



Eighth Network Meeting of the WHO Collaborating Centres in Occupational Health 19-23 October 2009 WHO Headquarters, Geneva, Switzerland

Introduction

The Eighth Meeting of the Network of the WHO Collaborating Centres in Occupational Health, organized by WHO Occupational Health, Department of Public Health and Environment, was held on 19-23 October 2009 in WHO Headquarters, Geneva Switzerland. The 170 participants from 42 countries in the meeting represented:

- 107 from Collaborating Centres (CCs) and Nongovernmental Organizations (NGOs)
- 14 from WHO Headquarters
- 6 WHO Regional representatives
- 10 from the International Labour Organization (ILO)
- 33 other institutions and associations in related fields of workplace health & safety

A total of 57 of the 68CCs (84%) were represented, including 7 institutes in the process of designation.

Objectives of the meeting

1. Discuss progress and needs of the 2009-2012 Global Workplan
2. Discuss roles of all parties in achieving the Workplan objectives by 2012
3. Discuss collaboration with CC Network partners; priorities, grouped CC projects, and other aspects of implementing the projects in the 2009-2012 Workplan
4. Clearly define the deliverables/products to be produced by 2012
5. Obtain CC commitments for projects to fill gaps, where still required.

Materials for the meeting

Materials prepared for the meeting, this report, Working Group and Workshop reports can be found at http://www.who.int/occupational_health/network/collaborating_centres_meeting/en/index.html

All PowerPoint presentations can be found at

<http://www.cdc.gov/niosh/programs/global/whoccmeeing09.html>

Monday 19 October 2009

1. Opening

Dr. Carlos Dora, Acting Coordinator, Interventions for Healthy Environments, WHO, opened the meeting by warmly welcoming the participants and reviewing the scope and objectives of the meeting. He summarized the agenda for the week, and obtained approval from the participants for the scope and agenda, as well as for the election of Joan Burton, Canada, as Rapporteur for the meeting. He announced a change in the program due to the sudden illness of Dr. Eusebio Rial Gonzales, who had been scheduled to deliver the Marco Maroni Memorial Address. Dr. Timo Leino had kindly agreed to speak in his place. The Agenda of the Meeting is attached as Annex 1 and the list of participants as Annex 2.

2. Welcome from ILO

Dr. Igor Fedotov, Coordinator, Occupational and Environmental Health, ILO Programme on Safety and Health at Work and the Environment (SafeWork) extended the ILO's best wishes to the Global Network of WHO CCs for the success of the gathering. He noted that the ILO and WHO are the only two specialized agencies in the United Nations system with the mandate to protect and promote workers' health. They have a long history of working together to promote a multidisciplinary and inter-sectoral approach to occupational health. He noted that WHO and ILO

approaches are convergent, complementary and mutually supportive. He informed participants that while the WHO CCs were meeting in Stresa in 2006, the ILO adopted a new ILO Promotional Framework for Occupational Safety and Health (OSH) Convention No. 187, which laid the basis for a systematic approach towards OSH. He praised the work of the WHO CCs for occupational health as a mechanism for creating favourable conditions for the ratification of ILO conventions, and for promoting the ILO Decent Work Agenda. He closed by emphasizing the desire of ILO to continue to work closely in collaboration with the WHO and the work of the CCs in occupational health.

3. Welcome by Global CC Network Chair

Dr. Max Lum, Associate Director for Communication and Global Collaborations, US National Institute for Occupational Safety and Health (NIOSH), addressed the gathering on behalf of the Chair of the Network, Dr. John Howard, Director of NIOSH, who was unable to attend. He reviewed the purpose of the meeting, stressing that a key reason for gathering is to network with people from other CCs, to think about projects that could work together, and look for synergies. He reminded participants that the World Health Assembly endorsed Resolution 60.26, the Global Plan of Action for Workers' Health, in May 2007¹. Our Network 2009-2012 Workplan projects should provide assistance to the countries to meet their commitments within the GPA. The heart of this 8th Global Network Meeting is the focused effort of the 14 Working Groups to assess deliverables anticipated by 2012, and to identify critical gaps that we need to fill by 2012. He urged attendees to participate fully in the planned working groups during the week. He thanked Dr. Evelyn Kortum, WHO, and Dr. Marilyn Fingerhut, NIOSH, for their hard work in organizing the meeting,

4. Welcome from WHO

Dr. Maria Neira, Director, Department of Public Health and Environment, WHO, welcomed the participants to WHO Headquarters, and expressed her delight in having the CCs meeting at this location. She recognized the energy and enthusiasm in the room, and noted that the inspiration created by meeting at venues situated on water in recent years (Iguaçu Falls, Lago Maggiore, and now Lac Léman) will help to create inspirational outcomes to help us meet the challenges of the future. She reminded participants that WHO's power is linked to the ability to call on and convince the best scientists and groups in the world to promote and protect worker health. She specifically thanked the ILO, the Global Plan of Action on Workers' Health (GPA) Objective Managers, the WHO Regional Office representatives, and WHO staff for their hard work and commitment. She noted the challenges of the financial crisis, the food crisis and climate change, which make it even more important for all to use resources efficiently, and to influence those with power. She closed by emphasizing that the power of the Network will cause the achievement of the GPA – "Yes we CAN!"

5. Greetings from the NGOs

Dr. Kazutaka Kogi, President, International Commission on Occupational Health (ICOH), brought greetings from ICOH. He was pleased to note the outstanding progress made toward implementing the GPA, and the fact that so many ICOH members are involved in this work. He stressed the need to emphasize health and safety in the informal sector and developing nations during this economic crisis, and to learn from local good practice. There are good examples of group occupational health service provision in small enterprises and rural settings, with checkpoints for identifying needs and priorities. He confirmed that ICOH will continue to promote basic occupational health services (BOHS) with the WHO Network, and is looking for practical tools to address this issue. He concluded by inviting the Network to hold their 9th meeting in conjunction with the next ICOH meeting in Monterrey, Mexico, in March 2012.

Dr. Danilo Cottica, President International Occupational Hygiene Association (IOHA), spoke about IOHA's role in promoting the field of occupational hygiene globally. He noted that IOHA has been recognized as an official Non-Governmental Association by both WHO and ILO, and represents

¹ WHA Resolution 60.26 *Global Plan of Action for Workers' Health*, May 2007
http://apps.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf

25,000 occupational hygienists in 24 countries. He invited participants to attend the next IOHA conference in Rome in 2010.

Dr. Klaus Zink, Vice-President of the International Ergonomics Association (IEA), brought greetings from the newly elected Board of IEA, which represents 50 member associations around the world. He noted that the Board wishes to extend relationships internationally, and increase networking with international organizations such as WHO and ILO. They also want to focus on building capacities in developing countries. He mentioned priorities for IEA such as clarifying the business case and benefits for health and safety, and the need for assistance in high risk industries such as agriculture. He wished the participants a successful meeting.

6. The Marco Maroni Memorial Lecture

Dr. Roberto Bertolini spoke briefly about Dr. Marco Maroni, who had been a close friend. He noted that Dr. Maroni would be very pleased to see the turnout for this meeting. Dr. Bertolini had known Dr. Maroni since 1982, and sorely missed the conversations they used to have about dreams and the future of workplace health, many of which have come true over the years.

Dr. Timo Leino, Finnish Institute for Occupational Health (FIOH), graciously stepped in to give the Marco Maroni Memorial lecture in place of Dr. Eusebio Rial Gonzales, who had become ill. His topic was, *“Who Takes Care of Workers’ Health? International Strategies.”* He began by outlining the problem, from the perspective of occupational diseases/injuries, work-related diseases, and public health, and provided compelling data about the scope of the problem. He noted the overlap but inconsistencies between the needs of clients, the demands of clients, and the supply of experts. He then discussed the issue of priorities – should the focus be on the working population, or those in paid jobs? Primary prevention or treatment of diseases? Work ability or diagnosis of disease? The less fortunate, or those with higher social status? He then examined various strategic approaches of the ILO, WHO and the European Commission, and concluded that a dual focus on public health and a high-risk approach is required. He concluded with a list of what is still needed to build up a good occupational health system.

7. Structure of the Network: Advisory Committee Introduction and Functions

Dr. Max Lum explained to participants that there are approximately 200 CC projects in the 2009-2012 Workplan, organized into 14 Priority Areas under the 5 GPA Objectives, as shown on the Priorities sheet (Annex 3). During this Network Meeting, a Working Group is scheduled for each of the 14 Priority Areas.

He directed participants to the other materials provided and explained the Country Grid, which shows the projects being carried out by each Collaborating Centre, and the Summary Table, in which projects are categorized into priorities. He then discussed the Draft Guidebook that has been developed to explain the history, structure and functions of the Global Network for WHO CCs in Occupational Health². He specifically described the Terms of Reference for the Advisory Committee and other groups that are outlined in the Draft Guidebook. He asked participants to read them carefully and provide input before the end of the meeting, with a view towards achieving consensus approval on them at that time. He noted that this Network is looked upon as a model Network by WHO, and this next level of formality will assist effective communication and networking and provide clear information for institutions interested in becoming a Collaborating Centre in Occupational Health.

8. Collaborating Centres: An Institutional Overview

Mr. Matias Tuler, Technical Officer, Knowledge Management Systems, WHO, confirmed that the Network of CCs in Occupational Health is indeed viewed as a model Network by WHO. He discussed what the Collaborating Centres (CCs) are, how they work with WHO and some legal

² Guidebook for the WHO Collaborating Centres in Occupational Health
http://www.who.int/occupational_health/draft_guidebook_for_CCs.pdf



aspects. He noted that the WHO constitution stated WHO must not create expert organizations, but should collaborate with the best that are already in existence. Most CCs are universities, research institutes, large hospitals, academies or research labs, often just one part of a larger organization. Designation is a time-limited (4 year) contract with very concrete objectives. There has been a decrease in the number of WHO CCs since 2000, when WHO decided to focus on better collaboration with fewer centres. Becoming a CC is not a designation of excellence or an award – rather it is a way of saying, “They work with us” – to implement the WHO agenda. There is also an attempt to encourage CCs in developed nations to help develop capacity in CCs in developing countries. The designation is independent from any kind of financial support, as the CCs are expected to mobilize their own resources. He stressed the importance of avoiding any conflicts of interest, by avoiding any funding that could be linked to tobacco, weapons, asbestos, or any entity whose purpose is incompatible with that of WHO. He described the new electronic system for designation or redesignation, which has been in place since 2007. He went on to describe the way that CC work has evolved from primarily bilateral work with WHO to a multistakeholder approach with other CCs as well as WHO. This leads to better alignment of projects, but also challenges of communication and coordination. He reminded participants that there is a searchable database of CCs in occupational health at <http://www.who.int/whocc>

Discussion:

In response to a questions, the following points were made:

- there is intercollaboration between WHO CC Networks, e.g., Nursing Network and Occupational Health Network collaborate on HIV and reproduction
- the Responsible Officer could help put CCs in touch with other CCs, or with other relevant institutions and individuals outside the CC network.
- while CCs must raise their own funds, WHO can help identify sources of funds, help complete applications, and support applications for funds.

Concern was expressed that the AFRO Regional Advisor was not in attendance at this meeting, and about the level of support available from Brazzaville, the WHO Regional Office. Mr. Tuler replied that there is a wish in WHO for more African CCs. He noted that not every Regional Office has a person working specifically on occupational health, so the Regional Advisor for this network may also be supporting many other networks, and be overloaded. It was noted that the Regional Advisor does not have to be located in the Region being supported, and it may be appropriate to request support from WHO Headquarters. Dr. Carlos Dora also noted that with Environmental Health, the Regional Advisors represent all of Africa – AFRO and EMRO combined - so there are different models of support that could be explored.

9. GPA Objectives for 2009 – 2012: Current Status, Gaps, Focus

Each GPA Objective Manager reported on the current status of the 2009-2012 Workplan projects contributing substantially to the Priority Areas of the GPA Objective. The outputs anticipated by 2012 were provided and some critical gaps were identified. The purpose of these presentations was to set the stage for the Working Groups to follow.

GPA Objective #1: Devise and implement policy instruments on workers’ health. *Claudina Nogueira, National Institute for Occupational Health, Johannesburg*

Priority 1.1 (11 projects): To develop/update national profiles on workers’ health and provide evidence base for development, implementation and evaluation of national action plans for workers’ health, including vulnerable groups.

Identified Outputs

- Comparative analysis of national strategies, action plans and national profiles

Priority 1.2 (18 projects): To develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases.

Identified Outputs:



- Evaluation of national programmes
- Packages of essential intervention and good practices – dust control, exposure and diagnostic criteria for pneumoconiosis
- Capacity in diagnosis and treatment
- Best lab practices for silica

Priority 1.3 (11 projects): To develop and disseminate evidence-based tools and raise awareness of asbestos-related diseases

Identified Outputs:

- Estimates of the burden of disease
- Review of good practices – asbestos substitution, prevention of exposure and health surveillance of exposed workers

Priority 1.4 (23 projects): To conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers with special emphasis on Hepatitis B immunization

Identified Outputs:

- Tools and guidance documents
- Training on national programmes
- Assistance to countries for implementation and evaluation of programmes
- Needle stick prevention tools
- Musculoskeletal / ergonomics/ stress/ work organization guidance
- Risk assessment tools

Some identified gaps in GPA #1 Priority Areas:

- Global list of workers' health indicators
- Systematic review of national policies, action plans and profiles in workers' health
- Sharing of successful outcomes across regions
- Review of effective preventive measures for primary prevention of Asbestos Related Diseases (ARDs) and for tertiary prevention of ARDs (treatment and compensation)
- Hepatitis B immunization campaigns for health care workers
- A global framework for occupational health of health care workers that links the hazard specific projects into a comprehensive approach

GPA Objective #2: Protect and promote health at the workplace.

Dr. Stavroula Leka and Aditya Jain, University of Nottingham, UK

Priority 2.1 (28 projects): To develop practical toolkits for the assessment and management of OH risks (focus: chemical, physical, biological, psychosocial risks, musculoskeletal disorders)

Identified Outputs: Tools, inventory, framework document, mapping of use and types of tools, evaluation, definition of common criteria of toolkits

Priority 2.2 (21 projects): Healthy Workplace programmes and guidance to inform country frameworks

Identified Outputs: Review of effectiveness of existing programmes for healthy workplaces, tools for creating healthy workplaces including a health-promoting culture and OH&S principles

Priority 2.3 (2 projects): To develop toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, and influenza, emphasizing vulnerable groups, in particular migrant workers

Identified Outputs: Tools, inventory, framework, mapping of use and types of tools, evaluation, and definition of toolkits



Expected Outputs by 2012 for all Priorities:

- Web-based toolkits
- Inclusion of control banding (simple guidance to assess and control exposures) principles and approaches in standards and legislation of range of countries
- Networks of stakeholder experts
- Training packages for toolkits
- Framework development
- Guidance development

Critical Gaps Identified for all Priorities:

- Implementation and evaluation and modification of toolkits for use in local situations
- Translation of materials
- Cost-effectiveness of practical tools
- Further network development
- Piloting
- Evaluation methods

GPA Objective #3: Improve the performance and access to occupational health services. *Dr. Timo Leino, Finnish Institute of Occupational Health and Leslie Nickels, University of Illinois, Chicago*

Priority 3.1 (16 projects): To develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources

Identified Outputs: Policies and programs on OH, good practices and demonstration projects for organization and delivery of OH services, development and evaluation of service delivery would draw on international knowledge networks of service providers and the WHO web-based OH capacity development facility. Specifically, by 2012:

- WHO Global report on "Occupational Health in Primary Health Care"
- National, regional and sectoral OSH profiles and roundtables
- Programmes for establishing and strengthening occupational health services
- Practical Basic Occupational Health Services (BOHS) delivery models and published practices distributed
- Programs of grass-root level training of occupational health and safety
- Programs of post-graduate training
- Train-the-Trainer Programs
- WHO electronic resource library for
 - Basic Occupational Health Services (BOHS) Guidelines and a Manual
 - BOHS field measurement kit for priority exposures
 - Book of good practices and solutions for specific problems

Priority 3.2 (41 projects): To adapt and disseminate curricula, training materials, and training for international capacity building in OH, to make meaningful structures and functions.

Identified Outputs:

- Core group of experts (technical, educational and content) to help move forward on developing capacity
- Development of a electronic resource for increasing capacity in OH which will include a learning repository, expert consultancy, and information access.
- Creation of platform for accessing information to build capacity for OH
- Inventory of learning materials in OH implemented in N number of countries
- Network of educators and technical advisors on BOSH

Critical Gaps:

- Home for platform both technical and professional users
- Project proposal(s) to support structure and functions including partners



- Necessary resources to run program(s)
- Identifying target audiences
- Models that are easy to use for local conditions

GPA Objective #4: Provide and communicate evidence for action and practice.
Dr. Jo Harris-Roberts and Ed Robinson, Health and Safety Laboratory, UK

Priority 4.1 (8 projects): To encourage practical research on emerging issues, including nano-materials and climate change

Identified Outputs: Research reports and communication strategies with low- and medium income countries on interventions to ensure workers' health.

Identified Gaps:

- Best practices for working with nanomaterials (exposure limits, monitoring, engineering controls, PPE)
- Health surveillance protocols and exposure matrix
- Information portals (dissemination)
- Guidance for handling nanomaterials in laboratories
- In vitro toxicology tests for nanomaterials
- Guidance for worker risks due to climate change
 - mitigation of climate change: limit overall damage (including sustainable usage of waste)
 - adaptation to climate change to minimize negative impact
 - heat stress
 - extreme weather events (affect transport, telecommunications, farming/growing seasons)
 - vector-borne diseases

Priority 4.2 (41 projects): To further develop the global research agenda for workers' health

Identified Output: Research report matrix to identify relevant gaps in research. Specifically, by 2012:

- Understand key current and future research areas - Strategy to identify research areas and 'gaps' – Do we know what we don't know?
- Identify current areas for potential knowledge sharing and collaboration opportunities
- Identify main gaps in research

GPA Objective #5: To incorporate workers' health into non-health policies and projects. ***Dr. Wendy Macdonald LaTrobe University, Australia***

Priority 5.1 (3 projects): To collate and conduct cost-benefit studies to clarify the economic benefits of workers' health.

Identified outputs:

- Quantification of number of DALYs due to occupational diseases and costs avoided
- ECOSH Consortium workshops and reports
- Framework development

Identified Gaps

- Expertise of OSH practitioners and knowledge of key decision makers.
- Inadequate research evidence

Priority 5.2 (4 projects): To formulate recommendations to manage risks from effects of globalization on workers' health

Identified outputs:

- Global situation analysis and strategy development document



- Analyses of effects of global economic integration on OHS in China
- Report on changing South American employment patterns and health impacts
- Report on OSH status of migrant workers in the Netherlands

Identified Gaps:

- Need wider regional coverage, and coverage of wider range of hazards
- Need greater focus on specific target groups and intervention strategies

Priority 5.3 (a) (17 projects): To formulate and implement toolkits for the assessment and management of OSH hazards in high risk industry sectors.

Identified outputs:

- *Agriculture:* Guidance for forestry workers, banana production, floriculture, exposure to pesticides, “ergonomics checkpoints” (for developing countries)
- *Transport:* Use of telemedicine to reduce health risks of seafarers; Road safety toolkits and international initiatives on Occupational Road Safety
- *Construction:* Assessment of exposure to carcinogenic compounds; Program to assess and reduce risk of musculoskeletal pain
- *Mining:* Improving mining safety and health in Colombian mines

Identified Gaps

- More focus in individual sectors – especially mining and construction
- More comprehensive coverage of hazards within each sector
- Better coverage of regions – e.g. Africa

Priority 5.3 (b) (6 projects): To formulate and implement toolkits for the assessment and management of OSH hazards for vulnerable worker groups.

Identified outputs:

- Young Workers Curriculum in English and Spanish
- Development and dissemination of child labour guidance
- Training programs for older workers and precariously employed women
- Electronic repository of OSH resources and risk control strategies targeting vulnerable workers
- Training program for Roma waste scavengers to provide for health and safety and to earn income in Serbia.
- Information materials and training directed to women who work in precarious jobs in agriculture and other sectors, to alert them to the hazards and suggest solutions, with particular attention to mental health risks

Identified Gaps:

- More projects for all vulnerable groups

Discussion

Comments and answers to questions on the following issues were raised:

- The is good breadth and depth of the projects within the 2009-1012 Workplan.
- Regarding overlaps, the specific projects may be working on different aspects or different technical levels. Some may be practical applications, some at systems level, and it is good to link in as many ways as possible.
- marketing and communications of all this good work needs attention, so that the maximum number of people can take advantage of it. It's not enough to simply put them on the website.
- Adding occupational health causes in ICD11 (International Classification of Diseases, 11th revision) be added as a new priority.



10. Wrap-up of the Day

The Chair for this session, Dr. Sin Eng Chia summarized the material presented during the day. But he noted that without the contributions of the people in the room over the next few days, nothing will materialize, and workers' health will not be protected. He urged participants to get involved with projects. In referring to the large amount of paper materials provided to attendees, he stated, "So many trees were sacrificed for this binder – don't let them die in vain!" He noted that "We owe it not just for ourselves but also for generations to come. We look forward to your contributions this week and in the future."

