■ to get sufficient data on the health effects of women’s work.

The means

- Collaboration between unions and their women’s committees and university occupational health researchers should be facilitated by union-university agreements with dedicated funding;
- Health ministries should fund researcher-health service delivery (including unions as health-service delivery agents) partnerships;
- Participatory and action-oriented research should be encouraged;
- Steps should be taken so that research in occupational health includes women as sub-
重点项目，涉及女性工人的生活，以及女性特有的生理参数；
- 定性和定量研究方法应结合使用，以确保女性的声音被听到，复杂情况可以被理解，重要参数可以被识别；
- 在研究工作组织时，应考虑到许多女性的工作和家务需要同时进行；
- 在许多测量技术、仪器和测试是基于男性开发并标准化后，测量方法应为女性和她们的经历而开发；
- 工人的健康研究应获得参与权，雇主不得要求研究参与者的同意。工作场所应允许为了合法研究目的而进入。
- 为职业健康研究提供工作参与者控制的资金；
- 定性研究应考察有良好和差的健康保护记录的工作场所，以识别制胜策略和良好设计；
- 为了满足其资助机构的要求，研究者应制作一份简短的报告，以非技术语言总结结果，提供给工人。
- 研究资助组织应鼓励女性参与所有数据收集，并尽可能地鼓励记录包括性别信息的数据（例如：工伤和疾病数据；工作时间数据）。
- 研究资助机构应鼓励其影响记录包含性别信息的数据（例如：工伤和疾病数据；工作时间数据）。
- 研究资助组织应发布促进女性及其关心的在职业健康调查中的参与。
- 在数据分析中，男性和女性的数据在分析前不应合并，以避免丢失信息。
- 性别、种族和年龄不应作为独立的健康决定因素，没有参考他们代表的工作和生活条件；
- 数据库应改善他们提供的工作暴露信息质量。

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The National Occupational Research Agenda: A framework to bring research into practice in the United States

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In 1996, at the 25th anniversary of the U.S. National Institute for Occupational Safety and Health (NIOSH), the National Occupational Research Agenda (NORA) was initiated. More than 500 stakeholders from industry, labour, government, academia and public health had identified 21 priority topics where research would make a difference for workers in a decade (See Table 1). NORA committed all partners to work together to advance research in these areas (1).

Table 1. Twenty-one Priority Areas of the National Occupational Research Agenda (NORA) 1996-2005

<table>
<thead>
<tr>
<th>Disease and Injury</th>
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<tbody>
<tr>
<td>Allergic and Irritant Dermatitis</td>
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<tr>
<td>Asthma and Chronic Obstructive Pulmonary Disease</td>
</tr>
<tr>
<td>Fertility and Pregnancy Abnormalities</td>
</tr>
<tr>
<td>Hearing Loss</td>
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<tr>
<td>Infectious Diseases</td>
</tr>
<tr>
<td>Musculoskeletal Disorders of the Lower Back</td>
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<tr>
<td>Musculoskeletal Disorders of Upper Extremities</td>
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<tr>
<td>Traumatic Injuries</td>
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<tr>
<th>Work Environment and Workforce</th>
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<tbody>
<tr>
<td>Emerging Technologies</td>
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<tr>
<td>Indoor Environment</td>
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<tr>
<td>Mixed Exposures</td>
</tr>
<tr>
<td>Organization of Work</td>
</tr>
<tr>
<td>Special Populations at Risk</td>
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</tbody>
</table>
Before this time, there had been no national agenda in the U.S. in occupational health. To ensure the carrying out of research in each topic area, a team of members from NIOSH and national stakeholders was created for each of the priority areas and was charged with identifying research gaps and developing research agendas for the nation.

In 2006, at its 35th anniversary, NIOSH sponsored a symposium to look back at the first decade of NORA to evaluate its success. The document “A Focus on Impacts: NORA Research 1996-2005”, contains descriptions of more than 400 research projects and the impact of each project (2). The descriptions point out the necessity and the successes of partnerships among researchers, employers, labour and government. The leadership of the NORA teams was described (3). Success was also evaluated by review of funding made available in the priority areas. NIOSH investment in research in the 21 priority NORA topic areas, by NIOSH and university researchers, increased steadily from about $15 million dollars in 1996 to about $100 million per year by 2006. Other government agencies funded up to an additional $30 million each year for researchers at universities. A review of national stakeholder efforts in many countries concluded that such national efforts provide a valuable framework for priority research aimed at impact in the workplace (4).

Magnitude of the problem

Why was a National Agenda formed? Is a National Agenda still needed? In 1996, despite progress during the 25 years since the passage of the Occupational Safety and Health Act, a tremendous toll continued to be inflicted in both human and economic costs in the U.S. This led to the decision to encourage national partnerships to focus research in the priority areas and to the development of NORA. A review of workplace hazards, illness and injury in preparation for the 2006 evaluation of NORA indicated that much remains to be done.

Each day, approximately 146 million U.S. workers go to their workplaces with the expectation that they will return home healthy and safe (5). However, workplace hazards have a significant impact on workers’ physical and psychological health. A recent article commemorating Workers’ Memorial Day 2007 estimated that, on average, nearly 16 workers in the United States die each day from injuries sustained at work and 134 die from work-related diseases. Daily, an estimated 11,500 private-sector workers have a nonfatal work-related injury or illness, and more than half will require job transfer, work restrictions, or time away from their jobs as a result. About 9,000 workers are treated in emergency departments each day because of occupational injuries, and approximately 200 of these workers are hospitalized. In 2004, workers’ compensation costs for employers totalled $87 billion (6). Such statistics translate into terrible personal, societal and economic burdens and underpin the commitments of the second decade of NORA.

National Occupational Research Agenda (NORA) 2006-2015

The second decade of NORA (2006-2015) was inaugurated in April 2006 on the 35th anniversary of NIOSH. It continues the emphasis on partnerships, but it has a new structure that is aimed at efficiently moving research results into practice in workplaces (see www.cdc.gov/niosh/nora). NORA now uses a sector-based approach, which includes all employers, all workers and all workplaces in the country. In the U.S., Canada and Mexico, all industry is coded into 20 sectors of the North American Industrial Classification System (NAICS) (7). As shown in Table 2, the 20 NAICS sectors were aggregated into eight sector groupings according to the similarity of their occupational safety and health issues. NIOSH and its partners formed 8 Sector Councils that include participants from industry, labour, academia, public health and government. Leadership in implementing NORA resides in the Sector Councils, which are taking input regarding the worst problems remaining in sectors, in order to develop a sector-based strategic research agenda. The input is collected through national meetings and via the NIOSH web site. Input from partners globally is welcome at www.cdc.gov/niosh/nora/comments.html.
Table 2. The 20 Sectors of North American Industrial Classification System (NAICS) have been grouped into 8 NORA Sector Councils

<table>
<thead>
<tr>
<th>Sector Councils</th>
<th>NAICS Codes</th>
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</thead>
<tbody>
<tr>
<td>Agriculture, forestry, and fishing</td>
<td>11</td>
</tr>
<tr>
<td>Construction</td>
<td>23</td>
</tr>
<tr>
<td>Mining</td>
<td>21</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>31-33</td>
</tr>
<tr>
<td>Healthcare and social assistance</td>
<td>62</td>
</tr>
<tr>
<td>Services</td>
<td>51-56, 61, 71-72, 81, 92</td>
</tr>
<tr>
<td>Transportation, warehousing, and utilities</td>
<td>48-49, 22</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>42, 44-45</td>
</tr>
</tbody>
</table>

Each Sector Council strategic research agenda will include sector-specific goals, performance measures, and implementation plans for the nation. These agendas will provide guidance to the entire occupational safety and health community for carrying out critically needed research and moving research results into practice in workplaces. In addition, a Cross-Sector Council has been formed to coordinate priorities that affect multiple sectors and groups of workers across sectors (e.g. musculoskeletal disorders). Global Collaborations is one of the NORA Cross-Sector programs, because the sharing of solutions to common problems can increase the health and safety of workers on all continents (www.cdc.gov/niosh/programs/global). NIOSH is the steward of NORA and facilitates the work of the NORA Councils. Figure 1 illustrates the structure of NORA 2006-2015.
NORA Sector Council Strategic Research Agendas

Currently, the Sector Councils are drafting their strategic research agendas aimed at substantially reducing hazards, exposures, illnesses and injuries in the sectors. Progress can be followed on the NIOSH NORA website at www.cdc.gov/niosh/nora and by subscribing to the monthly NIOSH eNews at http://www.cdc.gov/niosh/enews/default.html. When the Sector goals are in place, it will be necessary for NIOSH and external researchers who apply for NORA funds to show how their proposed research meets the goals of the sectors.

The NORA Sector Council Strategic Research Agenda will typically include:

1. Strategic (long-term) goals to reduce or eliminate the most important current or anticipated future problems in the sector or a sub-sector;
2. Intermediate (short-term) goals which are critically important to accomplish in order to attain the strategic goal;
3. Performance measures (concrete countable outcomes and timeframes) suitable for tracking annual progress and success in achieving the strategic and the intermediate goals; and
4. Implementation plans (partnerships with employers and workers) to move proven improvements in practice into workplaces.