Tuesday 20 October 2009

1. Role of the CCs in Implementing the GPA in the Countries

Dr. Ivan Ivanov, WHO, reported the results of an all-country survey done in 2008-2009 to determine the status of implementation of the GPA globally. The results show that the majority of respondents state that countries have some form of national policy framework and/ or a national plan of action. The priorities for national action were on respiratory diseases and musculoskeletal disorders. About half of the responding countries have taken regulatory action on chrysotile asbestos and have established national programmes on occupational health & safety for health care workers.

A number of countries have taken action to protect and promote health at the workplace, such as healthy workplaces programmes, banning tobacco smoking in indoor workplaces and including workplace components in their programmes on health promotion, injuries, HIV/AIDS, and non-communicable diseases.

Over a third of responding countries state that at least one third of their workforce are covered by occupational health services. More than two thirds have incorporated the development of occupational health services into their national health strategies.

Information on workers' health appears to be available in most countries. However, awareness remains disturbingly low among employers and health practitioners. Workers' health has been incorporated into other non-health policies in varying degrees in countries, mostly in to chemicals management emergency preparedness and response and employment policies.

Discussion

Comments and questions related to the following were expressed:

- A third of countries did not respond to the survey, so results are too "rosy" as low income countries are under-represented
- If ministries of health completed the surveys in isolation, the results may not be entirely accurate. They were encouraged to fill it out in consultation with other ministries
- India and china did complete the survey, so a large percentage of the global workforce would be covered, but the informal sector would not be included.
- Some countries that do not have any kind of occupational health policies may not have been willing to complete the survey
- Soing television media campaigns to increase awareness or worker health issues is effective.

2. The Role of the CCs in Implementing the GPA in the Regions

Dr. Maritza Tennessee, WHO Regional Advisor for the Americas, talked about the work of the CCs in addressing workers' health in AMRO. Activities are being carried out by 15 CCs, and contribute to all 5 GPA Objectives as follows:

GPA 1: Regional initiatives to eliminate silicosis and asbestos-related diseases; and protecting the health and safety of healthcare workers through training, vaccination of healthcare workers, an online course based in Brazil, and development of surveillance systems.

GPA 2: Healthy workplace initiatives within PAHO and other workplaces; HIV and influenza prevention in the workplace

GPA 3: Regional framework on essential occupational health services incorporated into primary healthcare; capacity building for OHS professionals

GPA 4: CCOHS and SESI online information portals, best practices for nanotechnology, and determining regional, national and local profiles and indicators

GPA 5: Initiatives related to road safety, unpaid workers, etc.

Dr. Rokho Kim, WHO Regional Advisor for Europe, presented on the work of the CCs in implementing the GPA in EURO. The European region comprises 53 member states with 33 Collaborating Centres (including 8 in the process of designation). There is a complex multi-level process of GPA implementation in Europe. The European CCs meet every two years, and at their last meeting in Madrid in October 2008 they developed and approved a *European Work Plan for Implementation of the Global Plan of Action on Workers' Health* for the period of 2009-2012. There is also a network of European WHO Focal Points that work closely with the Ministries of Health in countries, and meet annually. There are additional regional and sub-regional networks that are coordinated by various CCs. For example, there is a Baltic Seas Network (BSN) that holds annual conferences facilitated by the Finnish Institute of Occupational Health (FIOH); and a South-East Europe (SEE) Network coordinated by MIOH. Some key multi-centre priorities for the European CCs are:

- Mental health at the workplace
- Prevention of workplace injuries among young workers
- including occupational causes in ICD-11 (GPA objective 4)
- Implications of economic recession for health and health systems
- Streamlining EU directives on work-related musculoskeletal disorders
- WHO–ILO joint template for national OSH profiles

Dr. Kim noted one challenge for this region is the very large gap between Western and Eastern countries with respect to BOHS coverage – less than 10% versus 90% in Eastern and Western countries respectively.

Dr. Said Arnaout, WHO Regional Advisory for the Eastern Mediterranean, presented on the work of the CCs in implementing the GPA in EMRO. This unique region straddles two continents, and consists of 22 countries with 3 CCs (2 in Egypt, 1 in Tunisia). There are extremely large disparities in Gross Domestic Product (GDP) among countries, although there are many cultural similarities. Informal and non-local immigrant workers make up the bulk of the workforce in many countries. There are challenges with lack of communication and cooperation between and among different ministries, weak legislation in some countries and a lack of capacity/expertise. Nevertheless, there are encouraging signs of activities as a number of conferences and meetings on occupational health have been held in recent years in Syria (2003), Egypt (2005), and Bahrain (2008). EMRO has developed a Regional Framework for Implementing the GPA and is following up with all countries. There is cooperation between the ILO and the Arab Labour Organization (ALO) and a joint plan is in place. The Gulf Cooperation Council (GCC) has established a Gulf Committee for Occupational Health, which has developed and convinced the GCC to adopt a Gulf Strategy on OH. Many countries have excellent programs or initiatives, such as Oman's healthy workplace initiative. A specific goal for the Region is to make the WHO Regional Office a healthy workplace.

Dr. Hisashi Ogawa, WHO Regional Advisor for the Western Pacific, presented on the work of the CCs in implementing the GPA in WPRO. This Region includes 37 countries and 13 CCs in 8 countries. There is great cooperation in the region between WHO and ILO, with joint regional meetings on occupational health and safety every two years. In addition, the WHO CCs meet regionally every year. They developed a Regional Framework for Action for Occupational Health: 2006-2010 before the GPA was published. The Objectives of the Regional Framework are grouped into three areas:

- Environment - To create physical and socio-political environments that support worker health and safety
- Work - To monitor and manage risks effectively; To promote safe work practices

- Worker - To reduce workers' vulnerability to poor health and work-related risks
- The Framework includes recommended actions by countries, WHO collaborating centres and other relevant institutions.

Dr. Salma Burton, WHO Regional Advisor for South-East Asia, presented on the work of the CCs in implementing the GPA in SEARO. The Region has the largest population of all the regions, with only 11 countries, and a total of 3 CCs in Occupational Health (India-2 and Thailand-1). She noted that the picture in this Region is not very rosy, with less than 5-10% of workers covered by Basic Occupational Health Services (BOHS), as more than 80% of workers are in the informal sector. Some of the difficulties in the Region are that the terms of reference of the CCs are not aligned with the GPA; there is little cooperation or networking among the CCs, and while there is good capacity within the CCs, it is very low in the region as a whole. Climate change is being recognized as a very important occupational issue, which all three CCs will be working on next year.

WHO Regional Office for Africa: The Regional Advisor for Africa was unfortunately unable to attend the CC meeting, so there was no presentation from that Region.

3. Working Groups and Report Backs

Dr. Leslie Nickels explained the process for the Working Group breakout sessions to take place Tuesday morning and afternoon and on Wednesday morning. Over the course the next day and a half, Working Groups would be held for each of the 14 Priority Areas (see Annex 3). The purpose of these breakout sessions was to provide the following information:

1. Examples of key 2012 outputs already achieved or expected to be achieved by the existing projects in the Priority area.
2. Examples of possible critical output gaps that need filling by 2012
3. Can the CCs carry out project to achieve these by 2012? Which CCs will do the projects? If not, how will the deliverables be achieved?
4. Beyond the anticipated 2012 outputs, what are the critical gaps to be filled by 2016 that we should focus on in the next Workplan 2012-2016?
5. What do we want WHO to report to the World Health Assembly in 2013 and 2017 as the key achievements of our efforts for this GPA Priority?
6. Gaps and barriers: for each gap, what are the barriers and how do we get over these?
7. How do we overcome the barriers (working methods, communication patterns, contacts, partnerships, ministries)?
8. How can we work together better to support dissemination and adoption of programmes/activities?
9. What are some ways WHO headquarters, regional offices and/or the GPA managers can be a partner with you for successfully implementing your projects?
10. What do we need to do to monitor and evaluate progress of CCs on deliverables for this Priority?

Each Working Group reported back to the plenary as a whole in one of three plenary sessions held on Tuesday and Wednesday of the Meeting. The detailed PowerPoint report-back presentations can be found at <http://www.cdc.gov/niosh/programs/global/whoccmeeing09.html> Summaries of the key results can be found in Annex 4, where the concluding presentations of the GPA Managers are located.

Wednesday Afternoon 21 October 2009 Joint Meeting of the WHO Collaborating Centres and the ILO CIS Information Centres

Dr. Ho Sweet Far, Ministry of Manpower, Singapore, was pleased to introduce the first joint meeting of WHO Collaborating Centres and ILO CIS Information Centres. She noted that WHO's strength is in the collection and dissemination of primary information and practical guidance, while ILO's strength is in knowledge management. The two are complementary.



1. WHO Network of Collaborating Centres for Occupational Health: Roles, Ways of Working, Workplan.

Dr. Evelyn Kortum, WHO, described the network of WHO Collaborating Centres in Occupational Health, which now number 68. She outlined their many functions, and their methods of collaborating with each other and with WHO. She mentioned the 14 Priority Areas, and the ways that CCs are contributing to the many projects that are gathered under these areas. Examples of successful products were illustrated, such as the Geolibary (www.geolibary.org), various toolkits, and the Protecting Workers' Health series of guidance documents. She concluded by showing the complementary roles of WHO CCs and ILO CIS Information Centres in the areas of information distribution, guidance development, technology application, and capacity building.

2. ILO Network of Safety and Health Information Centres: Roles, Ways of Working, Major Initiatives.

Dr. Gabor Sandi, ILO discussed the CIS Information Centres, the information arm of SafeWork, the ILO unit responsible for safety and health matters. CIS was set up 50 years ago, with 11 contributing CIS Information Centres. This network of CIS Centres has now grown to over 150, which operate at regional, national or Collaborating Centre levels. They serve as conduits for Occupational Safety and Health (OSH) information to flow from ILO to their respective countries, and from their countries to ILO; in addition they act as focal points in their areas for OSH information services. Dr. Sandi reported that CIS centres meet annually to reinforce their cooperation. He noted that one highly useful outgrowth of the Centres network is the online *CIS Newsletter*, to which anyone can subscribe for free. He wished the participants a successful meeting and expressed hope that this joint meeting will result in an intensification of collaboration between the WHO and ILO networks of centres.

3. The Experience of Individual Centres

Short presentations were invited from 6 Centres, to discuss the benefits of networking, opportunities for WHO and ILO networks to work together, and specific success stories.

Dr. PK Abeytunga, Canadian Centre for Occupational Health and Safety (CCOHS) Canada, a WHO CC and ILO CIS centre: Technology is a major leveling factor between nations, and CCOHS has developed and maintained a global portal and database for occupational health and safety that is widely used by all countries. He noted that OH&S is often not a priority among funding agencies or governments, so WHO and ILO CC networks can raise the profile to achieving excellence in performance.

Dr. Sergio Iavicoli, National Institute of Occupational Safety and Prevention (ISPESL), Italy, a WHO CC and ILO CIS centre: Referring to the 13th Session of the Joint ILO/WHO Committee on Occupational Health, Dr. Iavicoli noted the five main areas of future WHO/ILO collaboration as being elimination of silica and asbestos-related disease, ergonomics, violence at work, occupational injuries and listing of occupational diseases.

Dr. Kalpana Balakrishnan, Department of Environmental Health Engineering, Sri Ramachandra Medical College and Research Institute, India, a WHO CC and ILO CIS centre: This is a new centre, only 2 years old, but has already achieved some success, particularly with chemical safety in SMEs in Southern India. She noted the need for new models of risk communications, as it is common to be lulled into apathy when the situation is overwhelming. More outrage is needed, to change the perception of risk ("Risk = Hazard + Outrage").

Dr. Saeed Awan, Centre for the Improvement of Working Conditions & Environment (CIWCE), Pakistan, an ILO CIS centre: Due to ILO CIS networking, a database of International Chemical Safety Cards was translated into Urdu, and is now immensely popular. In addition, some low-cost ideas were implemented, for example, providing ergonomic looms for women working in

households. There could be better WHO/ILO interaction at all levels, and development of practical materials for micro enterprises with little capital.

Dr. Irja Laamanen, Finnish Institute for Occupational Health (FIOH), a WHO CC and ILO CIS centre: Dr. Laamanen noted that collaborating helps us look at things from different perspectives. She suggested that ILO and WHO databases could be correlated, and newsletters as well. The use of social networking technology is very important for future communications. A successful collaboration was the translation of International Chemical Safety Cards into Estonian, as a result of a twinning exercise between Collaborating Centres.

Dr. Renán Alfonso Rojas Gutiérrez, Consejo Colombiano de Seguridad, Columbia, a WHO CC and ILO CIS centre: The Colombian Safety Council has an important role in diffusing information through its website. In addition to distributing government information, the site collects and makes available results of research that is being developed through universities in the country. He noted the importance of seeing the ILO and WHO working together, because their support and influence in Columbia is extremely important.

4. Briefing on the Updating of the ILO Encyclopaedia for OSH

Dr. Michael Riediker, *Institute of Work, Switzerland*, discussed the ILO Encyclopaedia. He noted that the first edition in 1930 consisted of 2 volumes; the 4th edition in 1995 consisted of 4 volumes, and if the 5th edition were printed it would be over 40 volumes. The intention is to make the 5th edition fully electronic, available on the ILO website, CD-ROMs and possibly other servers. Without funding or dedicated staff, progress is slower than optimal, and depends on the good will of contributing professionals. The intention is to have a yearly review cycle, so that content is not a “moving target” as with Wikipedia. A process concept for content development was proposed in February 2009 and is awaiting approval from ILO. He noted the challenges with the speed of the approval process and lack of resources.

Dr. Sameera Al-Tuwajjri, Director, ILO SafeWork, stated that the encyclopaedia is a long and enduring programme. She mentioned some concerns about equity, with an entirely electronic version. She reinforced the need for resources, and called upon everyone to contribute to the encyclopaedia effort.

Discussion

- **Dr. Carlos Dora** noted the complementary geographical distribution of ILO and WHO centres. We must give more thought to opportunities to interact. He also noted that it is also about making friends and influencing policies. This is enormously powerful, and we must find mechanisms to make this knowledge base more accessible to the global audience.
- **Dr. Max Lum** referred back to the comment from Dr. Irja Laamanen about the importance of social media. We need to put our information where people are looking for information. He explained how NIOSH has been placing its information on Wikipedia, and then controlling it.

Roundtable: Workers' Health in a Climate of Change

Co-Chairs:

Dr. Maria Neira, Director, WHO Department for Public Health and Environment
Dr. Sameera Al Tuwajjri, Director, ILO SafeWork

1. What Can Primary Health Care Deliver for Workers' Health?

Dr. Maria Neira, WHO, challenged participants to meet the changing needs of the 21st century, which she sees as moving from an era of irresponsibility to one of policies, regulations and reforms, now that the world is emerging from the financial crisis. She emphasized the social impact of the financial crisis, with 80% of the world without social protection, and 85% without basic occupational health services. A global “social protection floor” needs to be established and current systems maintained or strengthened, since once there is a reduction of financial support, it is very difficult to

recover. There is a global need for a basic package of financing for essential social services, including primary health care, which needs to be more affordable and accessible for all.

This social protection floor must be incorporated into the earliest stages of economic development in order for it to be sustainable, and must include access to primary health care, income security, and protection against work-related illness and injuries. Health inequities must be reduced by action on the social determinants of health, as set out in the recent Commission on the Social Determinants of Health report. She noted that occupational health services may be the only entry point for some to the health care system, but this is inadequate due to lack of this access, and a disconnect between occupational health care and the rest of the health care system.

She noted that reforms are needed in four areas: universal coverage reforms to improve health equity; service delivery reforms, to make health systems people-oriented; leadership reforms to make health authorities more reliable; and public policy reforms to promote and protect the health of communities.

The “greening” of the economy also presents opportunities and challenges. While there are some benefits – reduction of exposure to fossil fuels, pesticides, air pollution – there are also some occupational health challenges, such as exposure to mercury from compact fluorescent light bulbs, asbestos from retrofitting old buildings, and heavy metal exposure in the recycling industry. Climate change can also pose occupational risks to certain groups of workers. She concluded by emphasizing the message from Timo Leino that it is time to “turn the pyramid around” and start emphasizing prevention activities rather than reactive treatments.

2. Labour Policies and Action on OSH During Job Crisis

Dr. Sameera Al Tuwajri, ILO, noted that even before the current economic crisis, globalization was affecting every economic sector, and the financial crisis is further impacting worker health and safety. The recent report of the WHO Commission on Social Determinants of Health clearly points out the health hazards of job insecurity, which is on the rise at present due to a shift to more informal work and precarious working conditions. Even in formal work, enterprises are often cutting health and safety resources and practices, and enforcement agencies operating with limited resources may be tempted to compromise their standards.

The ILO’s position in these times is clear and firm. It is universally accepted that a healthy workforce is critical to reaching sustainable economic development. In addition, social protection must be preserved for those workers who have lost, or may lose their jobs during this crisis. The work of the ILO and WHO to preserve this social protection floor is thus more critical now than ever.

She reinforced that the right of everyone to a safe and healthy working environment must not be compromised during times of financial constraints, due to short-term thinking. Countries concentrating on restoration of sustainable productivity must do this with the full respect of labour standards, including health and safety.

Dr. Al Tuwajri reported that the ILO adopted a Global Jobs Pact this year to give increased impetus to the ILO Decent Work agenda during this time of economic crisis, and noted that the ILO and WHO are the lead agencies in the United Nations’ Joint Crisis Initiative, charged with building a social protection floor of essential services to safeguard human development. She noted that the ILO’s Global Strategy on Occupational Safety and Health has laid the foundation for integrated action, and has been strengthened by the passing of ILO Convention #187, the Promotional Framework for Occupational Safety and Health (2006). She wrapped up by stating that the ILO believes only a safe and healthy workforce can build a sustainable economy, and that this financial crisis has taught the world the lesson that it is better to act than react. She ended by quoting Mr. Juan Somavia, Director General of the ILO, who has repeatedly underlined that “The current economic crisis should not be an excuse to lessen decent working conditions, but an opportunity to promote them.”



3. Keeping People Healthy at Work: UK Government Strategy

Dame Carol Black, United Kingdom National Director for Health and Work discussed the findings and recommendations of her 2008 report, “Working for a Healthier Tomorrow.” She noted that while the UK has a very good social security system available to all, which provides primary and secondary health care, there are disconnects with the workplace. The main causes of sickness absence from work are due to stress-related mental health problems, MSDs, and cardio-respiratory illnesses, and those with chronic illnesses are poorly retained in the workplace. She noted an inappropriate “medicalization” of minor illnesses, during which contact with the workplace is often lost, leading to much greater absenteeism and presenteeism than necessary.

Her report noted a widespread fallacy that workers should not be at work unless they were 100% fit, and that in the UK this belief is supported by inadequate vocational rehabilitation, occupational health services, and employer flexibility. The report made a number of recommendations, key among them one to replace the current system of a required “Sick Note” with a “Fit Note” that explained a worker’s ability to do work, as assessed by a physician in consultation with the workplace.

The UK government has accepted these recommendations, has implemented an electronic “Fit Note” and is will begin piloting an early return to work system based on early intervention in January 2010. They are also revitalizing and reorienting an occupational health service that will be available to all, not just a few. A national education programme is being launched to promote the message that work is generally good for health, and long-term worklessness is harmful to mental and physical health. The expectation is that these reforms will lead to better productivity, a more resilient workforce, lower presenteeism, a more stable society and ultimately an improved UK economy.

4. How Employer Organizations Can Protect Workers’ Health In Times Of Economic Crisis

Dr. Janet Asherson, International Organization of Employers (IOE) discussed ways that employer organizations can represent their members (enterprises) to influence governments or other policy-making bodies. She noted that employers want sustainable, competitive businesses, and the IOE can help them achieve that. To that end, the IOE has established a “GOSH Network” or Global Occupational Safety and Health network of multinational companies willing and able to share best OSH practice globally and within their supply chain, in order to reach SMEs and micro companies with OSH messages. It is aimed at the developing world who are the suppliers, customers and neighbours of the multinationals.

She noted that there are many crises at the moment, and many SMEs are fighting for survival. “We must appreciate the real world of the many businesses whose bank is about for foreclose on their overdraft facility, they can’t pay the workers, and they can’t pay their suppliers, and their customers are not paying them.”

She presented four general principles that can provide businesses with a toolbox for survival:

- Recognition that all businesses make a contribution to the health of a nation. Businesses are the wealth creation engine of most nations, which contributes to the health of the population
- Keeping people employed in good work. People in work are generally healthier than those who do not have an income and/or stimulation from good employment.
- Keeping people informed about what good health looks like and how it can be achieved. Businesses need to know what a healthy workplace is, and how to get there.
- Recognition that innovative and resilient businesses are more sustainable. Businesses need employees to be “happy, healthy and here.” Resilient businesses recognize that change happens, and they need resilient employees to be able to respond and adapt to the inevitable changes and threats.

In conclusion, she noted the importance of breaking down silos, and working together in an integrated manner. Employers and their organizations can help to dissolve the barriers between occupational and public health, in order to nurture the health and well-being of workers.