Construction Sector Example of Sector Research Goals and Performance Measures

Although the various Sector Councils are currently working on developing strategic goals, none are yet complete at this time. Several of the NIOSH programs developed draft goals prior to or in preparation for NORA and some examples are provided here to illustrate the types of research encouraged by NORA and the emphasis on getting research results into practice in the workplace. The NIOSH Construction Program example illustrates one draft strategic goal, two of several short-term intermediate goals that contribute to meeting the long-term strategic goal, and performance measures that commit the program and researchers to a timeframe and provide for the tracking of success.

- Construction Strategic Goal: Reduce the incidence and severity of work-related musculoskeletal disorders in construction work;
  - Performance measure: Demonstrate that successful implementation of interventions can lead to 25% reduction in musculoskeletal disorders for targeted tasks and trades, by 2015;
- Construction Intermediate Goal: Identify and evaluate the job demands and associated musculoskeletal problems for workers’ capabilities;
  - Performance measure Identify and evaluate the job demands and associated musculoskeletal problems for 20 construction job tasks, by 2009;
- Construction Intermediate Goal: Increase the number of effective interventions for reducing workers’ exposures to risk factors for musculoskeletal disorders; and
  - Performance measure Identify and evaluate 20 currently available interventions and 5 new interventions by 2012.

Global Collaborations and the Transportation, Warehousing and Utilities Sectors

Data from the U.S. and other nations indicate that road transport injuries are the leading cause of occupational fatalities in many countries. These data led to a NIOSH project entitled Promoting Global Initiatives for Occupational Road Safety (http://www.cdc.gov/niosh/programs/twu/global/) that benefits workers in the U.S. and worldwide. The project is relevant to workers in transport, manufacturing, trade, construction, and services who have high exposure to road traffic as drivers, pedestrians, or road workers. The project addresses a NIOSH program goal for the Transportation, Warehousing, and Utilities sectors to “Reduce transportation-related incidents in the Transportation, Warehousing and Utilities industries”, and a NIOSH global goal to “Enhance global workplace safety and health through international collaborations.” This project also addresses priorities of the World Health Organization and is included in the Global Network 2006-2010 Work Plan of the WHO Collaborating Centres in Occupational Health (http://www.who.int/occupational_health/network/2006compendium/en/index.html).

The Promoting Global Initiatives for Occupational Road Safety project is responsive to the global road safety initiatives of the World Health...
Organization and the World Bank, which state that deaths from road traffic injuries are projected to increase globally from 1.2 million in 2002 to 1.9 million in 2030, with low- and middle-income nations bearing most of the increase. If effective interventions are not implemented, WHO and the World Bank estimate that by the year 2030 road traffic injuries will become the 8th leading cause of mortality worldwide (8). The human and economic costs of this growing health burden are only beginning to receive attention in international development and in the business community. There is momentum internationally to engage governments, the private sector, non-governmental organizations (NGOs) and donor groups to address this growing epidemic. However, no large scale international initiative addresses the special problems of work-related road fatalities in developing countries. Neither is there adequate recognition that worldwide promotion of road safety by business interests will yield both public safety and workplace safety benefits.

This project invites partners to share good practices and guidance for worker safety on roads in a global electronic library and to implement and evaluate the success of the practices. This project’s goal is to demonstrate injury reduction and economic benefit from workplace initiatives to prevent road traffic injuries among workers in the U.S. and globally, so that these approaches will be incorporated into the ongoing global road safety initiatives. More about this project and an invitation to all to partner in the project can be found at www.cdc.gov/niosh/programs/1wu/global.

**Conclusion**

The first decade of the National Occupational Research Agenda (NORA) 1996-2005 advanced research on stakeholder identified topics important for the health and safety of workers, and created a culture of partnership in the country. The second decade of the National Occupational Research Agenda (NORA) 2006-2015 has a sector-based structure and a strategic research approach that should greatly facilitate implementation of research results in workplaces. Global partners are welcome to participate in NORA so that information can be shared and the health and safety of workers everywhere will improve.

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Priority setting in occupational health research

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Introduction

The numerous changes in the labour market over the last few decades have greatly influenced matters related to Occupational Safety and Health (OSH). New goals have been set for better interventions and prevention of occupational illness and accidents. It has thus become essential to identify and define single priority topics under the heading of OSH in order to cope with emerging problems.

Identification of OSH research priorities might be seen in the context of the broader picture of identifying health research priorities, discussed by the Global Forum for Health Research (1), which established that identifying these priorities was as important as the research itself. It is increasingly important to establish some sort of rating for research areas in view of the limited funds available and the obvious need to use them in the most efficient way possible.

Identifying research priorities is a long-term process as the priorities never stand still and have to be updated regularly and systematically so as to keep up with changes as they arise. Another difficulty is that the wide range of factors that must be taken into account, and the large numbers of people involved every day in occupational health care and safety. Thus each person questioned about a problem may give a different reply depending on their viewpoint.

A subjective approach to identifying research priorities, though inevitably influenced by personal experience in every case, must in any event ensure objective results achieved with a valid method and scientific process involving all those concerned, e.g. public authorities, “social partners” (unions, etc.), companies, public and private insurance institutions, and others. The long-term approach, however, often conflicts with political objectives and requirements, since research does not give immediate tangible results.

Studies in different countries

Many studies have been done in the last 15 years, in various parts of the world, with a view to establishing a list of OSH priority topics. The first were done in 1993 in Great Britain by the BOHRF (British Occupational Health Research Foundation) (2). In 1995 in the United States, to meet increasing demand and new OSH research requirements, NIOSH (National Institute for Occupational Safety and Health) and its partners in the public and private sectors set up a program known as NORA (National Occupational Research Agenda), as the first step in a broader project to coordinate research on health and safety in the workplace (3,4). Then in 1997 there was a Dutch study (5), in 1998 one by the European Agency for Safety and Health at Work (6), and in 2001 an ISPESL (National Institute for Occupational Safety and Prevention) project in Italy (7,8,9). Similar studies have since been reported from Malaysia (10) and Japan (11).

These have all been “national” projects, and although they all aimed at identifying OSH research priorities they took different approaches, and used different methods to contact people, so the findings are heterogeneous, with differing impacts on economic, political and scientific decisions.

A critical comparative analysis of the main projects to identify OSH priorities and measures reported in literature is difficult because of differences in socio-cultural backgrounds, the routes followed to reach agreement, and the methods employed to identify priority topics and group them in macro-areas (12-13). Many of the studies used the Delphi technique, which involves proposing one or more topics to a group of experts in the sector who then rate them through an iteration process, in successive rounds, until they reach a consensus, with all the replies remaining anonymous. This method offers advantages that make it preferable...
to other approaches when it comes to identifying areas of agreement and disagreement, such as OSH research priorities. The most delicate part of the Delphi procedure is forming the panel of experts, since this is not covered by the guarantees of the theory of samples. To make sure the results are reliable and unbiased, the panel must be highly representative of all the parties involved in the study. This implies that panels selected in the studies considered here must be assessed too (12).

**International studies**

The World Health Organization (WHO) Network of Collaborating Centres (CCs) in Occupational Health comprises 64 national institutions and organizations on all continents. The Network includes the International Commission on Occupational Health (ICOH), the International Occupational Hygiene Association (IOHA), the International Ergonomics Association (IEA), the International Labour Organization (ILO) and all six Regional Advisors in Occupational Health.

In 2001, WHO occupational health staff invited the heads of CCs to list their priority areas, in order to draft the first Work Plan of the Global Network of WHO Collaborating Centres (CCs) in Occupational Health. This constitutes the implementation of the WHO “Global Strategy on Occupational Health for All” (14). On the basis of the ratings provided by the CC heads, an agenda was drawn up of 15 OSH priority topics, to which every CC would commit at least one project to benefit developing nations. A Task Force chaired by WHO experts was set up for each of the 15 areas.

The priority areas in Occupational Health, agreed on by the members of the Network for the 2001-2005 Work Plan, were the following: Technical guidance in occupational health; Intensive partnership in Africa; Child labour and adolescent workers; Elimination of silicosis; Health care workers; Health promotion activity; Psychosocial factors at work; Promotion of OSH in small enterprises and the informal sector; Prevention of musculoskeletal disorders; Preventive technology; Training occupational health and safety personnel; Internet resources and networks; National and local profiles and indicators; Economic evaluation of interventions; and Global burden of disease (15).

The results achieved with the 2001-2005 Work Plan of the Global Network of CCs indicate that it is important to carry on working with the CCs on a new Work Plan for the five-year period 2006-2010. In June 2006, 45 representatives of the WHO CCs Network in Occupational Health from 32 countries attended the Seventh Meeting of the Global Network, in Stresa (Italy), with the participation of the United Nations Environment Programme (UNEP), the International Commission on Occupational Health (ICOH) and the International Occupational Hygiene Association (IOHA), to discuss the follow-up of the WHO Global Strategy for Occupational Health. The participants at the Meeting undertook to contribute to the WHO global agenda on workers’ health through the 2006-2010 Work Plan, which includes six areas of activity:

1. global situation analysis;
2. evidence for action and national policies and action plans;
3. practical approaches to identify and reduce occupational health risks;
4. education, training and technical materials;
5. development and expansion of occupational health services; and
6. communication and networking.

**Conclusions**

Studies in the last 15 years, aimed at identifying OSH research priorities, indicate an approach geared to reaching consensus and sharing findings, which would have several advantages:

- it would take account of all the factors and all the people who, with different tasks, deal every day with occupational health and safety;
- this involvement of all the people concerned would make for more reliable findings. One example might be the impact identifying research priorities could have on investments and policy-makers’ decisions;
- finally, this would serve as a basis for early forecasts of priorities that are not easily identified.