5. Workers' Health in a Climate of Change: What Role for Trade Unions?

Dr. Raquel Gonzalez, International Trade Union Confederation discussed the important role for unions in ensuring workers' health. She made the current situation startlingly real by stating that when translated into daily figures, ILO statistics would suggest that by the end of this day, one million workers would have an accident and 5500 would die, globally*. She echoed Dr. Al Tuwaijri's comments that the current economic crisis may tempt employers to cut corners with health and safety, cut back on equipment maintenance and safety training; and it may also put pressure on workers to ignore risks due to their precarious job situations. She expanded on the ILO Global Jobs Pact adopted in June, which reinforced the need to avoid a downward spiral in labour conditions during the crisis, and to respect fundamental principles and rights at work, beginning with freedom of association and collective bargaining.

Recognizing that most accidents and diseases in the workplace are preventable, unions have an important role to play. It is well documented that one of the most effective measures to reduce injury and illness is the involvement of workers and their representatives in all aspects of occupational health and safety at national and enterprise levels. Some research has confirmed that workplaces with active trade unions have a better health and safety record than workplaces without unions. It is critical for employers to engage with health & safety representatives and committees to consider problems identified and identify solutions. Tripartite (governments, employers and trade unions) consultations at national levels are also an important way of designing national policy and strategies to overcome OSH problems. Now is an important time for countries to ratify the many ILO Conventions such as 155 (occupational safety and health), 161 (occupational health services), 162 (asbestos use) and 187 (promotional framework for OSH). Labour inspections are more important than ever in times of economic crisis, to ensure existing standards in OSH are not ignored.

ILO conventions also stress the right of workers to associate and bargain collectively, and the Global Jobs Pact has reinforced these rights. Trade unions will continue to strive to promote stable employment by improving contractual conditions, which may be threatened by the economic situation. She concluded that it is more important than ever for trade unions to continue to work towards the implementation of decent jobs that recognize the right to safe and healthy work conditions.

Discussion

A short discussion ensued, with questions and clarifications from the participants and speakers.

Thursday 22 October 2009

1. Agreement on the 2009-2012 Workplan of the Global CC Network

Dr. Marilyn Fingerhut, NIOSH, facilitated the presentations from the five GPA Objective Managers, who reported on their conclusions and recommendations following the discussions during the 14 Working Groups that had taken place during the previous two days of discussion. A brief summary of the conclusions and 'the way forward' for each of the GPA Objectives is presented here. The full 'Way Forward' reports are included in Annex 4. The information in these 'Way Forward' reports reflects the input of the CC Directors participating in this 8th Global CC Network meeting and will be used to develop the approach to re-contacting CCs and the project leaders to move forward on implementing the key deliverables and to update and intensify focus on these deliverables in the 2009-2012 Workplan of the Network. A brief summary of each GPA Objective plan for going forward is provided below:

* Numbers vary from time to time. According to the ILO Safework website, one work-related death occurs every 15 seconds (= 5760 deaths/day) and 160 accidents every 15 seconds (= 921,600 accidents/day). <http://www.ilosafetyconference2009.org/> accessed on 16 November 2009.



GPA Objective 1: Devise and implement policy instruments on workers' health

1.1: Develop / update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health. Key deliverables are a standardized WHO/ILO format for national profiles based on the Finnish profiles, and a global repository of national policies on worker health. Development, updating and evaluation of profiles and policies will occur in Brazil, Ukraine, Australia, Chile, etc.

1.2: Develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases. A number of projects relate to establishing partnerships and strategic plans to eliminate pneumoconioses; capacity building in diagnosis, surveillance and treatment; laboratory analysis; hazard control strategies; and increasing technical knowledge in industrial hygiene. Key countries involved are Brazil, Chile, Peru, Columbia, Ukraine, Viet Nam, Thailand, Kenya and Turkey.

1.3: Develop and disseminate evidence-based tools and raise awareness for the elimination of asbestos-related diseases (ARD). An English-language Japanese training video on prevention of ARD will be posted for e-access; national profiles of asbestos use and ARD in the ILO/WHO format are to be completed in a number of countries; WHO CCs will provide support to governments to ratify ILO Convention 162; estimates of burden of disease for ARD will be produced; and awareness-raising activities carried out.

1.4: Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization. The WHO/NIOSH/PAHO tool kit Protecting Health Workers will be revised; WHO guidelines developed for health worker immunization, and a global framework for national programmes for health workers developed.

GPA Objective 2: To protect and promote health at the workplace

2.1 Develop practical toolkits for the assessment and management of occupational health risks, including chemical, physical, biological, psychosocial and musculoskeletal risks. The chemical, physical and musculoskeletal kits will be developed with input from IOHA and the IEA, adapting kits to local situations, and translation into different languages; as well as development of a management system for available tools. The completed work done on psychosocial risks will be expanded to adapt it for different contexts, including translation into Portuguese and Arabic. Training materials and capacity building in this area will be developed.

2.2 Develop healthy workplace programmes and guidance to inform country frameworks. The draft framework and model will be finalized and guidance materials developed for different sectors and countries. Training materials will be developed. A Healthy Workplace meeting will be held in Egypt in 2011. Work will be done developing indicator models and assessment tools, as well as work started on an accreditation programme.

2.3 Develop toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, and influenza, emphasizing vulnerable groups, in particular migrant workers. Guidance documents will be developed for prevention and treatment of HIV and TB in the workplace and specifically among migrant workers. Current work on pandemic preparedness will be completed and piloted in 3 countries. Training and certification with informal waste collectors will be developed, based on assessment findings.



GPA Objective 3: To improve the performance of and access to occupational health services.

3.1 Develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources. National, regional and sectoral OSH profiles and roundtables will continue to be organized. Programmes for establishing and strengthening OH services and basic occupational health services (BOHS) will be developed in countries such as China, Thailand, Viet Nam, Macedonia, Turkey, South Africa, India, Indonesia and others. Practical BOHS delivery models and published practices will be distributed in these countries as well.

Key outputs are also related to results for education and training (Priority 3.2) such as programmes of grass-root level training of OSH, programmes of post-graduate training, train-the-trainer programmes, an online WHO OH capacity development facility, BOHS Guidelines and a manual, a BOHS field measurement kit for priority exposures, a book of good practices and solutions for specific problems.

3.2 Adapt and disseminate curricula, training materials, and training for international capacity building in OH. A key output will be the establishment of an electronic platform for capacity building in OH. An editorial board for the repository and a community of practice will be developed for educators and experts to create and improve the teaching materials and essential OH information resources. A draft of a core set of competencies for BOHS and for shop floor level OH activities in enterprises will be developed. A network of educators and technical advisors will be established. Target groups and quick wins will be identified.

GPA Objective 4: to provide and communicate evidence for action and practice

4.1 Encourage practical research on emerging issues including nano-materials & climate change
Nano Materials (NM): Development of tiered exposure registries across all the WHO CCs; Development of WHO guidance for handling nanomaterials for developing and low-income countries; Development and consensus agreement between CCs of a framework for measuring and testing NM.

Climate Change: Review existing information, data and projects being done within CCs and elsewhere, and draft a position paper; Learn from others through a Workshop to identify gaps and develop/agree on ways forward.

4.2 Further develop the global research agenda for workers' health

Set priorities via a systematic, comprehensive, objective and rigorous process that might be through a tiered approach; Research priorities to match the particular needs of workers in a country with external funding constraints; WHO to input to funding agencies to raise awareness and highlight the importance of occupational issues; Do an audit and evaluation of the current WHO CC projects and progress.

4.3 (new) Revision of ICD 11. Ensure the inclusion of occupational health causes in the 11th revision of the International Classification of Diseases.



GPA Objective 5: to incorporate workers' health into other (non-health) policies

5.1 Collate and conduct cost-benefit studies to clarify the economic benefits of workers' health. Develop a broad conceptual framework for this work based on an agreed set of OSH elements, including a wider set of values than just dollar costs; identifying factors relevant to costs and to benefits; and identify different types of interventions involving different stakeholder groups, with future formulation of OSH cost-benefit guidelines.

5.2 Formulate recommendations to manage risks from effects of globalization on workers' health. Write a global situation analysis on occupational safety & health in a globalized world to provide a coherent basis for future activities. This will incorporate identification of different types of problems, types of interventions, target groups, potential partners, examples of successful interventions, and recommended actions for 2013-2016.

5.3 Develop and implement toolkits for the assessment and management of OSH hazards (a) in high risk industry sectors and (b) for vulnerable worker groups.

High risk industry: Agriculture There are 6 projects underway, which will be completed. Two others are creation of a "Latin American Network on Rural Medicine and Health" and of a "Mediterranean and Balkan Network on Rural Medicine and Health."

High risk industry: Construction & Transport Develop simple guidance on managing chemicals in the construction sector using a control banding approach, with a broader spectrum of chemicals. Develop simple guidance on other hazards by adapting, disseminating and evaluating existing materials. Promote a more integrated approach to health & safety management. Also develop and implement a chemical safety program for maritime workers in European harbours.

Vulnerable workers Establish a resource library for all vulnerable workers, including child labour issues, young and older workers, informal sector workers, migrant workers, precariously employed workers, those in disadvantaged ethnic groups, vulnerable women workers and those with chronic illnesses or disabilities.

Dr. Fingerhut summed up by noting many common themes throughout the presentations: cross-collaboration, sharing success stories, clearing houses, electronic library, motivation, workshops, networks, WHO and ILO pressing countries to pass and enforce laws, cost-effectiveness/business case, frameworks, one holistic toolkit, funding sources, healthy workplaces, guidance documents for experts, toolkits for practical implementation, competence/capacity building, conferences, awareness raising.

2. Conclusions, Recommendations, Way Forward: Chair's Summary

Before the Chair's summary, thanks were offered to a number of individuals who have made significant contributions to the WHO Occupational CC Network.

Dr. Maged Younes paid tribute to **Dr. Maritza Tennessee**, PAHO, for her work over the years in PAHO. He conveyed the gratitude of the Network to Dr. Tennessee, as this will be her last meeting before her retirement in May 2010. Dr. Tennessee graciously replied, and ended her remarks with the comment that "There is nothing that can't be accomplished if it is fair and it is right."

Dr. Max Lum thanked all the GPA managers for their hard work over the past few days. He then thanked **Ms Terri Mealiff**, Secretary, WHO Headquarters, for her excellent administrative and organizational skills, and her help in organizing the conference. He presented her with a plaque of appreciation.

Dr. Lum then paid tribute to **Dr. Suvi Lehtinen**, FIOH, who not only has represented FIOH for many years, but has been the meeting Rapporteur, having prepared 40 Meeting Reports for the Network over the past 20 years. He presented her with a token of appreciation from the Network.

Dr. Max Lum then summed up the meeting. He also explained that consensus agreement by the Collaborating Center Directors is the procedure followed in the Network, and he asked the Directors for consensus agreement on a number of business items:

- Commitment to the 2009-2012 Workplan. All were in favour of the suggested workplan. Approved.
- Agreement with the terms of reference for the Planning Committee, the Advisory Committee, the GPA Managers, the CC Initiative Leaders, and the Coordinators of the WHO Global Network of CCs in Occupational Health. These had been included in the Guidebook in the participant materials, and participants had been asked to review them and communicate any concerns. Dr. Lum had received some revised wording for the Terms of Reference of the Advisory Committee: that prior to each Network Meeting the CCs in the geographic area of the Institute rotating off the Advisory Committee may indicate interest in becoming a member Institute of the Advisory Committee. All were in favour of approving all of the Terms of Reference, including this revised wording. Approved.
- Intensive work to advancing the GPA priorities. All were in favour. Approved.

Next Network Meeting: Dr. Lum noted that the next Congress of the International Commission on Occupational Health (ICOH) is being held 18-23 March 2012 in Monterrey, Mexico. The WHO Global Network has been invited to hold the next CC Network meeting in Monterrey immediately before that the ICOH Conference, possibly on 14-16 March 2012. He stated that the CC Network is pleased to receive that invitation.

Communication: Dr. Lum closed by discussing the issue of communication within the network. In terms of the online newsletter, *Collaborating Centre Connection*, he noted that feedback had been provided for three improvements:

- Include updates on the strengths and capabilities of specific Collaborating Centres
- Arrange for the various CCs to link to the newsletter from their websites
- Include more updates on emerging issues on which various CCs are working, such as nanotechnology, climate change, etc.

Dr. Lum then discussed the importance of communicating to people where they are looking and listening. For example, NIOSH has recently started using Wikipedia to provide information about occupational health. NIOSH provides the information and can control the content, as well as get measures about how many people connect to NIOSH through Wikipedia. NIOSH is getting 10,000 extra hits per month through Wikipedia.

He then provided information to participants about Twitter, and noted that ICOH and NIOSH are now using Twitter to communicate what they are doing. He invited participants to connect to the NIOSH Twitter site at <http://twitter.com/NIOSH>. He pointed out the many, many types of products and channels that the Network has available, and stressed that it is important to make these easily accessible to people globally.

A concern is that the Network has a wealth of information for WHO to present to the World Health Assembly (WHA) in 2013, but we need improve the marketing of our tools and information to the countries who can benefit from them. He suggested that we consider having a meeting of people interested in research translation in 2011 to prepare a marketing plan to include in the presentation to WHA, along with the content. It might be appropriate to develop a guidance document about moving our products into the market. He closed by saying that our slogan should **not** be, "*if you can find it ...you may use it!*"

3. Closing

Dr. Carlos Dora closed the meeting by stating how impressed he is with the strength of the Network, which is unusual and unique. There are strong anchors in every part of the world, there is

a very strong knowledge base, and there is strong collaboration with WHO, which can add value by liaising with governments. He noted how well organized the meeting was, and thanked his staff (Evelyn Kortum, Susan Wilburn, Ivan Ivanov). He noted that it is a challenge to get ministries of energy, transportation, and environment to work with us, and to establish linkages. He noted that our role is to make sure that our expertise reaches the policy desks of those who make the decisions. He agreed with Dr. Lum that communication is the main challenge, and looked forward to working with the CCs to facilitate change in this area.

Dr. Marilyn Fingerhut reminded participants that the three Workshops would begin after lunch and continue into Friday. The three Workshops are on the following topics:

1. Capacity Building for Education and Training in Occupational Health
2. Healthy Workplaces
3. Healthcare Workers

Summary Reports of these three Workshops are attached as Annexes 5, 6 and 7, respectively.

ANNEXES

Annex 1: Agenda for the meeting

Annex 2: List of participants

Annex 3: Priorities sheet

Annex 4: The Way Forward: GPA summaries from GPA managers (5)

Annex 5: Capacity Building workshop

Annex 6: Healthy Workplace workshop

Annex 7: Healthcare workers workshop

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in **WHO** Headquarters, 20 Avenue Appia, Geneva

OVERALL PURPOSE OF THE CC MEETING:

To advance the implementation of the WHO Global Plan of Action on Workers' Health (World Health Assembly Resolution 60/26 endorsed in May 2007)

OBJECTIVES:

1. Discuss progress and needs of the 2009-2012 Global Workplan
2. Discuss roles of all parties in achieving the Workplan objectives by 2012
3. Discuss collaboration with CC Network partners; priorities, grouped CC projects, and other aspects of implementing the projects in the 2009-2012 Workplan
4. Clearly define the deliverables/products to be produced by 2012
5. Obtain CC commitments for projects to fill gaps, where still required

MONDAY, 19 OCTOBER

Kofi A. Annan Room, UNAIDS/WHO Building

Session Chair: Carlos Dora

2:00 - 2:20	Opening: Scope and purpose, approval of meeting agenda, election of meeting rapporteur	Carlos Dora, A/Coordinator
2:20 - 2:30	Welcome by WHO	Maria Neira, Director
2:30 - 2:40	Welcome by Global CC Network Chair	Director, NIOSH
2:40 - 2:50	Welcome by ILO	Sameera Al- Tuwajri, Director Safework
2:50 - 3:10	Greetings from the NGOs: ICOH, IOHA, IEA (5' each)	
3:10 - 3:45	Marco Maroni memorial speech	Eusebio Rial Gonzales, EASHW

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in **WHO** Headquarters, 20 Avenue Appia, Geneva

Coffee/Tea Break in the Red Ribbon Cafe

Session Chair: Sin Eng Chia

4:00 - 4:15	Structure of the Network: Advisory Committee Introduction and Functions	Max Lum
4:15 - 4:45	Collaborating Centres: an institutional overview Questions	Matias Tuler
4:45 - 6:15	2009-2012 Workplan, 5 Objectives, current status, gaps, focus (15' each) Discussion; summary and closing.	GPA Objective Managers

End of first Day : Buffet Reception in the WHO Cafeteria, Main Building at 6:30

TUESDAY, 20 OCTOBER 2009 Kofi A. Annan Room, UNAIDS/WHO Building

Session Chair: Barry Kistnasamy

8:30-8:45	The role of CCs in implementing the GPA in the countries (10') Discussion (5')	Ivan Ivanov
8:45-9:45	The role of CCs in implementing the GPA in the regions Discussion	Regional Advisers
9:45- 10:00	Instructions for the Working Groups.	Leslie Nickels

Coffee and tea from 10:00 - 10:15 a.m. in the Red Ribbon Cafe

Working Groups: guidance to be provided : identifying 2012 deliverables in context of 2017; developing and adapting projects, timetables, intermediate achievements, communication patterns, methods of working together

10:30 - 1:45	Group 5.3: Kofi A. Annan Room Priority 5.3: Implement sectoral toolkits for the assessment and management of OHS risks in high hazard sectors and for vulnerable groups (agriculture, construction, transport, young and ageing workers, women) Outputs: Tools, inventory, framework document, mapping of use and types of tools, evaluation	WHO Secretariat, GPA Objective Managers, Initiative
Coffee/Tea at the Red Ribbon Cafe		

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in **WHO** Headquarters, 20 Avenue Appia, Geneva

Lunch in the UNAIDS Building, 1 st floor, or WHO Main Cafeteria	<p>Support: Wendy Macdonald, Catherine Beaucham, Claudio Colosio, Lygia Budnik, Jane Hingston-Wilkins, Owen Evans, Susan Gunn, Annie Rice</p> <p>Group 4.1: C102 (20) Priority 4.1: Encourage practical research on emerging issues, including nano-materials and climate change Output: Research reports and communication strategies with low- and medium income countries on interventions to ensure workers' health Support: Jo Harris-Roberts, Ivan Ivanov</p> <p>Group 1.3: C202 (20) Priority 1.3: Develop and disseminate evidence-based tools and raise awareness for the elimination of asbestos-related diseases. Outputs: Estimates of the burden of asbestos-related diseases, review of good practices for substitution of asbestos and prevention of exposure to asbestos, health surveillance of exposed workers Support: Ken Takahashi, Ivan Ivanov</p> <p>Group 3.2: X10 (22) Priority 3.2: Adapt and disseminate curricula, training materials and training for international capacity building in OH Outputs: Model materials and courses for BOHS, inventory, technical support for delivery of international courses and on-line training, national training programmes in low- and medium-income countries, introduction of OH into professional education Support: Timo Leino, Leslie Nickels, Norbert Wagner, Rokho Kim, Jonny Myers, Berenice Goelzer, Linda Grainger, Frank Van Dijk</p> <p>Group 2.2: X7 (20) Priority 2.2: Develop a global framework and guidance on healthy workplaces Outputs: Review of effectiveness of existing programmes for healthy workplaces, tools for creating healthy workplaces including a health-promoting culture and OH&S principles Support: Stavroula Leka, Adi Jain, Abeytunga, Fernando Coelho, Evelyn Kortum, Marie-Claude Lavoie</p>	Leaders, Project Managers
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Session Chair: Dennis Nowak

2:00 -3:00	PLENARY in Kofi A. Annan Room: Feedback from the working groups (10' each); Discussion (10'); Instructions to the afternoon working groups	Rapporteurs
Coffee and tea from 3:00 - 3:15 p.m. in the Red Ribbon Cafe		

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in WHO Headquarters, 20 Avenue Appia, Geneva

Working Groups: guidance to be provided : identifying 2012 deliverables in context of 2017; developing and adapting projects, timetables, intermediate achievements, communication patterns, methods of working together

3:30 - 5:00

Group 1.1 : X10 (20)

Priority 1.1: Develop/update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health

Outputs: Comparative analysis of national strategies and action plans, national profiles, and reports on lessons learned

Support: *Claudina Nogueira, Jovanka Bislimovska, Ivan Ivanov*

Group 2.3: Kofi A. Annan Room (22)

Priority 2.3: Develop toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, influenza, emphasizing vulnerable groups, in particular migrant workers

Outputs: Tools, inventory, framework, mapping of use and types of tools, evaluation, and definition of toolkits

Support: *Adi Jain, Stavroula Leka, Milano Milosevic, Susan Wilburn*

Group 4.2: C102 (20)

Priority 4.2: Further develop the global research agenda for workers' health

Output: Research report matrix to identify relevant gaps in research

Support: *Jo Harris-Roberts*

Group 5.1: C202 (20)

Priority 5.1: Collate and conduct cost-benefit studies to clarify the economic benefits of workers' health

Output: Published articles and information posted to WHO website

Support: *Wendy Macdonald*

Group 1.2: X7 (22)

Priority 1.2: Develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases.