**References**

Second Hand Smoke (SHS) and the health of bar workers

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In GOHNET Issue 11, Ivan Ivanov wrote about Second Hand Smoke (SHS) as an occupational hazard. He summarized the medical effects, described how exposure is measured, and recommended a total ban on smoking at the workplace (smoke-free workplaces) as the best prevention measure. The article below describes how evaluation of a ban on smoking in enclosed public places in Scotland includes a study of the respiratory health of bar workers, and discusses more recent legislation for smoke-free workplaces in Northern Ireland and England.

Evaluating the legislation on smoke-free public places in Scotland

For many years now, what many smokers thought of as a right to smoke a cigarette while having a drink or a meal has been accompanied by the exposure to SHS of those who work in bars and restaurants. A ban on smoking in public places in the Republic of Ireland, the UK’s nearest neighbour, had proved a great success, with strong public support, excellent compliance, and without the huge adverse economic impact on pubs, bars and restaurants that some in the drinks trade had feared and predicted. Encouraged by this success and after careful preparation and full consultation, on 26 March 2006 the Scottish Parliament introduced a comprehensive legislation to ensure that public places in Scotland became smoke-
free. An implication of this legislation is that, in Scotland, workers in bars and restaurants can now work without exposure to SHS from customers.

The smoke-free legislation in Scotland was accompanied by a very comprehensive programme evaluating its effects (1). The evaluation programme covers a wide range of issues, including impacts on (i) hospital admissions for cardiovascular causes (STOPIT); (ii) SHS levels in bars and the respiratory health of bar workers (BHETSE); (iii) attitudes to smoking, in adults and in young people; (iv) children’s exposure to environmental tobacco smoke (CHETS); and (v) economic impacts of the legislation, in the hospitality trade.

Study of the respiratory health of bar workers before and after the smoke-free legislation came into effect

The Institute of Occupational Medicine (IOM) in Edinburgh, a Collaborating Centre of the WHO Global Occupational Health Network, has a long-standing history and tradition of research on occupational respiratory diseases, in industries such as coal mining (deep mining and opencast), quarrying, brickworks, shale mining, asbestos, ceramic and other mineral fibres, steel-making, PVC dust. The Department of Environmental and Occupational Medicine (DEOM) at the University of Aberdeen, is a highly regarded research centre for a wide range of occupational and environmental topics. There is a long-standing research collaboration between IOM and DEOM, especially in exposure assessment and epidemiology.

Led by DEOM, we formed a multi-disciplinary team together with social scientists from the Medical Research Council Social and Public Health Sciences Unit (SPHSU) in Glasgow, and with economists from the University of Aberdeen; and we developed a proposal to study whether the respiratory health of bar workers improved following the smoke-free legislation. NHS Health Scotland funded the study, BHETSE (Bar-workers’ Health and Environmental Tobacco Smoke Exposure), as part of its overall evaluation programme.

Study design and what we hope to achieve

BHETSE was modelled on studies of the respiratory health of bar workers following a smoking ban in California (2) and in Ireland (3). The basic idea is simple:

(i) monitor the respiratory health of a sample of bar workers both before and after the smoking ban;
(ii) monitor or otherwise estimate their exposure to SHS in the same time periods; and
(iii) controlling for other factors, look for relationships between health and exposure.

Studies of this simple design have shown evidence that the lung function (FEV1, FVC) of bar workers improved after a ban on smoking in public places was introduced both in California and in Ireland (2, 3). Perhaps surprisingly, the improvement was noticeable in smokers as well as non- and ex-smokers.

The Scottish study, BHETSE, has a number of design improvements. The study is based on a sample of bars, located in areas covering a range of socio-economic conditions, in the three largest cities in Scotland (Glasgow, Edinburgh and Aberdeen). It includes an assessment of exposure to SHS in these bars both before and after the legislation, using direct reading instruments to monitor levels of fine particles in air (PM2.5). Information was also collected on factors that may influence exposure to SHS (e.g. size, number of smokers, ventilation, and other sources such as cooking or open fires). Using these factors, an exposure model was developed, to assist in classifying all bars in terms of intensity of exposure. In addition, saliva samples were collected of all participants to determine cotinine levels as another indicator for SHS exposure. Finally, respiratory health of participants was determined using lung function testing and symptoms questionnaire. These measurements have been taken on three occasions – shortly before the legislation came into effect; shortly afterwards; with the third survey one year after the first, to control for seasonal effects in respiratory health.

Preliminary results confirming a marked reduction in fine particle exposure in bars in Scotland (4) are supported by findings of reduced salivary cotinine levels in bar workers (5). We are currently analysing the health data for differences before and after the ban, and for evidence of exposure-response relationships. Results will be presented at a major conference (‘Towards a Smokefree Society’) (http://www.smokefreeconference07.com/index.php) in Edinburgh on September 10-11 2007. The Conference will include a special WHO session, chaired by Dr Haik Nikogosian from the WHO Regional Office in Copenhagen, Denmark,
focusing on what needs to be done to support Eastern European countries to develop smoke-free regulations and tobacco control policies.

**Linking occupational and public health – using workplace studies to evaluate and inform public policy**

Within the overall evaluation framework, the bar workers’ study has a special significance. In the UK, responsibility for environment and for public health has been devolved to the Scottish Parliament and Executive, but workplace health and safety in Scotland remains a responsibility of the Health and Safety Commission (HSC), based in London. There is very good co-operation between the HSC and the Scottish Executive on the interface between the health of workers specifically and wider issues of public health in Scotland. Nevertheless, in introducing the legislation on smoking in public places in Scotland, the Scottish Executive had to make the case primarily on the benefits to public health; benefits to the health of workers were necessarily not highlighted in the same way because they are not a specific responsibility of the Scottish Executive.

It is particularly interesting then that a study of the respiratory health of bar workers should be one key plank of the Scottish Executive’s overall strategy for evaluating the effects of the smoking legislation. It shows, once again, that studies of the health effects of workplace exposures can provide key information about public health effects. This is because workers in some occupations tend to be much more heavily exposed (in terms of duration or intensity of exposure) than the public generally. Also, it is often easier to track the exposures of people at work rather than in the general environment. These factors can make workplace studies attractive in understanding the relationship between public health and environmental exposures, and can compensate for the disadvantages of studying a possibly restricted and relatively healthy group of people, and of extrapolating health effects from high (cumulative) occupational exposures to the lower exposures experienced by the general public.

**And now – Northern Ireland and England also**

The good news for workers’ health and public health is that on 30 April 2007, legislation came into effect in Northern Ireland to prevent smoking in enclosed public places and workplaces. The IOM and University of Aberdeen have carried out a baseline study to investigate the impact of this legislation on exposure to SHS of non-smoking adults who live with smokers. This study involved collecting questionnaires from a representative sample of eligible non-smokers, and obtaining measurements of airborne nicotine levels in the homes of 100 of them. This study will be repeated one year after the implementation of the legislation and results will be compared with the pre-legislation results, to determine whether domestic SHS has changed.

And a ban on smoking in public places in England came into effect on 1 July 2007, following legislation which was strengthened, not weakened, in the course of its passage through Parliament in London. The BHETSE team, again led by DEOM in Aberdeen, has been commissioned to carry out a similar study in four areas of England (London, Liverpool, Lake District and Northeast). The first phase of that study has been completed, with the second phase currently underway. This again is an example of the close links between occupational and public health research and policy. It is also an example of monitoring, evaluation, reporting and accountability around a major public health initiative which includes the protection of workers’ health as a key component.

Perhaps the most important lessons are that scientific knowledge, public opinion, health policy makers and political leaders can combine together to bring about improvements that even a few years ago seemed impossible; and that examples of good practice, whether they are in respect of health protection policy itself or in its evaluation, can be an inspiration for similar good practice elsewhere.

**References**

Meeting report: Sustainable Collaborations for Workers’ Health: meeting the needs and bridging the gaps in the WHO European Region

A Report from the Fifth European Meeting of the WHO Collaborating Centres in Occupational Health, Buxton, United Kingdom, 14–16 March 2007

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The meeting

Sixty delegates from the twenty-six European countries met in Buxton, UK, on 14-16 March 2007, for the Fifth European Network Meeting of WHO Collaborating Centres in Occupational Health. The Network meets at two-yearly intervals, and this year the Health and Safety Laboratory hosted the event. Representatives from the European Commission, the International Labour Organization (ILO), the International Commission on Occupational Health (ICOH), the International Trade Union Confederation (ITUC), and the Association of British Insurers (ABI) also participated. The main conclusions and recommendations of the meeting are summarized below. The meeting was closed with the unanimous adoption of the Buxton Pledge Statement (see box). The next meeting of the Network will be held in Madrid, Spain, in late 2008, hosted by the European Institute of Health and Social Welfare.

Main conclusion and recommendations

1. Coordination and leadership

The European Network of the WHO Collaborating Centres in Occupational Health expressed its satisfaction in the efforts of the WHO Regional Office for Europe to strengthen the activities on occupational health in the European Region in accordance with the WHO Global Plan of Action on Workers’ Health.

The meeting recommended that issues of continuity and sufficient human and financial resources for occupational health be considered by the WHO Regional Office for Europe. This is crucial for meeting the occupational health needs of the countries and for the coordination and leadership to develop occupational health on an equitable basis in all parts of the Region.