Outputs: Evaluation of national programmes, packages of essential interventions and good practices, for dust control, exposure and diagnostic criteria for pneumoconiosis

Support: *Marilyn Fingerhut,, Claudina Nogueira, Maria Lioce-Mata, Catherine Beaucham, Ivan Ivanov*

WHO
Secretariat,
GPA
Objective
Managers,
Initiative
Leaders,
Project
Managers

Session Chair: Dr Sameer Abdulla Is Alhaddad

5:15 - 6:15

PLENARY in Kofi A. Annan Room: Report back of the working groups (10' each) and Discussion (10')

Rapporteurs

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in WHO Headquarters, 20 Avenue Appia, Geneva

6:15 - 6:30	Wrap up and announcement of working arrangements for the next day EB Room, Main WHO Building	EB	Chair
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WEDNESDAY, 21 OCTOBER 2009 Executive Board Meeting, WHO Main Building

Coffee and tea break from 8:30 - 9:00 a.m. in front of EB Room. Then begin in Working Groups in rooms assigned in the WHO Building. Go to EB Room for Plenary Session and for Joint CIS-CC Meeting

Working Groups: guidance to be provided : identifying 2012 deliverables in context of 2017; developing and adapting projects, timetables, intermediate achievements, communication patterns, methods of working together

9:00 – 11:30 **Group 5.2: X10** (22)
Priority 5.2: Develop specific and relevant recommendations to manage risks associated with the impacts of globalization on workers' health
Outputs: Guidance for development banks, non-health sector entities to improve workers' health
Support: Wendy Macdonald, David Rees

Group 3.1: E110 (20)
Priority 3.1: Develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources
Output: Good practices and demonstration projects for organization and delivery of OH services, evaluation of service delivery, international knowledge networks of service providers, website clearinghouse of information materials for OH practice
Support: Timo Leino, Ivan Ivanov

Group 2.1: EB Room
Priority 2.1: Develop practical toolkits for the assessment and management of OH risks (focus: chemical, physical, ergonomics, psychosocial risks)
Outputs: Tools, inventory, framework document, mapping of use and types of tools, evaluation, definition of common criteria of toolkits
Support: Stavroula Leka, Adi Jain, Leslie Nickels, Wendy Macdonald, Evelyn Kortum

Group 1.4: M405 (40)
Priority 1.4: Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization.

WHO
Secretariat,
GPA Objective
Managers,
Initiative
Leaders,
Project
Managers

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

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Outputs: Tools, guidance documents, assistance to countries for implementing and evaluating programs, training on national programs
Support: *Claudina Nogueira, Maria Lioce-Mata, Susan Wilburn*

Session Chair: Sergio Iavicoli

11:45 - 1:00 **PLENARY** : Feedback of the working groups (10') - wrap up (Chair) Rapporteur

Lunch 1 hour

Joint WHO/ILO, CC/CIS meeting and Roundtable: EB Room

WHO responsible person: Evelyn Kortum
ILO responsible persons: Gabor Sandi / Annick Viro

2 - 3:30 **Session 1: Joint meeting of the WHO Collaborating Centres and the ILO CIS Information Centres**

Chair: Ho Sweet Far, Occupational Safety & Health Division, Ministry of Manpower, Singapore

- Introduction and purpose by the Chair
 - WHO Network of Collaborating Centres for Occupational Health: roles, ways of working, workplan - WHO
 - ILO Network of Safety and Health Information Centres: roles, ways of working, major initiatives - ILO
 - The experience of the individual centres (invited interventions from 6 centres)
 - Briefing on the Updating the ILO Encyclopaedia for OHS
 - Discussion
 - **Signing of Joint (CCs/CIS) Statement of Intent**
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Coffee/Tea break 20 minutes in front of EB Room

WHO responsible person: Ivan Ivanov; ILO responsible person: Igor Fedotov

03:50 - **Session 2: Workers' health in a climate of change**
05:30

AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in **WHO** Headquarters, 20 Avenue Appia, Geneva

Co-Chairs: Maria Neira, Director, WHO Department for Public Health and Environment
Sameera Al Tuwaijri, Director, ILO Programme on Safety and Health at Work and the Environment

- What can primary health care deliver for workers' health? WHO, M. Neira
 - Labour policies and action on OSH during job crisis. ILO, S. Al Tuwaijri
 - Keeping people healthy at work: UK Government strategy. Dame Carol Black
 - How employer organizations can protect workers' health in times of economic crisis. IOE, J. Asherson
 - Workers' health in a climate of change: What role for trade unions? ITUC, R. Gonzalez
 - Policy options for joint action - round table discussion.
 - Interventions from the floor.
 - Closing remarks: WHO and ILO
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THURSDAY Morning, 22 OCTOBER 2009 Executive Boardroom

Session Chair: Dr Max Lum

8:30 - 9:30	Agreement on the 2009-2012 workplan of the Global CC Network: Plenary discussion	Marilyn Fingerhut
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Coffee/Tea break 15 minutes in front of EB Room

9:45 - 10:45	Conclusions, recommendations, way forward: Chair's summary The next meeting in 2012	Chair
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10:45 - 11:00	Closing of the meeting	Maria Neira
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11:00 - 12:00	Post-meeting session in E110: CC Network Planning Committee meeting (Advisory Committee, WHO secretariat, GPA Objective Managers, Regional Advisers, Representatives of NGOs and ILO)	
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Lunch 1 hour

THURSDAY afternoon, 22 OCTOBER 2009 Special Workshops

1:00-9:00	Capacity Building for Education and Training in Occupational Health	Salle G
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AGENDA

8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health

19-23 October 2009 in **WHO** Headquarters, 20 Avenue Appia, Geneva

1:00-6:00	Healthy Workplaces	EB Room
1:00-6:00	Healthcare Workers	M405

FRIDAY morning, 23 OCTOBER 2009 Special Workshops. Continued

9:00 - 12:00	Capacity Building
9:00 - 4:00	Healthy Workplaces and Healthcare Workers
	Same room allocation for the workshops as on Thursday

**We hope you enjoyed the meeting and we wish you a safe trip back home.
The WHO Secretariat**

List of Participants for Collaborating Centre Meeting 19-22 October 2009

16 December 2009

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Workplan of the Global Network of WHO Collaborating Centres for Occupational Health for the period 2009-2012

This workplan represents the contribution of the Global Network of WHO Collaborating Centres for Occupational Health to the implementation of the WHO Global Plan of Action on Workers' Health, 2008-2017: http://apps.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf. The Network includes government, research, professional and academic institutions from 37 countries, and three international professional associations http://www.who.int/occupational_health/network/cc_address_list_2822008.pdf. The 2009-2012 workplan is organized into 5 objectives, reflecting those of the Global Plan of Action, and 14 priorities. Projects associated with each priority can be found at http://www.who.int/occupational_health/en/. For more information contact ochmail@who.int.

GPA Objective 1: to devise and implement policy instruments on workers' health Manager: Claudina Nogueira, NIOH, South Africa			
<p>Priority 1.1: Develop/update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health</p> <p>Outputs: Comparative analysis of national strategies and action plans, national profiles, and reports on lessons learned</p> <p>Support: CC: Jovanka Bislimovska, Institute of OH, FYR of Macedonia WHO/HQ: Ivan Ivanov</p>	<p>Priority1.2: Develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases.</p> <p>Outputs: Evaluation of national programmes, packages of essential interventions and good practices, for dust control, exposure and diagnostic criteria for pneumoconiosis</p> <p>Support: CC: Catherine Beaucham, Maria Lioce-Mata, and Faye Rice, NIOSH US Partner: Igor Fedotov, ILO WHO/HQ: Ivan Ivanov</p>	<p>Priority1.3: Develop and disseminate evidence-based tools and raise awareness for the elimination of asbestos-related diseases.</p> <p>Outputs: Estimates of the burden of asbestos-related diseases, review of good practices for substitution of asbestos and prevention of exposure to asbestos, health surveillance of exposed workers</p> <p>Support: CC: Ken Takahashi Institute of Industrial Ecological Sciences, Japan Partner: Igor Fedotov, ILO WHO/HQ: Ivan Ivanov</p>	<p>Priority 1.4: Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization.</p> <p>Outputs: Tools, guidance documents, assistance to countries for implementing and evaluating programs, training on national programs</p> <p>Support: CC: Ahmed Gomaa and Maria Lioce-Mata, NIOSH, US WHO/HQ: Susan Wilburn</p>
GPA Objective 2 : to protect and promote health at the workplace Managers: Stavroula Leka and Aditya Jain, Univ. of Nottingham, UK			
<p>Priority 2.1: Develop practical toolkits for the assessment and management of OH risks (focus: chemical, physical, biological, psychosocial risks)</p> <p>Outputs: Tools, inventory, framework document, mapping of use and types of tools, evaluation, definition of common criteria of toolkits</p> <p>Support: CC: Leslie Nickels, University of Illinois at Chicago, Wendy Macdonald, La Trobe University, Australia , Stavroula Leka and Aditja Jain, University of Nottingham, UK WHO/HQ: Evelyn Kortum</p>	<p>Priority 2.2: Healthy Workplace programmes and guidance to inform country frameworks</p> <p>Outputs: Review of effectiveness of existing programmes for healthy workplaces, tools for creating healthy workplaces including a health-promoting culture and OH&S principles</p> <p>Support: CC: Abeytunga, CCOHS, Canada Fernando Coelho, SESI, Brazil Partner: Valentina Forastieri, ILO WHO/HQ: Evelyn Kortum WHO/PAHO: Marie-Claude Lavoie</p>	<p>Priority 2.3: Develop toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, influenza, emphasizing vulnerable groups, in particular migrant workers</p> <p>Outputs: Tools, inventory, framework, mapping of use and types of tools, evaluation, and definition of toolkits</p> <p>Support: CC: Jadranka Mustajbegovic, Medical School University of Zagreb, Croatia WHO/HQ: Susan Wilburn</p>	

GPA Objective 3 : to improve the performance of and access to occupational health services Managers: Timo Leino, FIOH and Leslie Nickels, UIC		
<p>Priority 3.1: Develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources</p> <p>Output: Good practices and demonstration projects for organization and delivery of OH services, evaluation of service delivery, international knowledge networks of service providers, website clearinghouse of information materials for OH practice</p> <p>Support: CC: Timo Leino, FIOH, Finland, Norbert Wagner, University of Illinois at Chicago, Frank VanDijk, Coronel Institute, The Netherlands; Partner: Igor Fedotov, ILO WHO/HQ: Ivan Ivanov</p>	<p>Priority 3.2: Adapt and disseminate curricula, training materials and training for international capacity building in OH</p> <p>Output: Model materials and courses for BOHS, inventory, technical support for delivery of international courses and on-line training, national training programmes in low- and medium-income countries, introduction of OH into professional education</p> <p>Support: CC: Jonny Myers, University of Cape Town, Linda Grainger, ICOH WHO/RO: Rokho Kim</p>	
GPA Objective 4 : to provide and communicate evidence for action and practice Managers: Jo Harris-Roberts and Ed Robinson, HSL, UK		
<p>Priority 4.1: Encourage practical research on emerging issues, including nano-materials and climate change</p> <p>Output: Research reports and communication strategies with low- and medium income countries on interventions to ensure workers' health</p> <p>Support: CC: Nano-materials Rosemary Gibson HSL, UK and Vladimir Murashov, NIOSH USA Climate change Jo Harris-Roberts, Ed Robinson, HSL, UK WHO/HQ: Ivan Ivanov</p>	<p>Priority 4.2: Further develop the global research agenda for workers' health</p> <p>Output: Research report matrix to identify relevant gaps in research</p> <p>Support: CC: Jo Harris-Roberts, Ed Robinson, HSL, UK WHO/HQ: Ivan Ivanov</p>	
GPA Objective 5 : to incorporate workers' health into non-health policies and projects Manager: Wendy Macdonald, La Trobe University, Australia		
<p>Priority 5.1: Collate and conduct cost-benefit studies to clarify the economic benefits of workers' health</p> <p>Output: Published articles and information posted to WHO website</p> <p>Support: CC: Jos Verbeek, FIOH, Finland</p>	<p>Priority 5.2: Develop specific and relevant recommendations to manage risks associated with the impacts of globalization on workers' health</p> <p>Output: Guidance for development banks, non-health sector entities to improve workers' health</p> <p>Support: CC: David Rees, NIOH, South Africa</p>	<p>Priority 5.3: Implement toolkits for the assessment and management of OSH hazards in high risk industry sectors and for vulnerable worker groups</p> <p>Output: Tools, inventory, framework document, mapping of use and types of tools, evaluation</p> <p>Support: CC <i>Hazardous sectors:</i> Catherine Beaucham, NIOSH, USA <i>Agriculture:</i> Claudio Colosio, University of Milan, Italy <i>Transport:</i> Lygia Budnik, CIOM, Hamburg and Jane Hingston, NIOSH, USA <i>Vulnerable workers:</i> Owen Evans, La Trobe Univ. Australia Partner: <i>Young workers:</i> Susan Gunn, IPEC ILO, Annie Rice SafeWork, ILO</p>

The Way Forward Report: Global Plan of Action Objective Summaries

GPA Objective 1: To devise and implement policy instruments on workers' health Summary Report of GPA1 Working Groups GPA Objective 1 Manager: Claudina Nogueira (NIOH, South Africa)

Action Areas according to the Global Plan of Action (GPA) for Workers' Health

Actions 6-10 within the GPA fall within GPA Objective 1 -*To devise and implement policy instruments on workers' health*:

6. National policy frameworks for workers' health should be formulated taking account of the relevant international labour conventions and should include: enactment of legislation; establishment of mechanisms for intersectoral coordination of activities; funding and resource mobilization for protection and promotion of workers' health; strengthening of the role and capacities of ministries of health; and integration of objectives and actions for workers' health into national health strategies.

7. National action plans on workers' health should be elaborated between relevant ministries, such as health and labour, and other major national stakeholders taking also into consideration the Promotional Framework for Occupational Safety and Health Convention, 2006. Such plans should include: national profiles; priorities for action; objectives and targets; actions; mechanisms for implementation; human and financial resources; monitoring, evaluation and updating; reporting and accountability.

8. National approaches to prevention of occupational diseases and injuries should be developed according to countries' priorities, and in concert with WHO's global campaigns.

9. Measures need to be taken to minimize the gaps between different groups of workers in terms of levels of risk and health status. Particular attention should be paid to high-risk sectors of economic activity, and to the underserved and vulnerable working populations, such as younger and older workers, persons with disabilities and migrant workers, taking account of gender aspects. Specific programmes should be established for the occupational health and safety of health-care workers.

10. WHO will work with Member States to strengthen the capacities of the ministries of health to provide leadership for activities related to workers' health, to formulate and implement policies and action plans, and to stimulate intersectoral collaboration. Its activities will include global campaigns for elimination of asbestos-related diseases – bearing in mind a differentiated approach to regulating its various forms – in line with relevant international legal instruments and the latest evidence for effective interventions, as well as immunization of health-care workers against hepatitis B, and other actions addressing priority work-related health outcomes.

Priorities within GPA Objective 1

Priority 1.1: Develop / update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health

Outputs: Comparative analysis of national strategies and action plans, national profiles, and reports on lessons learned

Support:

Initiative Leader: Jovanka Bislimovska, Institute of Occupational Health, FYR of Macedonia

WHO/HQ: Ivan Ivanov

Priority 1.2: Develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases.

Outputs: Evaluation of national programmes, packages of essential interventions and good practices, for dust control, exposure and diagnostic criteria for pneumoconiosis.

Support:

Initiative Leaders: Maria Lioce-Mata, Faye Rice, Catherine Beaucham – NIOSH, USA

WHO/HQ: Ivan Ivanov

Priority 1.3: Develop and disseminate evidence-based tools and raise awareness for the elimination of asbestos-related diseases.

Outputs: Estimates of the burden of asbestos-related diseases, review of good practices for substitution of asbestos and prevention of exposure to asbestos, health surveillance of exposed workers.

Support:

Initiative Leader: Ken Takahashi, Institute of Industrial Ecological Sciences, Japan

WHO/HQ: Ivan Ivanov

Priority 1.4: Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization.

Outputs: Tools, guidance documents, assistance to countries for implementing and evaluating programmes, training on national programmes

Support:

Initiative Leaders: Maria Lioce-Mata, Ahmed Gomaa - NIOSH, US

WHO/HQ: Susan Wilburn

At the 8th Meeting of the Global Network for WHO CCs in OH held in Geneva, 18 – 23 October 2009, working groups were held for each of the four priorities within GPA Objective 1, with the main aims of identifying/confirming the measurable key outcomes expected by 2012; proposing other longer term deliverables expected to be met during the next Global Network Plan (2013-2016); gaps that need to be addressed; and ways of improving and implementing communication and coordination of the activities within the four priorities of GPA Objective 1.

The main outputs of the Working Group Discussions are summarized below, per priority

Priority 1.1 – Develop update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health

There are currently 11 projects within Priority 1.1 that focus on the development and update of national plans and profiles on workers' health in various countries (Ukraine, Serbia, Chile, Australia, Vietnam, China and Brazil). Two new projects were proposed from Bulgaria and Macedonia.

Short Term Deliverables

The following were confirmed as being important deliverables for 2012:

- Standardized format for national profiles to be developed and approved by ILO and WHO (to be developed in cooperation with the WHO CCs with projects in Priority 1.1)
- Consider the Southeast European National Profile Programme and the Finnish National Profile as models and guidelines
- Establish a global repository of national policy instruments on workers' health
- Develop / update national profiles on workers' health: completed for Vietnam, China
- Develop / update national profiles on workers' health: ongoing for Brazil - NEW Project, and a few other countries (Ukraine, Serbia, Australia, Chile)
- Develop and update national legislation, implementation and evaluation of national policy instruments for workers' health in the abovementioned countries

Recommendations

It was agreed by the participants that the following are the recommendations to follow, in order for the proposed deliverables to be met:

- WHO, ILO, regional economic integration bodies: these should work together for common support, joint actions and inter-country collaboration and benchmarking.
- Gather evidence for action on workers' health and develop a global list of workers' health indicators. Two of the projects in this priority are led by WHO HQ and will develop national and international indicators of achievement for the GPA. These will include review of existing data on the current status and trends in workers' health, and will compare data from both developed

and developing countries. It is envisaged that the expected outcomes will inform and advise policy makers.

- Implement a systematic review (monitoring, evaluation and benchmarking) of national policies, action plans and profiles in workers' health
- Assist in enabling the ministries of health to provide leadership for activities related to workers' health
- Aim to strengthen national capacities and contribute to policy development among WHO CCs, in order to encourage inter-sectoral collaboration and promote governmental stewardship
- Use existing resources and established initiatives / networks as benchmarks and guidelines for new proposals and their implementation
- Cross-reference with projects across the other four GPA objectives and respective priorities and add new projects from WHO CCs to address identified gaps
- Design appropriate communication strategies to showcase products; promote marketing and uptake interventions

Long Term Objectives

Long term objectives to be accomplished beyond 2012 include the evaluation on policies and mechanisms developed for workers health. It is suggested the WHO and ILO offer ongoing guidance for the development, updating and use of national profiles on workers' health. The key achievement of Priority 1.1 will be the number of countries with developed national action plans on workers' health by 2013.

Barriers

The main barrier continues to be the low profile that occupational health is given on the political agenda of many countries. It is imperative that governments are sensitized to the fact that occupational health is a crucial issue for sustainable development to be possible. The WHO as an international organization should assist member states in elevating the profile of workers' health.

Another constraint is the limited resources (funding, technical and human), particularly in developing countries. The WHO should coordinate the process of resource mobilization and sharing of technical capacities in all regions, to assist the implementation of action on workers' health.

WHO HQ together with the ILO, regional offices and GPA leadership should work together to implement the projects within the Global Network Plan by developing policy options, model framework legislation and an inventory of good national practices.

Priority 1.2 – Develop and disseminate evidence-based prevention tools and raise awareness for the prevention of silica- and other dust-related diseases

This priority is divided into five areas of focus:

Area 1 - Partnerships and strategic plans to eliminate pneumoconiosis

Area 2 - Capacity building in diagnosis, surveillance and treatment

Area 3 - Laboratory analysis

Area 4 - Hazard control strategies

Area 5 – Increase technical knowledge in industrial hygiene

Short Term Deliverables

Across the five areas of focus, the following were confirmed as being important deliverables for 2012:

- Implementation of Silica National Strategic Programmes in Brazil and Chile, Vietnam and Thailand, Peru, Turkey, Colombia
- The establishment of a pneumoconiosis resource in the form of an electronic library
- Introduction of spirometry training courses in Ukraine, the Americas, Kenya
- The promotion of silica elimination initiatives to policy makers, OSH practitioners, enterprise managers, and workers
- The application of interventions in enterprises with a high risk of silicosis
- Development of a radiographic reading curriculum in Asia (Air Pneumo), already piloted in Brazil
- Introduction of Chilean accrediting system for silicosis diagnosis (PECASI)

- Creation of a Laboratory Network of CC experts led by NIOSH to provide technical assistance and guidance to countries to develop their own laboratories
- A inter-laboratory quality assurance programme to be developed
- Creation, implementation and evaluation of the Chilean silica control banding guidance for small enterprises adapted from UK COSHH Essentials
- Simple guidance for specific sectors: stone crushing, ceramics, dental labs, milling, etc.
- Compile regional profiles of the use of respiratory PPE - efficiency and certification programmes

Long Term Objectives

The main focus includes an increase in national programmes in regions; assisting new countries with implementation; accreditation of digital reading; continued translation, implementation, evaluation and sharing of strategies among countries; and the involvement of local and federal governments.