2. Roles of National Focal Points and Collaborating Centres

The National Focal Points for Occupational Health in the ministries participated for the first time in the Network meeting. This was seen as a positive stimulus for collaboration at the national level. The activities of the Baltic Sea Network (BSN) on Occupational Health and Safety, and the South East European (SEE) Network on Workers Health, were considered good examples of sub-regional networking and collaboration.

In order to further strengthen the priority position of occupational health – both on national and international agendas – closer collaboration among the National Focal Points for Occupational Health and the Collaborating Centres in Occupational Health was encouraged.

3. Programmes

The WHO, ILO and EU delegates presented their activities in health and safety at work. The WHO has developed the Global Strategy on Occupational Health for All (1996) and the WHO Global Plan of Action 2008-2017. The ILO Global Strategy on Occupational Safety and Health and the new ILO OSH Promotional Framework Convention No. 187, provide guidance to countries for developing occupational safety and health. The EU Strategy on Safety and Health at Work 2007–2012, and the EU Health Strategy, were approved in February 2007. All these policy instruments provide a strong political base for the practical implementation of occupational health and safety systems in the coming years.

The increasing gaps between and within sub-regions and countries were recognized as a big challenge in the WHO European Region. The meeting recommended that higher priority be given to the primary prevention targeted at
the work environment and work organization. The need for further training of all partners, including experts, workers and employers was recognized. The WHO, ILO, and EU, were requested to collaborate closely in the regional implementation of the Global Plan of Action on Workers’ Health through their strategies on health and safety at work in Europe.

4. Funding

Large-scale multi-centre projects with broad impact on European work life require sufficient funding and personnel resources. The funding mechanisms in the European Union were considered as the main resource for future projects.

The European Regional Office will support the Collaborating Centres in their organizing consortia to respond to the calls launched by the European Commission, especially by Research, and Health, and Consumer Protection Directorate-Generals. In addition, the Centres were invited to identify emerging occupational health research and policy issues and to bring these to the attention of the relevant contact points in the Commission, and the national contact points for the Framework Programmes for the development of future calls for proposals. This way, the area of Occupational Health can be recognized as one of the priorities in the forthcoming research Framework Programmes and other funding mechanisms.

5. Dissemination of information

Strong and dynamic information support to both the political decision-makers and other stakeholders in occupational health and safety is the foundation of well-informed and coherent policy decisions on occupational health in society. A reliable information system for workers’ health is sorely needed in countries with economies in transition to raise awareness and raise the profile of workers’ health issues during the health reformation process.

The meeting participants agreed that the Collaborating Centres should be strong advocates for Workers' Health in the Region. All channels and forms of information dissemination, including the participation of experts in public debate regarding the role and impact of workers health in the welfare of the nations, should be utilized in a more systematic way. The WHO Regional Office needs to develop a Pan-European Workers' Health Information System as a long-term solution to the fragmented information services for the policy-makers on workers' health in the region.

6. Multi-centre projects

During the meeting, nine Working Groups discussed future projects to be carried out in the Network. Their topics were:

- Protecting healthcare, construction and agricultural workers from hepatitis B, asbestos and pesticides, respectively;
- Ageing workers, work capacity and workplace health promotion;
- Promoting Basic Occupational Health Services;
- Occupational exposure to carcinogens;
- Pan-European Workers' Health Information System;
- Nanoparticles as a newly emerging hazard;
- Work-related stress as a re-emerging hazard;
- Economic aspects of occupational health and safety; and
- Narrowing workers' health inequities within and between countries.

The Regional Office was requested to support the Working Groups for further development of proposals for possible funding by voluntary donors. The work and conclusions of the Working Groups were considered to contribute to the regional implementation of the Global Plan of Action on Workers’ Health 2008-2017 in the European Region.
BUXTON PLEDGE STATEMENT

The 5th Meeting of the European Network of the WHO Collaborating Centres for Occupational Health met in Buxton, United Kingdom 14 – 16 March 2007, with 27 Collaborating Centres and 25 National Focal Points represented.

The purpose of the meeting was to review progress made in implementing the European Collaborating Centres’ programmes in member countries and to discuss in detail the next steps to develop an appropriate plan of support and implementation of the WHO Global Plan of Action for Workers’ Health, 2008-2017, in the European region.

After extensive discussions concerning the opportunities and challenges ahead for the WHO Global Plan, the WHO Collaborating Centres for Occupational Health offer the following pledges:

• We commit to support the development of the Global Plan of Action in the European region, and to help implement and sustain further networking, research and practical training activities, as well as promote best practice in occupational health for member countries.

• We will provide guidance for the implementation of the Global Plan of Action in the European region, taking into consideration specific regional needs and circumstances, including countries in transition and small-scale enterprises.

• We will fully support the WHO Regional Office to ensure that occupational health and safety is integral to appropriate programmes and policies developed by WHO and other international organizations.