Barriers / Gaps to be addressed

- The development of a WHO Fact Sheet and WHO/ILO policy paper
- Partnerships and strategic plans to eliminate pneumoconiosis
- Expanding training in radiographic reading for silicosis and pneumoconiosis for occupational physicians and primary health care workers
- Development of an electronic platform to advertise and market training workshops
- Inadequate legislation with regard to the need for the accreditation of B reading courses
- National accreditation schemes require strong support from ILO / WHO and regions
- Surveillance system sharing is required as it is currently very limited
- Building of adequate expertise and laboratories
- Development and sharing of laboratory procedures
- Work time does not take into account exposure to silica
- Facilitate the exchange of control validation information across countries
- Integration of BOHS into primary care services for prevention and control of silicosis
- There is a need for approved training documents – suggestion for the update of WHO PACE Hazard Control Document, with translations into other languages
- Rolling out of industrial hygiene sampling strategy and analysis courses which include a train-the-trainer component and monitor usage and impact
- Respiratory protection programme - guidance for small businesses
- Creation of an industrial hygiene education group to work with other GPA Objectives (e.g. GPA3.2) to develop education aids for GPA Priority 1.2
- In Chile, the infrared system for silica analysis has not been very efficient because of the unexpected interferences caused by different types of soils

Some Recommendations

- Working hours should be addressed as part of control strategies
- Technical knowledge and expertise with reference to infrastructure of the local government and selective collaboration
- Standardisation across various parameters:
- TLV of dust in workplace environments and of worker dust exposure; methods for collecting and measuring dust and for measuring exposure of the workers; methods for dust analysis.
- Safe reintegration of the disabled worker into the workforce
- The Silica Network of WHO CCs should liaise with the IAEA (International Agency of Atomic Energy) for the continual improvement of laboratories

Priority 1.3 - Develop and disseminate prevention tools and raise awareness for the elimination of asbestos-related diseases (ARDs)

The 11 current projects within this priority are organized into four areas, three of which correspond to the three levels of preventive activities, and the fourth, which was designated to monitor progress of the entire spectrum of preventive activities; a few new projects were proposed at the Working Group.

Short Term Deliverables

Across the four areas, the following were confirmed as being important deliverables for 2012:

- A training video for health and hygiene experts on prevention of ARDs (in English) has been

completed in Japan but was further to be posted for e-access

- National profiles of asbestos use and ARD in the NPEAD (ILO/WHO) format are to be completed in a number of countries. The effort by PAHO to formulate a Regional Atlas was deemed valuable and co-ordination is to be sought
- WHO CCs will provide support to governments to ratify ILO N.162 (currently 28 countries ratified). The measurable outcome is the increase in the number of countries provided with support in awareness-raising activities, particularly on the regulatory control of chrysotile asbestos. Countries which ratified the convention will share information and their experience to assist the facilitation of the ratification process in other countries
- Estimates of current and future burden of disease for ARDs will be produced
- Awareness-raising activities will be promoted through international meetings, workshops, publications, and data-sharing by use of specific portals. Work in this area implemented by WHO CCs and in co-operation with ministries will be showcased by convening regional meetings, to communicate the asbestos work being carried out by the WHO CCs

Gaps to be addressed

Examples of possible critical outcome gaps needing filling by 2012 included the following 4 items:

- There is a lack of updated information and data about exposure to asbestos from both direct and indirect sources, e.g. magnitude of exposure and number and types of workers affected, as well as about information about ARDs. In this regard, job-exposure matrices need to be developed in collaboration with environmental and public health institutions dealing with non-occupational exposures.
- There is insufficient review of the effectiveness of preventive measures to provide models of effective interventions, as well as on the cost effectiveness analysis for substitution, elimination, control measures and disposal.
- Currently there is no practical toolkit in one place for use by others, such as a data repository. The WHO portal on the "Ten most dangerous chemicals," currently under development and the GEOLibrary, are candidate sites.
- No project exists for Area 3 on Tertiary Prevention. The focus should be to develop, promote and share schemes for equitable compensation of ARDs.

Long Term Objectives

Long-term goals to be focussed on in the next Global Network Plan of the WHO CC In OH, 2013-2016 are to:

- contribute to increasing the number of countries establishing and implementing NPEAD i.e. in at least 15-20 countries; and
- build sufficient capacity (in terms of legislation, regulatory control, preventive measures, worker awareness) for the three levels of prevention in all countries with substantial level of asbestos exposure, with a special focus on developing countries

Communication and Coordination of Activities related to Priority 1.3

Suggestions for improved communication and coordination between WHO-HQ, Regional Offices, GPA managers, initiative leaders and project leaders include the following:

- Facilitate regional meetings by WHO-HQ and Regional Offices, highlighting the work of WHO CC and involving other stakeholders (e.g. UN agencies and NGOs), as currently planned for Asian Pacific area in December 2009, Thailand.
- Regional Offices to assist project leaders and WHO CC for direct liaison with government ministries and WHO Country Offices to obtain data and records which are crucial for the

implementation of their projects.

- The Responsible Officer for the particular region to function as a key player in assisting and supporting the WHO CC in implementing projects.
- Promote inter-regional communication, recognising that WHO CC can seek assistance from Regional Offices outside their own region.

Priority 1.4 - Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization

The projects within this priority are divided into 6 areas of interest:

Area 1: Needlestick / sharps injury prevention

Area 2: Musculoskeletal injuries / ergonomics

Area 3: Stress / work

Area 4: Pharmaceutical associated risks

Area 5: Respiratory risks

Area 6: General risk assessment / risk management tools and information dissemination

Short Term Deliverables

- Global framework for national programmes for health workers
- Revision of WHO/NIOSH/PAHO tool kit Protecting health workers – preventing needlestick injuries including tools and materials (TOT, brochures, palm cards, posters) & expansion to airborne hazards
 - Hepatitis B immunisation campaigns
 - Respiratory assessment and protection
 - Health and safety committee training and walk-through materials
 - Surveillance systems
- WHO Guidelines for health worker immunisation

Gaps to be addressed

- Comprehensive programme for national programmes for occupational health of health workers - assessment and management of all occupational hazards – 50% of countries reporting in the WHO GPA Member State survey
- Coordination and standardisation of tools, training, information systems to avoid duplication and enhance quality and comparability across countries
- Immunisation campaigns for health workers – 35 % of countries reported full requirement for hepatitis B immunisation of health workers.
- Law / regulation requiring immunisation of health workers against hepatitis B in all member countries, implementation of the law, assessment of coverage of hepatitis B immunisation for health workers
- Geographical gaps and dissemination of tools, resources and best practices
- Integrated migration policies with OSH aspects
- Partnering with rural health networks
- Partnering with HR rural migration initiative

Long Term Objectives

- Comprehensive package for hazard assessment, prevention and control of all hazards to health workers
- Piloting ergonomics tool kit in health care settings
- Guidelines for health worker access to HIV and TB prevention and care
- Key elements for surveillance of occupational exposure to blood, training on surveillance systems and networks for surveillance

Barriers and Solutions

- Misconception about the conflict between patient safety and worker safety
- Promotion of marketing and uptake of interventions
- AIDE Memoire on hazard awareness

- Describe capabilities needed
- The language for migrant nurses / improve cultural mediation

Suggestions for Communication and Networking

- Multiple partnerships planned and existing (IPC, HIV, HRH, GHWA, etc)
- Joint website linked to GEOlibrary to share tools and best practices
- GOHNET system

Global Plan of Action Objective 2: To protect and promote health at the workplace Summary Report of GPA 2 Working Groups GPA Managers: Stavroula Leka and Aditya Jain

The WHO Global Plan of Action for Workers' Health includes the following objectives:

- Defining essential interventions for prevention and control of mechanical, physical, chemical, biological and psychosocial risks in the working environment
- Adopting a basic set of occupational health standards to make certain that all workplaces comply with minimum requirements for health and safety protection, ensuring an appropriate level of enforcement, strengthening workplace health inspection, and building up collaboration between the competent regulatory agencies according to specific national circumstances
- Capacities should be built for primary prevention of occupational hazards, diseases and injuries, including strengthening of human, methodological and technological resources, training of workers and employers, introduction of healthy work practices and work, and of a health promoting culture at the workplace. Mechanisms need to be established to stimulate the development of healthy workplaces, including consultation with, and participation of workers, and employers
- Health promotion and prevention of non-communicable diseases should be further stimulated in the workplace, in particular by advocating healthy diet and physical activity among workers, and promoting mental and family health at work. Global health threats, such as tuberculosis, HIV/AIDS, malaria and avian influenza, can also be prevented and controlled at the workplace

On the basis of the above objectives, three key priorities have been defined by the WHO and a number of activities are being undertaken by its Network of Collaborating Centres in Occupational Health to meet them. The first priority focuses on the development of practical toolkits for the assessment and management of occupational health risks, with a particular focus on chemical, physical, biological and psychosocial risks, and on musculoskeletal disorders. The second priority focuses on the development of Healthy Workplace programmes and guidance to inform country frameworks. The third priority focuses on the development of toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, influenza, emphasizing vulnerable groups, and in particular migrant workers.

This report presents the outcomes of the 8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health that was held on 19-23 October 2009 in WHO Headquarters, Geneva, in relation to the above three priorities. Three working groups were organized as part of this meeting to discuss progress achieved so far, targets to be met by the next meeting of the Network in 2012 and further activities to be promoted between 2012-16. The report presents these outcomes by priority.

Priority 2.1: Develop practical toolkits for the assessment and management of occupational health risks (focus: chemical, physical, biological, psychosocial risks, musculoskeletal disorders)

There are a number of priority leaders in relation to the above area. Marilyn Fingerhut (NIOSH, USA) and Leslie Nickels (University of Illinois at Chicago, USA) are priority leaders for toolkits focussing on chemical and physical risks. Wendy Macdonald (La Trobe University, Australia) is priority leader for toolkits focussing on musculoskeletal disorders. Stavroula Leka and Aditya Jain (Institute of Work, Health & Organisations, University of Nottingham, UK) are priority leaders for toolkits focussing on psychosocial risks. Evelyn Kortum from WHO Headquarters provides support to this priority area. A number of outputs have been defined for this priority area such as tools, inventories, framework development, mapping of use and types of tools, definition of common criteria of toolkits and

evaluation. Two working groups were organized to address this priority area and both were led by the priority leaders in the respective areas: the first focused on chemical and physical risks and the second on psychosocial risks. A working group of the International Ergonomics Association (IEA) Technical Committee on Musculoskeletal Disorders was formed at the IEA Triennial Congress in Beijing in August 2009, and this work is now underway, coordinated by Wendy Macdonald.

Toolkits focusing on chemical and physical risks

A number of outcomes are anticipated by the current work plan until 2012. These include training and technical assistance development through workshops, web-based tools, and web-available instructor based training courses. Working with IOHA is essential in this area and a number of common activities were identified, including developing a common educated approach and drafting a document to manage available tools and determine their use and suitability. In addition, networks of stakeholders who interact via International Control Banding Workshops organized at IOHA meetings were considered important. Other initiatives mentioned included the translation of COSHH Essentials into Chinese and the update of ICCT to include all current toolkits. Adaptation of materials available to local situations was a key issue and will be taken forward in two countries in particular, Denmark and Bolivia. Funding was particularly considered and the submission of SAICM applications was discussed. Finally, the policy level was discussed and work will be carried out to include control banding principles and approaches in standards and legislation in different countries. In addition, action should be taken at WHO/ILO level to influence ministries to pass relevant health and safety laws.

The working group also identified some critical gaps that need to be addressed by 2012. One of them was an electronic resource library for control banding so that tools, training materials and policy information can be shared. The Geolibrary (www.geolibrary.org) will be used for this purpose. Another gap concerned the provision of a general framework on toolkits, including their purpose and application, that could be available on the internet so that networking, dissemination and flexibility can be facilitated. Active networking of toolkit experts was particularly highlighted. In relation to this, collaboration with GPA 3.2 and IOHA were stressed to increase training of occupational hygienists and to include control banding approaches in their training. Collaboration with the BOHS priority was also discussed so that BOHS personnel are trained on the use of toolkits to reduce exposure in workplaces. Sectoral collaboration (e.g. construction, healthcare) is also important to encourage inclusion of simple guidance approaches. Further implementation, evaluation, translation and modification of toolkits for use in local situations and SMEs are necessary. Finally, engagement in communication with regulators should be ongoing as without legal mandates, control banding is difficult to sustain.

Further work that is necessary beyond 2012 to 2016 was identified by the working group. This included evaluation of the cost-effectiveness of practical tools and the provision to governments of assessments of the economic benefit of using them. The development of web-based tools should use different levels, from a simple introduction and toolkit to a more advanced level. Work-related disease indicators should be used with the toolkit approach. As such the indicators used should be improved and where the indicators have been measured already this should be recognized and their use reviewed. Another area for future work is the integration of the different toolkits currently being developed to address physical, chemical, ergonomic and psychosocial hazards to promote a comprehensive risk management approach. Finally, there should be communication with the international association of labour inspectors so that a toolkits workshop can be organized to them to educate them on the outcomes of our work.

Toolkits focusing on psychosocial risks

The Working Group first discussed progress achieved since the last CC meeting. The major achievement noted was the development of the European framework for psychosocial risk management (PRIMA-EF) by a consortium of EURO CCs. The psychosocial risk management framework is meant to accommodate all existing (major) psychosocial risk management approaches across Europe. The PRIMA framework has been built from a theoretical analysis of the risk management process, identifying its key elements in logic and philosophy, strategy and procedures, areas and types of measurement, and from a subsequent analysis of typical risk management approaches as used within the EU. A number of outputs may be found on the PRIMA-EF website (www.prima-ef.org) including a book, a series of guidance sheets, a guide through the WHO's Protecting Workers' Health Series and an inventory tool on best practice interventions from different

European countries (with a focus on work-related stress and workplace violence and harassment). The PRIMA-EF materials are currently available in English, Italian, German, Dutch, Polish, Finnish, traditional Chinese and Japanese. A Spanish translation will be available by the end of 2009.

It was agreed that the framework should serve as the basis for global work in this area and more work should concentrate on its adaptation in different contexts. It was agreed that the PRIMA-EF materials will be translated in at least two more languages by 2012: Portuguese and Arabic. In addition, funding has been secured to develop training materials on the basis of the framework including a train the trainers guide. It was agreed that all training materials will also be translated in different languages. There is need to validate training materials and tools in different countries and adapt the framework in selected countries until and after 2012.

Awareness raising was identified as a key gap to be addressed until 2012. A number of PRIMA-EF dissemination activities have already taken place but these should continue both at the European and, more critically, at the international level. There was a suggestion for the development of a rapid survey tool on psychosocial risk assessment to be used in developing countries. This will be considered as part of the ongoing PRIMA-EF research activities. A universally accepted glossary of terms will also be developed until 2012 as part of the training materials. Another identified gap was information on the validity of existing tools that should be disseminated widely. Information sharing for the development of regional/country specific tools was deemed to be an important gap to be addressed. Finally, sector-based tools and guidelines should be developed and promoted.

A number of solutions were also identified to address the gaps and barriers identified. Apart from data and information sharing as discussed above, the Working Group agreed that it is important to further strengthen existing networks and promote better collaboration between regional networks. WHO regions, especially those with developing countries, should be particularly involved in these networks. It was agreed that a proposal will be submitted for the development of a Psychosocial Risk Management Network (PRIMA-NET). Different sources of funding will be explored towards this end. The work completed on the PRIMA toolkit and framework should be linked to other GPA priorities like i-BOHS and Healthy Workplaces. Though them it is important to link psychosocial risk management to other risk management practices at the workplace. Finally a suggestion was made for a joint statement by WHO CCs calling for better coordination between WHO-ILO. Closer links with the ILO's SafeWork programme will be actively explored.

A number of the actions identified above will continue after 2012. These include the further adaptation and implementation of the PRIMA framework across WHO regions, the evaluation of tools, and further development of sectoral frameworks. Finally links with industry will be strengthened to promote the implementation of the framework.

Priority 2.2: Healthy Workplace programmes and guidance to inform country frameworks

There are a number of priority leaders in relation to the above area. P. K. Abeyunga (CCOHS, Canada) and Fernando Coelho (SESI, Brazil) are priority leaders from the CC Network. Valentina Forastieri (ILO) is partner from the ILO. Evelyn Kortum (WHO Headquarters) and Marie-Claude Lavoie (WHO/PAHO) provide support to this priority area. A number of outputs have been defined for this priority area such as a review of effectiveness of existing programmes for healthy workplaces, tools for creating healthy workplaces including a health-promoting culture and occupational health and safety principles. A working group was organized to address this priority area and was led by WHO.

A number of outcomes to be achieved by 2012 were identified by the Working Group. A Healthy Workplace framework and model will be defined and accompanying guidance on healthy workplace will be developed and published through the WHO's Protecting Workers' Health series. In addition, training will be developed to support and promote the framework. The model developed will be piloted through WHO/PAHO and in Brazil. Finally, assessment tools and methods as well as indicator models will be developed. It should be noted that work completed through this priority links to other priorities, such as the development of toolkits, and should be promoted in a comprehensive manner.

Some of the above outputs currently represent gaps to be addressed. These include the development of indicator models and assessment methods. More work should concentrate on the definition of the fourth component of the Healthy Workplace framework that focuses on responsible business practices.

A further identified gap was the differentiation between innovation projects and best practices. In this way success stories will be better promoted. Another suggested gap was the development of accreditation systems for Healthy Workplaces and dissemination of methodologies to service providers globally. This will require concentrated efforts until and beyond 2012. Due to the fact that this represents a new priority in the GPA, it was decided that a Global Consultation Meeting on Healthy Workplaces will be organized in 2011 before the next CC meeting. The meeting will be held in Cairo, Egypt and will be promoted by WHO/EMRO. An idea was to organize the meeting so that it coincides with the World Health & Safety Day on the 28th of April.

A number of solutions were discussed as a way to address identified gaps and barriers. Awareness raising was key among them. To this end, partnerships with existing networks and different stakeholders were deemed to be important. It was suggested that a Global Network of Healthy Workplaces is established and a website is being developed to facilitate communication. Funding for this initiative will be sought from the World Economic Forum, charities and foundations. Collaboration with the ILO is crucial and will be actively pursued. In addition, communication with other GPA objectives is key as the Healthy Workplaces framework encapsulates most of the priorities addressed through other GPA objectives. In addition, it is important to consider implemented models, standards and management systems in the framework and its promotion. Finally, it was suggested to make use of the World Health & Safety day to disseminate Healthy Workplaces newsletter, initiatives etc.

The Working Group also identified key targets to be achieved after 2012. Apart from the ongoing dissemination of the framework, these included the implementation of the framework and its evaluation in different contexts as well as the development of national profiles and cost-effectiveness assessment. The promotion of regional awards of Healthy Workplaces and the development of accreditation systems were also discussed. Finally, it was suggested that employer associations are targeted so that they are engaged in the development and promotion of the framework globally, such as the CEO Leadership Charter and the International Employers Organization.

Report GPA Objective 3: To improve the performance of and access to occupational health services

Summary Report of GPA3 Working Groups

GPA Managers: Timo Leino, FIOH and Leslie Nickels, UIC

This report presents outcomes of the two working groups on capacity building of the 8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health that was held on 19-23 October 2009 in WHO Headquarters, Geneva. Working groups were organized as part of this meeting to discuss progress achieved so far, targets to be met by the next meeting of the Network in 2012 and further activities to be promoted from 2012-2016.

GPA 3 includes four objectives:

16. Coverage and quality of occupational health services should be improved by: integrating their development into national health strategies, health-sector reforms and plans for improving health systems performance; determining standards for and coverage of occupational health services; setting targets for increasing the coverage of the working population with occupational health services; creating mechanisms for pooling resources and for financing the delivery of occupational health services; ensuring sufficient and competent human resources; and establishing quality assurance systems. Basic occupational health services should be provided for all workers, including those in the informal economy, small enterprises, and agriculture.

17. Core institutional capacities should be built at national and local levels in order to provide technical support for basic occupational health services, in terms of planning, monitoring and quality of service delivery, design of new interventions, dissemination of information, and provision of specialized expertise.

18. Development of human resources for workers' health should be further strengthened by: further postgraduate training in relevant disciplines; building capacity for basic occupational health services; incorporating workers' health in the training of primary health care practitioners and other professionals needed for occupational health services; creating incentives for attracting and retaining human

resources for workers' health, and encouraging the establishment of networks of services and professional associations. Attention should be given not only to postgraduate but also to basic training for health professionals in various fields such as promotion of workers' health and the prevention and treatment of workers' health problems. This should be a particular priority in primary health care.

19. WHO will provide guidance to the Member States for the development of basic packages, information products, tools and working methods, and models of good practice for occupational health services. It will also stimulate international efforts for building the necessary human and institutional capacities.