In making these pledges, we would also ask the WHO Regional Office for Europe to recognize the need for sufficient full staff resources to lead and coordinate the work needed to achieve the objectives of the Global Plan of Action in the European region.
Remembering Professor Marco Maroni (1949-2006)

At the 5th European meeting of the WHO Collaborating Centres in Occupational Health, Buxton, United Kingdom, 14-16 March 2007, a session was dedicated to remember our colleague and friend Marco Maroni (see GOHNET no. 11 for obituary).

Professor Jorma Rantanen, President of ICOH, introduced the session and the meeting participants held one minute silence in memory of Marco Maroni, who was a scholar, educator, colleague, friend, and a great personality.

Dr Roberto Bertollini, Director, WHO Rome Office, addressed the meeting in remembrance of Professor Maroni, whose death was a tremendous loss both as a friend and as a public health expert. His role in the WHO in Environmental and Occupational Health had been very important and Roberto Bertollini proposed for the European Network to pay tribute to Marco Maroni’s work in an appropriate manner. Several options were discussed at the meeting.

It was decided that a Marco Maroni Memorial Lecture should be given at meetings of the European Collaborating Centre Network every two years, as well as at the Global Collaborating Centre Network meetings, which take place every three years, given Marco Maroni’s strong voice for the importance of occupational health in Europe and globally.

Professor Angelo Moretto, Director of the International Centre for Pesticides, and the successor of Marco Maroni, offered his availability and responsibility for practical arrangements of the memorial lectures, as well as institutional financial support. The meeting participants appreciate the generosity of this proposal and accepted.

The next European meeting will be held in late 2008 in Madrid, Spain, and the next global meeting will take place from 18-21 March 2009 in Cape Town, South Africa.

Announcements

Moving from Occupational Health to Communicable Diseases…

Good luck Kati!

The Occupational Health Team wishes farewell and good luck to our colleague and friend Kati Bozsoki who has been working with the Occupational Health Team for four years. Kati will join the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) in the Communicable Diseases Department.

Kati ensured the administrative functioning of our unit and also co-edited the GOHNET Newsletter.
# Upcoming Conferences

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<tr>
<td>12-14 Nov 2008</td>
<td>8th Conference of the European Academy on Occupational Health Psychology, Valencia, Spain</td>
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<tr>
<td>18-21 March 2009</td>
<td>The 8th Global Meeting of the WHO Collaborating Centres in Occupational Health in the Spier Estate, Cape Town, South Africa</td>
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GOHNET Newsletter - Contributors’ Information

General
GOHNET is a vehicle for information distribution and communication for all who are involved, active and interested in the subject areas of occupational health.

The Editor reserves the right to edit all copy published.

Contributors of all material offered for publication are requested to provide full names, titles, Programmes or Departments, Institute names, and e-mail addresses.

Why write for GOHNET?
All experts have a professional responsibility to disseminate their views and knowledge. The Network of occupational health experts is constantly growing, and the Newsletter can therefore help you to reach a large audience in the occupational health community. This can help you to make new contacts, exchange views and expertise.

What kinds of article do we publish in GOHNET?
Our diverse audience means that articles should be not only informative but also engaging and accessible for the non-specialist. We do not accept articles based on data that has not been accepted for publication following peer review. Such articles are more appropriate for submission to a journal. Articles may provide a broad overview of a particular area; discuss theory; add a critical commentary on recent articles within a GOHNET Newsletter; or debate applied, practical and professional issues.

You can view examples of issued Newsletters, which are available at http://www.who.int/occupational_health

How should I go about writing my article?
Articles should be written as for an intelligent, educated but non-specialist audience, as the majority of readers will not necessarily be familiar with the topic of any individual article. Articles need to be written in clear, non-technical language, and aim to engage the interest of the membership at large. Sexist, racist and other discriminatory or devaluing language should be avoided. Articles can be of any length from 800 up to a maximum of 2000 words (excluding references), double spaced, with complete references and a precise word count (excluding references). Relevant high-quality scanned image materials is also welcome.

How do I submit my work?
Send your article as an attachment to ochmail@who.int, or post one copy to:

Evelyn Kortum, Editor of GOHNET, World Health Organization, C/o SDE/PHE/OEH, office L.125, 20 Avenue Appia, 1211 Geneva 27, Switzerland

Counterpoint articles
If you have a view on an article we have published, your best route is an e-mail or a letter to the Editor. If you wish to add a substantial amount of evidence on a significantly different angle, we welcome commentary pieces of up to 1000 words, submitted within four months of the original piece.

Conference or workshop reports
Brief reports on conferences or workshops of interest to a wider audience (any length up to 700 words) should be sent, within a month of the event, to the Editor. Focus on what is new and of general interest, rather than including a lot of background information about the conference.

Reference style
Below is an example of the reference style to be used:


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