To address the significant gaps in capacity to recognize, assess and prevent work related injuries and illnesses, the network of collaborating centres in occupational health has defined two priority areas for capacity building as part of the 2009-2012 workplan. The priorities, anticipated outcome and leadership includes:

Priority 3.1: Develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources

Output: Good practices and demonstration projects for organization and delivery of OH services, evaluation of service delivery, international knowledge networks of service providers, website clearinghouse of information materials for OH practice

Support:

CC: Timo Leino, FIOH, Finland and Norbert Wagner, UIC

Partner: Igor Fedotov, ILO

WHO/HQ: Ivan Ivanov

Priority 3.2: Adapt and disseminate curricula, training materials and training for international capacity building in OH

Output: Model materials and courses for BOHS, inventory, technical support for delivery of international courses and on-line training, national training programmes in low- and medium-income countries, introduction of OH into professional education

Support:

CC: Norbert Wagner (Great Lakes Centers University of Illinois at Chicago School of Public Health, USA), Linda Grainger and Jonny Myers (University of Cape Town SA), Frank van Dijk (Coronel Institute NL), John Harrison (NHS UK), Katja Radon (LMU Munich Germany)

WHO/RO: Rokho Kim

Priority 3.1: Develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic OH services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources

Discussion about Basic Occupational Health Services (BOHS)

Throughout two working groups held during the meeting several themes emerged including the definition of basic occupational health services and at what level of service should capacity building be prioritized.

The meeting started with a thorough and committed discussion about the concept of Basic Occupational Health Services (BOHS) sharing experiences and visions.

A discussion on the target population for BOHS resulted in the conclusion that the target population is 'all who are working'.

There is a need for a good definition of BOHS starting from the acknowledgement that BOHS will

always be a part of a health system and within that of an OH system. The systems are not the same in different countries and cultures and even within countries large diversities exist. The ILO convention 161 on Occupational Health services (OHS) has been developed for enterprises who can afford an advanced type of service. SMEs however have a problem; they mostly cannot organize such a system for various reasons. Workers in SMEs and other underserved populations such as workers in the informal sector and in rural areas often do not have any support or care. Therefore we need models and strategies on how to reach these working populations with the first aim to make a start in OHS. From there we would like to develop toward a more complex and complete form of service. In many situations the primary health care network is the only existing network infrastructure for health. Health professionals there have the opportunity e.g. to ask for the work history and to start an intervention. It is not yet clear which ways are most successful in the development of occupational health within primary care, but a number of initiatives are running in different countries and cultures showing various possibilities and challenges. Evaluation and sharing experiences should be promoted in order to stimulate each other and to foster rapid progress in different places of the world.

Essential is a national framework. Countries should have a health system including activities in occupational health. There is a great need for a comprehensive approach such as for national programmes wherein priorities for OH can be set. Government support is needed always. Some argue for a leading role of the government. The role of the Labour Inspection is important. The labour parties involved: workers and employers and their associations cannot be missed. So, OHS might have to be a part of a national labour policy as well. Funds are needed and commitment of competent professionals. It is important to describe the governance of the services as the services have to meet standards and have to be supported by expert institutions. Nevertheless low-cost solutions are important for BOHS, adapted to local conditions.

A stepwise model representing development stages is widely accepted as a conceptual starting point. This model is described in a WHO publication on BOHS¹. The model has not the aim to represent a picture of a static reality or a picture of evolutions in various countries because reality is far more complex and creative. The aim of this model is to structure thinking and development of policies in order to contribute to a rapid realization of concrete support especially for those 80 % of all workers in the world who nowadays have no professional OH support at all. The model distinguishes four levels of care:

- a. Starting level including e.g. a nurse or a safety agent dealing with existing accidents and occupational diseases
- b. BOHS facilities with a toolbox including several well developed instruments; provided by a nurse and/or a physician mostly operating from primary health care services
- c. The ILO level that is OHS in the form of comprehensive multidisciplinary teams
- d. In-company or external most comprehensive services including rehabilitation services, health promotion, sometimes curative care etc.

In this model we see a staging from a simple level of complexity and completeness of care toward an all embracing stage. Finally the aim is to reach a service level stage 3 (c) for all workers.

In reality in all countries all levels can be and mostly are present at the same time. We can see various forms of OHS in different companies, branches or subpopulations. BOHS organizational structures and governance are different as well. In some countries unions are leading services such as in Spain. In many countries such as in Thailand OH is integrated in existing health care structures. In some situations the training and participation of workers and of the local community is the key structure. In Bahrain where the aim is coverage for all, a minimum package of care exists including training of family physicians in e.g. taking an occupational history. In Italy all levels are present, among these there is a BOHS network for agriculture including trained General Physicians (GPs). The public system pays for the expertise and the enterprises provide locations. Common access to internet is important. It can be noted that in many countries industry is paying for the services with a good result, whereas in other countries public financing stays central. Mixed models exist as well such as in Finland.

In South Africa a key problem is the functioning of the health systems in general as some are disfunctioning. Most of these are in the curative mode applying a doctor-nurse approach. In other

¹ http://www.who.int/occupational_health/publications/bohsbooklet.pdf (third edition 2007)

occasions the focus is primarily on legal issues for compensation e.g. for safety injuries. A preventive or promotional approach is often missing. Multinationals and transnationals often have a comprehensive OHS in their home countries but not in South Africa. There are examples of multinationals being an important source of OH, but also examples where differing standards exist within the same multinational in different countries. Examples are presented of an asbestos case in South African mining and in African countries north of S.A. Sometimes there is a form of primary health care provided by these companies but not offering occupational health care. When companies fear for compensation claims that can hinder the start of health promotion and protection campaigns.

In Latin America prevention should have first priority and not medicalisation. Public policy must support OH to prevent deterioration of the situation such as in Colombia. There is a need for effective down-to-earth systems because complex systems do not work for workers. In Turkey large industries covering about 20 % of the working population provide OHS stage 3 now. For the rest a family health system approach has been planned starting at the stages 1 and 2. The ministry of Labour has included the social partners in this approach.

Whenever possible we should start with a first 'needs assessment' concluding what is needed in a specific country or branch of industry, or e.g. for the informal sector or SMEs. Even more: it is important to find out who is responsible and who can be a provider. We need to identify actors able to provide occupational health care. In some places in e.g. India there are no or limited numbers of physicians and nurses, so we have to look for other actors.

There is some confusion about BOHS as well. There is the ILO convention 1612 but we need a clear definition of OHS and of BOHS as some employers are only willing to pay for medical examinations or only for measurements at the work place, which is not sufficient and will not provide an effective prevention. BOHS has to be explained in terms of a standardized minimum package of services including e.g. workplace surveillance, workers' health surveillance and primary prevention. This minimum has to be developed in a good definition of BOHS that can be defended in e.g. parliaments³. In addition well trained experts are needed who can execute BOHS tasks and can support BOHS.

Conclusions

- The target population of Basic Occupational Health Services (BOHS) are those 80% of all workers who today do not have any OH support; special attention has to be paid to those workers who need support most e.g. workers in the informal sector and in SMEs.
- BOHS can be a starting point toward more comprehensive forms of OHS.
- BOHS can be part of the health care system but can include other parties as well such as workers, unions, branches of industry, Labour Inspection or local communities. Large variations exist in BOHS depending on national and local conditions. Often, primary health care (PHC) systems are the only available systems to use. Integration of OH in PHC is a good option. Inclusion of 'labour' is to be considered⁴.
- Often, initiatives of the government are crucial e.g. in the form of legislation, or in the development and implementation of a nationwide health system or a programme for OHS in primary health care. ILO is pleading for an Occupational Safety and Health (OSH) system.

² 'The ILO Convention No. 161 on Occupational Health Services and the WHO Global Strategy on Occupational Health for All call for the organization of services to all working people of the world. We are still far from this goal, and it is not likely that the coverage will essentially expand without concerted efforts. To address the new safety and health needs the WHO has launched a new Global Plan of Action on Workers' Health and the ILO has produced a Global Strategy on Occupational safety and Health and the ILO Convention No. 187 on Promotional Framework.' (citation from WHO BOHS booklet page 5, footnote 1).

³ In the WHO booklet on BOHS, 12 activities of BOHS are described; more elaborate descriptions of these activities are in preparation.

⁴ In the WHO booklet on BOHS, ILO is cited pleading for BOHS as part of an Occupational Health and Safety system (OSH system).

Annex 4

- A health system approach is needed including the building of capacities on different levels; just as examples: in OHS stage 1 competency on exposure assessment & evaluation and on practical prevention; in stage 2 in addition competency in diagnosis of occupational diseases; in stage 3 adding competency in rehabilitation.
- There is a need to define a standardized minimum package of services for BOHS to prevent insufficient and ineffective services; the WHO publication on BOHS can be a starting point for elaboration.
- A needs assessment can be a good starting point for BOHS provision, defining local needs and opportunities. In general there is a great need for low-cost, simple, effective, down-to-earth tools and materials.
- For funding: in general the employer is in charge and pays for services as he is responsible to prevent diseases and accidents; where this is not possible or when this just does not happen, governmental initiatives are essential. In some cases social security organizations and other forms of insurance systems can play an important role.
- Evaluation of BOHS practices and sharing experiences should be promoted more in order to stimulate each other, to organize mutual support and to make more rapid progress in different parts of the world. Global and regional facilities for sharing materials and support have to be organized.

Measurable achievements and expected 2012 outcomes

Examples of key 2012 outcomes already achieved or expected to be achieved by the existing projects

Global report on "Occupational Health in Primary Health Care" will be completed with support of collaborating centres

National, regional and sectoral OSH profiles and roundtables (forums, e.g. Chile 2009) are and will be organized

Programmes for establishing and strengthening occupational health services and BOHS:

- China, Thailand, Vietnam, FYR Macedonia, Latin America, Turkey, South Africa, India, Indonesia, and in many other countries and regions, including various networks

Practical BOHS delivery models and published practices are distributed:

- China, Thailand, Vietnam, FYR Macedonia, Latin America, Turkey, South Africa, India, Indonesia and in many other countries and regions

Key outcomes are also related to results for education and training (priority 3.2) such as programmes of grass-root level training of occupational health and safety, programmes of post-graduate training, train-the-trainer programmes, an online WHO OH capacity development facility, BOHS Guidelines and a Manual, a BOHS field measurement kit for priority exposures, a book of good practices and solutions for specific problems

Examples of possible critical outcome gaps needing filling by 2012

How to benefit of the work of others in developing strategy and programmes on BOHS is a gap as many projects are running without knowing each other: ICOH initiatives, ILO/CIS initiatives, initiatives of professional associations and schools e.g. IAOH and EASOM, collaborating centres active in one region or across regions (Fundacentro Brazil, Kitakyushu Japan, Singapore, Lausanne Switzerland, Cape Town S.A., Chicago USA, Madrid Spain, South East European countries S.E.E., etc.). There is a need for permanent connecting overarching initiatives.

How to create necessary tools to build-up and integrate OH in Primary and Public Health Care.

In many countries there is no support from the national government which mostly is essential to get developments started and continued.

Cross-links are to be laid with Primary Health Care (e.g. WONCA), Labour Inspectorates, ILO, employers, workers and their associations.

Funding is needed as many initiatives are lacking financial support.

Adequate policy and technical consultations are needed.

CCs projects to achieve deliverables by 2012

Many initiatives are going on delivered by the collaborating centers and overarching initiatives are running in different regions. The WHO regional centers play an important coordinating role. An example is the initiative in South East Europe where nine countries are working closely together in developing Basic Occupational Health Services. This initiative might be a model for other regions such as OHS networks in Asia, Latin-America, Arabic countries and Africa where similarities in history and cultural backgrounds can be used to develop (basic) occupational health care more efficient in a regional approach.

An important initiative is the Occupational Health Capacity Development (OHCD) project that will be started as soon as funding can be found. In this project two so far separate facilitating initiatives will cooperate: the iBOHS initiative and the Learning Repository initiative. The aim is to establish one online platform to support education and training and BOHS development including a learning repository, a support and advice function and access to high quality information such as the Cochrane Occupational Health field, ILO, WHO publications and PubMed. Basic Occupational Health Services will be promoted by a special task group working within this platform. Other task groups are possible such as one on translation as the need to translate good learning materials is high.

Priority 3.2 “Adapt and disseminate curricula, training materials, and training for international capacity building in OH”

Project leadership presented two models for increasing collaboration and dissemination of training and education materials, curricula, and course. The presentations included:

- (a) the learning repository (Jonny Myers and Linda Grainger) and
- (b) the i-BOHS Initiative (Frank van Dijk and John Harrison), also an ICOH initiative

A through discussion started on content, goals, limitations and demands for collaborations. Specifically, following aspects were discussed in depth:

- Quality control and need for a review process
- Focus on primary prevention technologies and actions in teaching
- Need to define core competencies and levels of competencies stratified according to target groups of educational efforts, professions and tasks
- Need to add resources and “train the trainers”- teaching modules to improve pedagogical skills of educators
- Potential need for mentoring educators through the process of using materials from the repository
- Possibilities for more successful fund raising if funding efforts take regional needs and funding opportunities into account.
- Need to specifically develop and support BOHS initiatives by having a separate section on BOHS materials, networking and expert support as part of a future repository

Outputs of Priority 3.2 in the Global Plan of Action:

- 1) Development of a core group of experts (technical, educational and content) to help move forward on capacity building (WHO-OH Capacity development (WHO-OHCD));
- 2) Development of an electronic resource for increasing capacity in OH which will include a learning repository, expert consultancy, and information access.

Measurable achievements and expected 2012 outcomes

Key 2012 outcomes already achieved or expected to be achieved by existing or initiated projects:

- Creation of an electronic platform for capacity building in OH

Annex 4

- Inventory of learning materials (collecting, editing, moderating, quality controlling, networking, quality improving) in OH implemented in a number of countries
- Develop an editorial board for the repository and a “community of practice” for educators and experts for creating, quality controlling and improving the teaching material, available expertise and essential OH information resources
- Draft of core set of competencies for BOSH and for shop-floor level OH activities in companies
- Network of educators and technical advisors specifically in BOSH
- Identify target groups and clear and well-defined products and activities for “quick wins”

Here is an overview of the structure of the proposed fields of activities, intended to draw together the various activities:

Possible critical outcome gaps needing filling by 2012.

- Home for e-platform both technical and professional.
- Project proposal(s) to support structure and functions including partners
- Necessary resources/funding to run programme(s)
- Identification of target audience(s) with clear needs
- Models and modules that are easy to use in different local settings
- Train the Trainers: increase competencies of trainers! Include pedagogical education and improvement of trainers including production and use of electronic materials for the web
- Collection, creation, piloting and translation of materials in several languages from the start (English, Spanish, Arabic, French, Chinese, Portuguese ...)
- Minimum standards for professional practice which are internationally recognized
- Support regions and countries to start and develop academic programmes in OSH, including insertion of OH into other professional and technical curricula (Min of Health, of Education, of Labour)

CCs that will be involved in the proposed structure for activities:

- Netherlands, University of Amsterdam, Coronel Institute
- South Africa, University of Cape Town, Centre for Occupational and Environmental Health Research and the National Institute of Occupational Health
- UK, NHS
- USA, University of Illinois at Chicago
- Germany, LMU Munich
- Others to join and to contribute to the repository, the community and development in material

Critical gaps to be filled by 2016:

- Support countries to start and develop academic programmes in OSH, and to include OHS into other curricula (Min of Health, of Education, of Labour)
- Expand collaboration with trade unions, labour inspectorates, primary care systems
- Integrate materials into a common format, to be discussed
- Develop material in other languages: Arabic, Chinese, Hindi, Tamil, French, Malay, Portuguese

How do we overcome the barriers?

- Funding: a proposal is being drafted to apply for funding. However, discussions for sustainable funding are ongoing. We will need support from WHO HQ on this, even if it is not monetary.
- Funds for translations and adaptations of materials will be included in future fund-raising efforts
- Housing and administering the e-platform, learning repository and other electronic resources needs to be secured
- For future meetings, an extra effort to invite representatives of missing stakeholders (see above) will be made.

Working together in an inclusive manner:

- Invite representatives of trade unions, labour inspectorates etc

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- Invite representatives of primary care systems and relevant practitioners e.g. WONCA
- Find funding for partnerships that are region-specific

Ways WHO headquarters, regional offices and/or the GPA managers can be a partner with you for successfully implementing your projects?

- WHO HQ need to officially support the funding applications
- WHO needs to clarify the level of endorsement of this exercise and the future products of this project: can we use the WHO logo? Is it a “WHO product”? It is a product of WHO Collaborating Centers separately?

Supporting documents:

Overview of Learning Repositories. L. Grainger. 2 August 2009

Experts' opinion on needs and opportunities for an online iBOHS educational support platform. Frank van Dijk, John Harrison, Paul Smits. 21 July 2009

Global Plan of Action 4: To provide and communicate evidence for action and practice Summary Report of GPA4 Working Groups GPA Objective 4 Managers: Jo Harris-Roberts & Ed Robinson (HSL, United Kingdom)

Action Areas according to the Global Plan of Action (GPA) for Workers' Health:

Actions 20-23 within the GPA fall within GPA Objective 4 - To provide and communicate evidence for action and practice

20. Systems for surveillance of workers' health should be designed with the objective of accurately identifying and controlling occupational hazards. This endeavour includes establishing national information systems, building capability to estimate the occupational burden of diseases and injuries, creating registries of exposure to major risks, occupational accidents and occupational diseases, and improving reporting and early detection of such accidents and diseases.

21. Research on workers' health needs to be further strengthened; in particular by framing special research agendas, giving it priority in national research programmes and grant schemes, and fostering practical and participatory research.

22. Strategies and tools need to be elaborated, with the involvement of all stakeholders, for improving communication and raising awareness about workers' health. They should target workers, employers and their organizations, policy-makers, the general public, and the media. Knowledge of health practitioners about the link between health and work and the opportunities to solve health problems through workplace interventions should be improved.

23. WHO will define indicators and promote regional and global information platforms for surveillance of workers' health, will determine international exposure and diagnostic criteria for early detection of occupational diseases, and will include occupational causes of diseases in the eleventh revision of the International Statistical Classification of Diseases, and Related Health Problems.

Priorities within GPA Objective 4:

Priority 4.1: Encourage practical research on emerging issues, including nano-materials and climate change

Output: Research reports and communication strategies with low- and medium income countries on interventions to ensure workers' health

Support: CC: Jo Harris-Roberts, Ed Robinson, Rosemary Gibson, HSL, UK (WHO/HQ: Ivan Ivanov)

Priority 4.2: Further develop the global research agenda for workers' health

Output: Research report matrix to identify relevant gaps in research

Support: CC: Jo Harris-Roberts, Ed Robinson, HSL, UK (WHO/HQ: Ivan Ivanov)

At the 8th Meeting of the Global Network for WHO CCs in OH held in Geneva, 18–23 October 2009, working groups were held for each of the 2 key priorities within GPA Objective 4 (as shown above), with the main aims of identifying/confirming the measurable key outcomes expected by 2012; proposing other longer term deliverables expected to be met during the next Global Network Plan (2013-2016); gaps that need to be addressed; and ways of improving and implementing communication and coordination of the activities within GPA Objective 4.

The summary and main outputs (by priority) of the Working Group Discussions are described below.

Priority 4.1: Encourage practical research on emerging issues, including nano-materials and climate change

[NB: Workshops were split to allow focus on both nano materials and climate change.]

Nanomaterials

Summary of Project Updates⁵:

Prof. Sin Eng Chia opened with a short presentation summarising his group's work on development of an exposure registry for workers handling nanomaterials (NM). This consists of collecting data on workplaces and health surveillance, which will hopefully lead to a cohort study. Biological samples (e.g. blood) will be collected with the aim of correlating exposure measurements with analysis of biomarkers (in the future).

Dr Vladimir Murashov summarized the recent activities of NIOSH (US) in the area of nanomaterials, highlighting recent guidance documents that have been published, including new guidance on risk assessment of carbon nanotubes. Vladimir also commented that other organizations have a lot of relevant publications and initiatives (e.g. OECD, ISO) on control banding and other aspects of nanomaterials health and safety.

Dr Yasutaka Ogawa described two projects / groups that JNIOH have on nanomaterials: the first is doing NM measurements in workplaces and the second is toxicity testing of NM by intratracheal instillation in laboratory animals.

The project of the group at ISPESL (Italy) was summarized by Dr Fabio Boccuni: they are developing a methodology for work-related risk assessment of NM from characterisation of materials to development of approaches for testing potentially exposed workers. They aim to strengthen collaboration within Italy through creation of a NM network. They are doing *in vitro* toxicity testing of NM, and are assessing use of a portable device to monitor airway exhalation of particles.

Dr Mary Gulumian's group has considerable experience in toxicity of materials such as asbestos and silica. They are involved in hazard identification and risk assessment of NM, and input into OECD Working Group on Manufactured Nanomaterials (WPMN) and ISO. She highlighted that we can learn from exposure to particles in mining.

Fintan Hurley gave updates on IOM's two projects, which are to provide up-to-date information on NM risks and develop an online community through the Safenano website, and to recommend *in vitro* tests for analysis of the toxicity of NM and identify the attributes of NM that could be used in risk assessment.

Dr Rosemary Gibson summarized HSL's project to establish a technical observatory on dissemination of information on NM health and safety issues. This project is assessing strategies to assess the occupational health effects of NM through a workshop (held as part of the Nanoimpactnet project) and developing a tool for risk assessment of NM.

Dr Dietmar Reinert highlighted that the German MAK working group is aiming to develop safe level guidance for NM, hopefully by 2011. His group would be keen to participate in development of

⁵ Some projects are already listed in Compendium with updates; these updates are not duplicated here for CCs not present at the working group. Others are not, and CCs are encouraged to submit projects if they would like them to be included.

exposure registries.

Sylvie Olifson is collaborating with WHO on setting research priorities, focussing on neglected areas, vulnerable populations and the informal sector. The group has developed a 3D combined approach matrix for identifying gaps.

Lucy Leong and Mary Shaub do not have NM projects yet but are keen to collaborate.

Prof. Iurii Kundiev is investigating several aspects of NM occupational health and safety, including electrowelded aerosols and effectiveness of protective equipment.

Dr Rudolf Schierl is making real-life measurements in workplaces and exposure chambers.

The recent publication in the European Respiratory Journal (Song et al, 2009) "Exposure to nanoparticles is related to pleural effusion, pulmonary fibrosis and granuloma" was mentioned by Dr Yuxin Zheng. This article highlights the issue of mixed exposures to NM and other chemicals.

The Finnish Institute for Occupational Health apologized for not sending a representative to the Working Group. They would like to submit a project for this GPA objective.

Emerging issues interactive discussion:

This discussion included the following areas for future work (**gaps**) and barriers that might exist to taking these forward:

- Assessment and measurement in the workplace of exposure to NM:
 - Monitoring should be environmental as well as biological (should they be considered together or kept separate?).
 - Consideration should be given to exposure to mixtures as well as just NM.
 - Consideration should also be given to exposure of vulnerable groups e.g. children, who are often ignored.
- Development of exposure registries: there is a need for a large, if possible worldwide standardized exposure registry (if possible including medical surveillance, follow-up). This should distinguish between different types of NM (tubes, particles etc), and engineered versus ambient NM. The registry could be tiered:
 - Tier 1 – basic job – exposure matrix, with description of surrogates for exposure (e.g. task, duration, area of work).
 - Tier 2 – Tier 1 with measurement of NM emissions
 - Tier 3 – as Tier 2 with detailed characterisation of NM and exposure measurements.
- Research is required on potential biomarkers of exposure although it was recognized that these may take many years to develop.
- Funding sources need to be explored for many of these ideas.
- How to translate emission information on NM to exposure data.
- Standard approaches for measuring and testing NM are yet to be agreed (although some guidelines are being developed). A framework could be developed under the WHO heading for agreement of good protocols and development of a consensus on approaches. This could be started with a basic survey of methods (before 2012), and then a workshop and more detailed survey / information gathering exercise to develop a consensus.
- Exposure limits are needed.
- Development of WHO guidance for handling nanomaterials, designed for developing and low-income countries.

Discussion of the barriers to progress focussed on:

- Access of researchers to workplaces to take measurements. This was noted as a particular problem for large companies, and especially businesses handling SWCNTs (although these are a strategic material for many countries including Japan). Small companies are generally more willing to take part in studies, since they welcome the advice they receive.
- Ethics of taking biological samples (especially blood) for biomarker analysis, and country-specific differences in the possibility of taking samples.
- Development of biomarkers will require detailed knowledge of the mechanisms of toxicity of NM, and will take many years.

- Will sufficient workers be recruited for the exposure registries to make them informative?

Solutions identified:

Development of the exposure registry between the CCs with *WHO support* will encourage participation from businesses / organizations in the nanotechnology industry.

World-wide cooperation across WHO CCs will greatly increase worker enrolment in the exposure registries and therefore the size of their information base.

Prioritization of forthcoming projects:

The emerging issues discussed were grouped and to prioritize them, the participants in the working group voted (using coloured stickers). The order was:

1. Development of tiered exposure registries, if possible across all the WHO CCs (12 votes).
2. Development of WHO guidance for handling nanomaterials, designed for developing and low-income countries (12 votes).
3. Development and consensus agreement between CCs of a framework for measuring and testing NM (10 votes).
4. Exploration of funding sources for work (5 votes).
5. How to translate emission information on NM to exposure data (0 votes).
6. Development of biomarkers of exposure (0 votes).

Consortia of CCs agreed to take the first three projects forward:

1. Development of tiered exposure registries, if possible across all the WHO CCs – Singapore with HSL, DGUV, Ukraine, NIOSH/WHO.
2. Development of WHO guidance for handling nanomaterials, designed for developing and low-income countries - NIOSH/WHO with HSL, NIOH South Africa, NIOH India.
3. Development and consensus agreement between CCs of a framework for measuring and testing NM – Munich with HSL, IOM, ISPESL Italy, JNIOH, NIOSH/WHO.

Climate change

Summary of Project Updates⁶:

JNIOH: Project on thermo-environment, contributing to ISO guidance non working in hot environments.

NIOH India: Projects on area surveillance for heat stress to identify “warning zones”, biophysical modelling and on vulnerable groups.

Gaps / Issues:

It was recognized that much work is being done on the impact of climate change on worker health, and this needs to be gathered together and reviewed systematically to avoid duplication of effort and learn from the experience of others.

Many other potential gaps were identified:

- Effects of climate-related issues (e.g. vector-borne diseases, different shift patterns, green jobs, worker migration, vulnerability of water and energy supplies, changes in precipitation patterns) on workers’ health. Does this represent a new context for existing risks or risks we understand in other contexts?
- How to assess risk to workers of climate change. Risks need to be managed pro-actively (and not after we are confident that we know everything we need to know).
- How methods to mitigate climate change will affect workers’ health; e.g. policies to reduce greenhouse gases.
- Methodology for conducting area surveillance.

⁶ Some projects are already listed in Compendium with updates; these updates are not duplicated here for CCs not present at the working group. Others are not, and CCs are encouraged to submit projects if they would like them to be included.

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- How to learn from other areas that have addressed similar issues (e.g. workers in mines exposed to heat stress).
- How to assess combined exposures (e.g. heat + pressure, heat + chemicals)
- Role of protecting factors and adaptation strategies.
- Research prioritization in systematic and inclusive way particularly for low and medium-income countries.
- How to bring all the stakeholders into the discussions.
- Can people adapt?
- Need for new WHO guideline on working practice in hot environments.

Solutions / Future Projects:

- Review existing information and data and projects being done within CCs and elsewhere, and draft a position paper (this is being done within Facilitating Project, HSL).
- Request that CCs contribute existing projects to this area.
- Learn from others through a workshop to identify gaps and develop/agree on way forward

Priority 4.2: Further develop the global research agenda for workers' health

This working group consisted of an interactive / free flow discussion of the issues surrounding identification of new areas / ideas for the future research agenda.

Research is needed in the following areas:

- Immigrant / migrant and informal workers' health
- Wellbeing
- Climate change
- Nanotechnology
- Mental health, gender issues, elimination and substitution of hazards
- Pandemic flu
- Respiratory diseases
- Musculoskeletal diseases

Challenges:

- Users and researchers may have different perspectives.
- Different countries and regions will also have different perspectives. Some may be more challenging than others. Different approaches will work in different regions / countries.
- Mechanisms to share and transfer knowledge.
- Stakeholder identification (to include public, workers, employers, unions, government).
- Recognition of the relationship of burden of disease to occupational health.
- Building consensus.

Solutions identified:

An audit and evaluation is needed of the current WHO CC projects and progress. Future research needs should be mapped onto the GPA.

Tools are available for setting research priorities. Sylvie Olifson (Global Forum for Health Research) summarized the "3D Combined Approach Matrix, an improved tool for setting priorities in research for health". Priorities should be based on available evidence and include all determinants, ensuring that the needs of those often forgotten are identified (i.e. ensuring "equity"). The importance of a systematic, comprehensive, objective and rigorous process should be emphasized.

Gap identification process should be activated through the CC regions.

Stakeholders could be brought together through public meetings and wide representation encouraged on steering and advisory groups. Stakeholder input is required early in the process of setting priorities.

Mortality / morbidity rates could be used as a method of reinforcing the importance of occupational health issues with different stakeholders.

Research ideas and proposals should be collaborative and carefully matched not only with funding agendas but particularly with the needs of the workers and countries.

Conclusions:

- Priority setting should occur via a systematic, comprehensive, objective and rigorous process that might be through tiered approach (subgroups of CC, e.g. regional).
- Research priorities should match the particular needs of workers in a country with external funding constraints.
- Collaboration and partnering are critical.
- WHO can have input to funding agencies to raise awareness and highlight importance of occupational issues: Global Plan of Action platform is a key tool.
- An audit and evaluation is needed of the current WHO CC projects and progress.

Addendum:

Priority 4.3: Revision of ICD-11

Prior to the Geneva meeting, the GPA priority as defined in action point 23 of the Global Plan (revision to ICD-11) had not been listed and therefore did not feature as a discussion/workshop topic for the meeting group.

This was due to previous planning to focus on this particular priority under a separate mechanism, rather than under the current Priority sectors.

Through the process for the Geneva meeting, discussions around this particular priority concluded that returning this priority to the GPA4 would be a step aimed at progressing its objectives under the challenging timescales for the ICD revision.

As such, post Geneva, GPA4 managers and WHO are currently planning a mechanism for tackling this important priority of the global plan to ensure that it is delivered within the timescales.

Global Plan of Action Objective 5: to incorporate workers' health into other (non-health) policies

Summary Report of GPA 5 Working Groups

GPA Manager: Wendy Macdonald, La Trobe University, Australia

WHO HQ Support: Evelyn Kortum

The WHO Global Plan of Action for Workers' Health includes the following objectives:

- The capacities of the health sector to promote the inclusion of workers' health in other sectors' policies should be strengthened. Measures to protect workers' health should be incorporated in economic development policies and poverty reduction strategies. The health sector should collaborate with the private sector in order to avoid international transfer of occupational risks and to protect health at the workplace. Similar measures should be incorporated in national plans and programmes for sustainable development.
- Workers' health should likewise be considered in the context of trade policies when taking measures as specified in resolution WHA59.26 on international trade and health.
- Employment policies also influence health; assessment of the health impact of employment strategies should therefore be encouraged.
- Employment policies also influence health; assessment of the health impact of employment strategies should therefore be encouraged. Environmental protection should be strengthened in relation to workers' health through, for instance, implementation of the risk-reduction measures foreseen in the Strategic Approach to International Chemicals Management, and

consideration of workers' health aspects of multilateral environmental agreements and mitigation strategies, environmental management systems and plans for emergency preparedness and response.

- Workers' health should be addressed in the sectoral policies for different branches of economic activity, in particular those with the highest health risk.
- Measures need to be taken to minimize the gaps between different groups of workers in terms of levels of risk and health status. Particular attention should be paid to ... the underserved and vulnerable working populations, such as younger and older workers, persons with disabilities and migrant workers, taking account of gender aspects.
- Aspects of workers' health should be taken into account in primary, secondary and higher level education and vocational training.

On the above basis, three key priorities have been defined by the WHO and a number of activities are being undertaken by its Network of Collaborating Centres in Occupational Health to achieve these priority objectives.

Priority 5.1 is to collate and conduct cost-benefit studies to clarify the economic benefits of workers' health.

Priority 5.2 is to formulate recommendations to manage risks from effects of globalization on workers' health.

Priority 5.3 is to develop and implement toolkits for the assessment and management of OSH hazards (a) in high risk industry sectors and (b) for vulnerable worker groups.

This report presents the outcomes, in relation to the above three priorities, of the 8th Meeting of the Global Network of WHO Collaborating Centres for Occupational Health that was held on 19-23 October 2009 at WHO Headquarters, Geneva. As part of this meeting, five working groups were organized to address these three priorities – one each for 5.1 and 5.2, and three addressing different aspects of 5.3. Each group discussed progress achieved so far, targets to be met by the next meeting of the Network in 2012, and the general nature of further activities for the period beyond 2012 through to 2016.

This report presents the main outcomes of these workshops, separately for each priority.

PRIORITY 5.1: collate and conduct cost-benefit studies to clarify the economic benefits of workers' health.

GPA 5.1 Leaders: Jos Verbeek, Finnish Institute of Occupational Health; Diana Gagliardi, ISPESL, Italy

Outputs: Published articles and information posted to WHO website

Within the previous workplan there were only two projects related to this Priority, one of which has been discontinued; an additional project added this year is that of the ECOSH Consortium. In the context of this very small number of existing projects, workshop discussions focused on defining the potential scope of this priority, including the nature of various 'costs' and 'benefits' of OSH, and the different levels at which these can or should be evaluated. Requirements to "sell" the benefits of OSH at these different levels were considered, including the need to assess benefits and costs over various timeframes, and of their allocation across among many different stakeholders. Difficulties in identifying and taking account of the social costs of poor OSH were raised, and there was discussion on what kinds of factors should be included in cost benefit analysis, whose costs they are, and whose benefits. It was suggested that there needs to be more effective communication concerning OSH benefits, to reduce the common perception that OSH is necessarily a net cost. It was agreed that financial costs and benefits are not the only ones that should be considered and evaluated; other kinds of values are also important and need to be taken into account.

Objectives for 2013-2016

Various future actions were proposed, including the following.

- Workers' health considerations should be incorporated within the economic development programmes of aid agencies and NGOs (e.g. requirements to protect workers' health and safety

during the process of starting up enterprises and small businesses, or other funded projects). To this end, improved guidelines for donor and funding bodies such as the World Bank are needed, to promote OSH more specifically than at present. This should be achieved by an initial review of existing guidelines, information and related initiatives, and then by collaborating with the ILO and other agencies and NGOs that are already active in this and related areas.

- Initiate cost-benefit evaluations of specific exposure reduction interventions (e.g. related to silica, asbestos), particularly when this can be done in collaboration with project leaders of existing projects within the CCs network which entail cost-benefit issues. Support for this work might be available from within the ECOSH consortium, and/or discussed at future ECOSH workshops.

Deliverables by 2012

It was agreed that a broad conceptual framework should be developed to support the above activities by providing the necessary basis for identifying the most appropriate projects for 2013-2016 and beyond. Work to develop this framework will be coordinated with that of the ECOSH consortium (existing project). It will:

- be based on an agreed set of OSH elements agreed to be important ... going beyond dollar costs to include broader set of values
- identify factors relevant to costs and to benefits, along with key stakeholders and potential strategies at different levels of analysis such as (1) *International* funding bodies (e.g. for projects in high risk sectors, vulnerable workers, etc); (2) *National* (e.g. related to exposure reduction policies and standards); (3) *Company* level (both cost savings and benefits gained); (4) *Individual* level (better performance, increased health and wellbeing, less absenteeism, fewer injuries)
- support identification of different types of interventions targeting and involving different stakeholder groups, and future formulation of OSH cost-benefit guidelines in relation to different components of the above framework.

A working party to develop and promote the above work was proposed, with an initial membership of 18 people. This will be facilitated by use of EZY-Collab on the WHO website. Gerard Zwetsloot (TNO, the Netherlands) offered to prepare an initial draft of the proposed framework, and all group members will send relevant information to Gerard, Wendy and Diana.

PRIORITY 5.2 Formulate recommendations to manage risks from effects of globalization on workers' health

GPA 5.2 Leaders: David Rees, NIOH South Africa; Wendy Macdonald, La Trobe University, Australia

Outputs: Guidance for non-health sector entities to improve workers' health.

David Rees opened the workshop with a brief outline of the history of work on this topic within our WHO network. This work was initiated by Kaj Elgstrand, from the now defunct Swedish National Institute for Working Life (NIWL). Kaj's intention was for a group of interested people to write a "Global situation analysis", including the following elements: A. ongoing globalization and its consequences for labour markets, employment patterns and working conditions; B. occupational safety and health in a globalized world; C. case studies; and D. identification of actions to be taken. Elements A and B were seen as purely descriptive but the analysis as a whole was intended to identify actions to be taken by WHO and others (element D). However, this work was disrupted due to the closure of the NIWL, and within the 2008-2012 workplan this became Initiative 5.2 within GPA 5. Within the current workplan there are four projects categorized under this Priority, one of which corresponds with Element B of the earlier plan (see above); the other three current projects represent case studies (C above) specific to particular regions and issues.

Workshop participants agreed with David's suggestion that, in light of the very rapid growth in studies of 'globalization' related to broad issues such as labour markets and employment patterns, there is no longer any immediate need to write the report earlier envisaged as Element A, since it would not contribute *directly* to the achievement of key outputs (Element D). Discussions then addressed needs for the 2013-2016 workplan and their implications for deliverables required by 2012.

Objectives for 2013-2016

It was agreed that to promote *implementation* of project outputs, work should be linked wherever possible to other elements of the current workplan, for example in relation to:

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- Global transfers of risk – e.g. via hazardous technologies such as nano; international transport of hazardous chemicals; uneven impacts of banning asbestos, certain pesticides; transfer to contexts with inadequate infrastructure and other resources needed to monitor/manage risks
- Migration of health care workers to richer countries
- Impacts on vulnerable workers – e.g. migrants, precariously employed, informal sector, etc.
- Impacts on high risk industry sectors – e.g. agriculture, construction, transport
- Relationships with climate change, ‘green’ jobs.

Further, it will be essential to identify and work with key stakeholders beyond our WHO network to ensure that proposed strategies are adapted and customized to meet specific local needs. Positive examples within particular contexts should be documented and adapted as needed for broader implementation in different contexts. Potential partners include: consumer groups (perhaps on certification programmes for a particular kind of product), Corporate Social Responsibility (CSR) programmes, and the Fair Trade movement. Specific programmes such as the Global Compact Initiative should be investigated with the aim of identifying ways in which we can contribute in ways that benefit our mutual interests and objectives.

Deliverables by 2012

It was agreed that the existing project related to Element B (see above) should be the main focus initially, to provide a coherent basis for the above activities. This should incorporate a multi-level framework enabling identification of different: (1) *types of problems* at different levels (international down to local); (2) *types of interventions* to manage those problems; (3) *intervention target groups*; (4) *potential partners* to involve in implementing or promoting interventions or to learn from, including *International agencies and NGOs* (e.g. Development Assistance Committee; UN Global Compact Participants; WHO Regional advisors; HR and Fair Trade NGOs; SCR NGOs), and *National and Local agencies, NGOs*; (5) *examples of successful interventions* tackling some of the above problems, and more general lessons learned; and (6) *recommended actions* for 2013-2016.

PRIORITY 5.3 Formulate and implement toolkits for the assessment and management of OHS hazards: (a) in high risk industry sectors, and (b) for vulnerable workers groups.

Outputs: tools, inventory, framework document, mapping of use and types of tools evaluation.

5.3 Hazardous Industry Sectors: AGRICULTURE

Initiative Leader: Claudio Colosio, University of Milan, Italy

Deliverables by 2012

In addition to the six projects already in the current workplan, two additional ones (completed or underway) are:

- Creation of a “Latin American Network on Rural Medicine and Health”, for which the next planned activity is the La Habana workshop on Agriculture (April 2010).
- Creation of the “Mediterranean and Balkan Network on Rural Medicine and Health”. Next planned activity: International Congress in Tirana (Albania), September 22 – 25, 2010: “From Transition to Sustainable Development: Healthy Farmers producing Healthy Food in a Healthy Environment”. WHO and ILO patronage have been requested.

Objectives for 2013-2016

Workshop participants agreed that the overall most important general objectives should be:

- (1) to disseminate the idea and promote agreement that agriculture needs *sector-specific* legislation targeting OSH issues, with support from the ILO as well as the WHO; and
- (2) to create a support network that includes all required expertise to promote improved OSH of workers in the agriculture sector. This will entail building regional networks and participation in international conferences (see examples above), as well as making materials and reports accessible in a range of relevant languages.

Empowerment of rural populations via both formal and informal education programmes, and the implementation of sustainable protocols requiring a minimum of instruments and tests, were also seen

as important. Other critical gaps that should be addressed in the 2013-2016 workplan are:

- Global pesticide authorization and registration system (harmonization; local needs): this is a long term objective.
- Biological risk in Agriculture: activity now commenced; it seems reasonable to anticipate some deliverables after 2012.
- BOHSSs in agriculture: some activities and experiences will be running after 2012.

5.3 Hazardous Industry Sectors: CONSTRUCTION and TRANSPORT

Initiative Leaders: Catherine Beaucham and Jane Hingston, NIOSH, USA; Lygia Budnick, CIOM, Hamburg

The majority of workshop participants were interested in discussing Construction sector issues. Critical gaps in that sector include:

(1) *Simple guidance on the management of hazardous chemicals in the construction sector.* To address this need, two proposed additional deliverables by 2012 were:

- to broaden the spectrum of chemicals studied, especially Naphthalene, and
- to create/evaluate a control banding approach to the management of chemicals used in the construction industry.

(2) *Simple guidance on the management of other types of hazard to which construction workers in developing countries are exposed.* Possible solutions were: the *Silica in Construction* toolkit (US NIOSH); adapting, disseminating and evaluating already existing guides such as guidance to reduce the risk of musculoskeletal injuries, safety management, and the NAPO videos (video's demonstrating safety without words).

(3) *Promotion of a more integrated approach to health and safety management,* with the specific deliverable of establishing a better link with ISSA, a combined list of references, an index of available materials, and/or greater accessibility of existing lists.

Barriers to progress include social inequalities within this sector and the high prevalence of workers in the following, highly vulnerable groups: migrant workers, informal sector workers, and precariously employed workers.

In the Transport sector, a proposed additional project was to develop and implement a chemical safety control programme to protect the health of maritime workers in European harbors, initially in Hamburg.

5.3 VULNERABLE WORKER GROUPS

Initiative Leaders:

CCs: Owen Evans and Jodi Oakman, La Trobe University, Australia

International Partner Organizations: Susan Gunn, IPEC ILO, Annie Rice Safework, ILO

WHO HQ Support: Susan Wilburn

The existing workplan has only a small number of projects on this topic, but workshop participants agreed that a more intensive effort is required, and that a broader range of projects might be sought for the 2013-2016 Workplan.

Deliverables by 2012

In addition to deliverables from existing projects, the major recommendation was to establish a *Resource Library for all vulnerable workers* (including child labour issues; young and older workers; informal sector workers, migrant workers; precariously employed workers; those in disadvantaged ethnic groups; vulnerable women workers (e.g. pregnant); and workers with chronic illnesses or disabilities).

It was agreed that for all efforts addressing vulnerable workers the following approaches are needed, and that it is important to integrate efforts with others working on them:

- Cost-benefit studies that could persuade employers to put in place work ability approaches
- Better marketing to improve awareness of tools

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- Integration of vulnerable worker issues into Basic Occupational Health Services
- Integration with the sector projects in Agriculture

Concerning Older Workers in particular, it was agreed that for gaps to be filled by 2012 the Resource Library should include (1) current guidance, tools and evidence regarding 'work ability' issues among older workers, and (2) associated guidance for employers to support implementation of preventive approaches at workplace level, to reduce future levels of current older worker health problems.

To address the needs of Young Workers and Child Labour, it was agreed to:

- Address denial of child labour in developed countries
- Increase cross-national sharing of good practices/tools
- Link awareness, motivation, and enforcement (promote cooperation of Health and Labour ministries, community groups, employers and workers' groups)
- Feed the Resource Library with all relevant materials
- Institute the new ILO/WHO Technical Committee on Young Workers and Child Labour
 - To provide leadership and to call on experts in CCs and other institutions to address policy questions
 - Primary efforts will:
 - Adapt and disseminate school curricula and evaluate impact
 - Develop and evaluate practical tools for employers, etc
 - Improve the evidence base for psychosocial guidance, duration of work, loads carried, etc.

**MINUTES OF WORKSHOP: EXPERTS MEETING FOR CAPACITY BUILDING THROUGH
EDUCATION AND TRAINING IN OCCUPATIONAL HEALTH,
OCTOBER 22-23, 2009,
SALLE G, WHO BUILDING, GENEVA**

1. Workshop conveners

GPA 3 Managers: Timo Leino and Leslie Nickels

Learning Repository Initiative Leaders: Jonny Myers and Linda Grainger

2. Overall goals

The workshop was convened for experts from collaborating centres and international partners to develop a proposal for scaling up international and national efforts on training and education in occupational health. The overall goals of the workshop were to:

- 2.1. develop a plan for creating an open educational resource repository and a community of educators for increasing access to occupational health education and training; and
- 2.2. define a mechanism for maximizing participation of local and regional educators and dissemination of good practice programs in OH education and training.

3. Intended outcomes of workshop

- 3.1. Map of competencies in relation to discipline descriptions.
- 3.2. Annotated list of existing resources potentially suitable for inclusion in an occupational health education and training repository.
- 3.3. List of educators willing to participate in a global network linked to the repository.
- 3.4. Strategic outline for:
 - 4.4.1. Establishing sustainable housing for occupational health education and training resources in the above repository.
 - 4.4.2. Establishing a mechanism or structure for continued participation and contribution to the repository or network in ways that are inclusive of local and regional needs. This could begin with the subset of WHO CCs actively engaged in educational and training activities.

5. **Participants:** There were 28 participants.

6. Plan for creating an open educational resource repository and a community of educators and maximizing participation of local and regional educators

Points agreed by participants on the plan for creating an open educational resource repository and a community of educators.

6.1. Functions that the LR must incorporate

Must be easy to use, based on a menu-driven process. For example, someone asking to start a course must be able to find a curriculum and competencies, LMs and experts to advise or assist with training. Must consist of digital learning materials and have a social networking component. Include virtual marketing spaces. Respond to requests regarding the LR: Essential to have a person available to direct them to the appropriate assistance - must be a quick response and the quality of the assistance must be good. Provide advice and support on using the LR and its contents. Allow feedback from users to improve content and continually improve LMs. Materials: to be OERs, Initially contain existing LMs in different formats that are easy to use. Upgraded, adapted and new ones can be added

over time; Uploading and downloading of LMs should be easy; accommodate different software types; Incorporate a tracking/versioning system; appropriate licensing

6.2 Material development; Involves three key components: technical; content; and pedagogy.

6.3. Technological aspects

6.4. Social networking dimension

6.5. Geolibrary in relation to LR

Not the same as the LR as it does not have the personal contact component. However, it does allow sorting by various topics and it contains learning materials and documents that are already in the public domain. New materials received for the LR can also be linked into the Geolibrary. There should be some link with the LR.

6.6. Evaluation of the LR

Follow up to identify users' experiences of using the LR. This feedback will form part of the ongoing evaluation and improvement of the LR.

6.7. Mechanism for maximizing participation of local and regional educators:

Marketing the LR

WHO authenticity is important selling point

How do we want it to be used?

Have a person to provide a quick response.

Core group blogs (can have general blog and specific core group blogs).

Tap into local and existing networks to publicize, for example the core group network can push information on the LR into other networks with which they are linked (e.g. Claudina – international programme and NIOH activities).

6.8. People who agreed to work in subgroups

Technology

Max Lum, Timo Leino and Suvi Lehtinen

Quality of materials

Tom Robins, Frank van Dijk and Wendy McDonald

6.9. Way forward for establishment of the LR

Important- it is a complex project/ vehicle.

Have a staged approach in the activities.

Start with the simple – core discussion groups and a storage facility.

Have a vision of where we want to go (what we want to achieve) and then start with easy, achievable objectives and activities.

Therefore working with the CCs is a good place to start.

Ask GPA members to inform us about available courses.

NIOHs are involved in networks, tap into these.

Identify key people who are doing networking.

Find a place to start – tap into the fraternity – CCS, ILO ICOH etc.

Do not start marketing until have some good materials. Staged approach small group interacting before open it up to broader community Item 19 of GPA plan of OH – WHO has mandate to provide guidance.

7. Broad preliminary framework for OH disciplines and competencies

Each of the core disciplines (occupational medicine, occupational health nursing, occupational hygiene, and safety) has a professional scope of practice and defined educational background, yet they all share the common goal of occupational health and safety. It appears that the discipline model for defining competencies will not result in a satisfactory set of competencies in basic occupational health and safety. Workshop participants agreed to use competencies developed for family medicine in resource constrained countries and competencies defined in the Basic Occupational Health for All document. The focus on creating a recommended set of competencies will include: activities, level of activity, good practice, definition of roles, and evaluation. A committee was formed to review and adapt competencies. The committee includes: Tom Robins, UM; Norbert Wagner and Leslie Nickels, UIC; Berenice Goeltzer, IH; Suvi Lehtinan, FIOH; Wendy McDonald, Latrobe University; Ina Naik, NIOH; and Linda Grainger, UCT.

8. Occupational Safety and Health Disciplines

In Europe and North America, occupational health and safety disciplines are well defined with established practice and professional guidelines. This discipline model represents an evolution of professions into specialty areas within public health, medicine, nursing, and/or engineering. The OH disciplines structure provides for depth within each discipline area. As part of the education and training workshop, participants agreed to draft a publication on education and professional opportunities in occupational safety and health modeled after the American Public Health Association document “Occupational Health and Safety: Education and Career Opportunities for You”. A committee was formed to review and potentially adapt this publication. Committee includes: Katija Radon, LMU; Anabela Simoes, ISEC; Wendy McDonald, LaTrobe University; Berenice Goeltzer, Ina Naik, NIOH; and Norbert Wagner and Leslie Nickels, UIC.

9. Conclusion

1. Continue to explore the creation of an open classroom learning repository, as a system for the storage, location and retrieval of electronic content which provides access to an increasing supply of digital educational content.
2. Form a committee to review draft competencies for basic occupational health.
3. Development of a publication for WHO on education and professional opportunities in occupational health and safety.
4. Draft a proposal for creating an umbrella organization to coordinate capacity building activities.

Summary: Healthy Workplaces Workshop 22-23 October 2009

1. Welcome and Introduction

Dr. Evelyn Kortum, Interventions for Healthy Environments, Department of the Public Health and Environment, Health Security and Environment Cluster, WHO Headquarters, Geneva, welcomed everyone to the Healthy Workplaces Workshop. She laid out the objectives for this Workshop:

With reference to the global framework identify:

- key components of healthy workplace programmes at global level
- barriers/opportunities
- elements for global, regional, and country guidance
- main elements for the business case
- experts for a WHO Network on healthy workplaces

Dr. Kortum then discussed the change in paradigm for workers' health that has occurred over the past 10 years, from a labour approach to a public health approach, from a focus on occupational health to a focus on worker health. She outlined how the healthy workplace framework project is initiative 2.2 under the Global Plan of Action on Workers' Health (GPA), as part of GPA Objective 2: to protect and promote health at the workplace.

She then described the interview process that was carried out during July and August 2009, during which Stephanie Macdonald from the University of Nottingham conducted 44 interviews with workplace health and safety experts from all 6 WHO regions. She concluded by outlining the process to be used after finalizing the framework, which will include developing more specific and practical guidance materials, training materials, and piloting the model in PAHO and Brazilian workplaces.

2. Presentation of the WHO Global Report and the Global Framework

Joan Burton, Senior Strategy Advisor, Healthy Workplace, Industrial Accident Prevention Association (retired) was hired by WHO to facilitate the researching and writing of the Framework for a Healthy Workplace, specifically the background and supporting literature and practices. This document had been distributed to participants before the meeting, and hard copies were present at the meeting. This draft document is available on the WHO website at http://www.who.int/entity/occupational_health/healthy_workplace_framework.pdf Joan thanked the 7 working group members and the 20 peer reviewers who had provided input into the third draft. She described the purpose of this document as being for scientists and medical experts to provide the evidence base for the proposed model, and explained that it would be followed by guidance documents that provided more practical assistance for enterprises. She stressed that the purpose of this framework and model is to focus on what enterprises – employers and workers in collaboration – can do to create and maintain a healthy workplace, regardless of the national policies of the country.

She then outlined the proposed model, which consists of two main groups of components, dealing with the *content* of a healthy workplace programme, and the *process*. The content consists of four "Avenues of Influence" through which an enterprise can influence the health, safety and well-being of workers. These have been tentatively named:

- Physical work environment (e.g., chemical, ergonomic, biological hazards)
- Psychosocial work environment (e.g. organization of work, culture, harassment)
- Health Promotion (support for personal health issues)
- Environment Community environment (enterprise support for community health)

She then described the process in the model, which is a variation of Deming's "Plan Do Check Act" continual improvement cycle, sometimes referred to as an OSH Management System, such as that promoted by the ILO and others. The working group has decided to use the 8-step

process outlined in the WHO Western Pacific Region's 1999 *Regional Guidelines for the Development of Healthy Workplaces*.

After stressing the importance of integration, and the core values and principles of worker involvement and management commitment, she outlined the content of the Framework document's 9 chapters and 6 annexes.

3. Regional and Country Presentations

Invited speakers had the opportunity to share examples of healthy workplaces from their regions or countries, and show how they corresponded with the WHO framework and model. They included case studies, opportunities, and barriers. The speakers were as follows:

- **Dr. Marie Claude Lavoie**, speaking on behalf of Dr. Maritza Tennessee presented on the healthy workplace initiatives in the American Region (AMRO).
- **Dr. Said Arnaut**, Regional Advisor for the WHO Regional Office for the Eastern Mediterranean (EMRO) spoke about healthy workplace initiatives in his region.
- **Dr. Hisashi Ogawa**, Regional Advisor for the WHO Regional Office of the Western Pacific (WPRO) presented on the healthy workplace activities of his region.
- **Dr. Salma Burton**, Regional Advisor for the WHO Regional Office for South-East Asia (SEARO), focused her remarks on the need for evaluation of healthy workplace efforts.
- **Joan Burton** presented a case study from the Industrial Accident Prevention Association (IAPA), a WHO Collaborating Centre in Canada with 220 employees.
- **Dr. Adel Zakaria** from the University of Alexandria, Egypt, presented three case studies, all of which have achieved significant results in reduced injuries: a glass factory, an iron and steel factory, and Bapetco, a petroleum enterprise.
- **Dr. Volker Schulte** from the University of Applied Sciences, Switzerland, presented a pilot project on comprehensive Workplace Health Promotion in small enterprises (SEs).
- **Dr. Nuri Vidinli**, Occupational Health & Safety Institute, Turkey, reported on a successful intervention with small enterprises in the denim sand-blasting industry
- **Dr. Kalpana Balakrishnan**, from Sri Ramachandra University in India presented three case studies: the physical work environment in SMEs from various sectors; the physical and psychosocial work environments in the healthcare sector; and the physical environment and enterprise community environment in the stone quarrying industry.
- **Dr. Pranab Nag** from the National Institute of Health, India discussed health and safety issues in two sectors: the food & agriculture industry, and the information technology sector.
- **Dr. Lucy Leong** from the Ministry of Manpower in Singapore outlined the health and safety situation in Singapore, specifically the activities of the new national Workplace Safety and Health (WSH) Council.
- **Fernando Coelho**, from Social Service of Industry (SESI), Brazil, reported on SESI's Healthy Industry Programme that assists enterprises with health & safety and leisure activities for healthy living.

4. Stakeholder Perspectives

A number of invited stakeholders presented their perspectives on the healthy workplace framework and model including case studies, opportunities and barriers. Speakers were as follows:

- **Dr. Valentina Forastieri**, ILO SafeWork, discussed the plans and activities of SafeWork in ILO, with emphasis on their goal of Decent Work for all.
- **Janet Asherson** representing the International Organization of Employers (IOE), discussed ways to engage employers in healthy workplace endeavors.
- **Sue Longley**, from the International Union of Food workers (IUF) spoke on behalf of trade unions, emphasizing their long history of addressing these issues and the importance of working with organized labour to promote the healthy workplace framework.
- **Dr. Stephanie Premji** from the Université du Québec à Montréal talked about the issue of integrating gender issues into healthy workplaces.

- **Dr. Linn Iren Vestly Bergh**, representing the International Association of Industrial Hygienists (IOHA) discussed the healthy workplace activities of StatoilHydro, a multinational oil and gas company headquartered in Norway.
- **Marilyn Pattison**, representing the World Federation of Occupational Therapists (WFOT), informed the group that Occupational Therapists take a holistic approach to look at people within their environments, and often work with employers, medical practitioners, the family and the worker to ensure the work environment is a healthy and supportive one for a worker returning after injury or illness.
- **Dr. K. C. Tang**, representing the Health Promotion department of WHO, spoke to the group about their activities in engaging the private sector in workplace health promotion (WHP).
- **Janet Voûte**, representing the Non-Communicable Diseases (NCD) department of WHO, spoke about engaging all stakeholders in workplace wellness. diseases in a coordinated manner by mobilizing stakeholders outside the health sector, such as the World Economic Forum (WEF).

Moderators led facilitated discussions on these presentations at various times throughout the day and a half of the workshop.

Dr. Evelyn Kortum thanked all participants for their positive discussions and engagement. She summed up some of the key suggestions for the proposed healthy workplace and model as follows:

- Strengthen the visibility of WHO-ILO complementarity and collaboration
- Refine definition of Healthy Workplace framework, components
- Include more references to workers with HIV infections
- Outline a clearer process for prioritizing actions from the process model (e.g., Maslow, quick wins)
- Mention the importance of external evaluation/auditing systems (e.g. ILO)
- Strengthen gender issues, role of organized labour
- Change health promotion circle (health education, provision of health services, lifestyles)

Dr. Kortum then asked the group for approval of the proposed WHO framework and model, assuming the incorporation of the feedback. All participants were in favour. The proposed WHO framework and model, when revised, can be considered approved.

In terms of next steps, she outlined the following:

- Revise the background document to reflect the feedback and input from this week's feedback and input
- Include healthy workplace issues in awareness raising campaigns on 28 April each year
- Create partnerships with other stakeholders, existing networks, NCD network, regional networks, WEF, IOE (GOSH), TU
- Develop peer-reviewed guidance on Healthy Workplaces that is specific to sectors and countries
- Pilot guidance in PAHO, Brazil, India, Egypt, Oman.... more in networks
- Interview stakeholders
- Develop peer-reviewed training modules & train-the trainer
- Develop assessment tools & methods, indicator model
- Develop criteria and context-applicable methods for evaluation
- Adapt guidance to country, community, company (org., team/division, worker), culture
- Develop and communicate simple cost-benefit models for employers to obtain ROI
- Develop a website with WHO healthy workplace materials
- Map the global framework on the ICF (International Classification of Functioning, Disability and Health)
- Organize a Global Consultation through EMRO before the next CC meeting in 2012.

A more detailed report of the Healthy Workplace Workshop can be downloaded from http://www.who.int/occupational_health/en/

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**Occupational Health of Health Workers Workshop
Geneva, Switzerland - 22 to 23 October 2009
WHO/HQ - Room M 405**

Meeting Report

1. Purpose

The purpose of the meeting was to develop a global framework for national programmes for the occupational health of health workers, plan for immunization of health workers against hepatitis B, and by doing so contribute to the strengthening of health systems (see attached revised DRAFT global framework).

2. Convenors

Susan Wilburn, WHO Occupational Health and Maria Lioce, US NIOSH co-chaired the session and Annalee Yassi, University of British Columbia and Chairperson of the International Commission of Occupational Health scientific committee on health workers served as rapporteur.

3. Participants

Twenty-six occupational health and WHO specialists from 17 countries representing 4 of the 5 WHO regions participated in the two day workshop.

4. Programme

4.1 Global

The first day consisted of a series of presentations on health worker protection from the global, regional and national perspective. Global presentations from intergovernmental agencies included: presentations of the **WHO Global Plan of Action on Workers' Health, joint ILO/WHO draft policy guidelines for health worker access to HIV/TB prevention and treatment services**, the **WHO Global Initiative in Radiation Safety in Health Care Settings** which includes occupational health and the safe and appropriate use of radiation, and the **International Labour Organization (ILO) Conventions and programmes for occupational health and health worker protection**.

Global non-governmental programmes: the **Positive Practice Environments (PPE)** initiative, a joint effort of the World Health Professions Alliance (WHPA: International Council of Nurses, World Medical Association, International Pharmacy Federation, World Dental Association, and International Physical Therapists Association) along with the International Hospital Federation and supported by the Global Health Workforce Alliance, disseminated literature and described their pilot projects in Uganda, Zambia and Morocco and the **International Commission on Occupational Health (ICOH) Scientific Committee on Health Workers** gave a brief background to ICOH and the scientific committee, noting that ICOH's scientific committee can help implement the Global Framework.

4.2 Regional

The workshop featured a report from the Latin American and Caribbean subregional workshop on the development of national policy for occupational health of health workers and a demonstration of the newly developed **European Regional "Guide to Prevention and good practice in hospitals and the healthcare sector for healthcare workers"**. The milestones of health and safety accomplishments in the health sector in the **Americas** were described including a commitment by the Regional Committee of the Americas that 80% of all the countries would establish a national programme to protect the occupational health of health workers by 2012. The fast growing nature of the sector was noted and the need for collaboration emphasized - between occupational health and health system strengthening, waste disposal, experts in both

Annex 7

non-communicable disease and communicable diseases and especially forging alliances with patient safety.

4.3 National programmes to protect health workers included presentations from **Egypt, Thailand, Venezuela and Vietnam**. A collaborative and interdisciplinary partnership model was described as key to the success in Venezuela along with seizing the opportunity presented by new labour legislation requiring health and safety committees in the health sector. Leadership in countries from the WHO Collaborating Centers in Occupational Health and other Institutes for graduate studies in occupational health solidified capacity building, scale-up and sustainability of the successes.

Collectively the presentations provided from WHO programmes, as well as ILO, PPE, ICOH, the Americas (PAHO) and European Regions, and four countries provided a strong background for the discussions that occurred in small groups and in plenary that led to the development of the Global Framework for National Programmes for Occupational Health of Health Workers.

5. Part 2: Hepatitis B immunization campaigns

The second part of the workshop was devoted to organizing campaigns to immunize health workers against the hepatitis B virus. WHO reported on the global burden of hepatitis B and C disease from sharps injuries to health workers which was followed by two presentations. The first presentation, from the regional perspective, described how health worker immunizations were integrated into the **Immunization Week of the Americas** in 2009 and demonstrated tools and resources for immunization campaigns. This was followed by a presentation from the global health worker trade union, **Public Services International (PSI)** describing PSI's campaign to negotiate immunization into collective bargaining agreements and to assist with awareness raising and mobilizing the workforce for the success of immunization campaigns.

Issues, barriers, solutions, and identification of targets for immunization campaigns and funding opportunities were discussed. Commitments were made from the group and partnerships established to pursue this initiative in Africa, south-eastern Europe, Egypt and the Americas.

6. Outcomes

The draft framework was circulated and revised based on comments from the participants and subsequently, on 2 December, a second workshop to plan for the implementation of the global framework was held as part of the ten year anniversary of the Safe Injection Global Network (SIGN). During the second meeting, the participants supported the revised framework and recommended that ILO and WHO explore its further development as a joint WHO/ILO effort.

Global Framework for National Occupational Health Programmes for Health Workers

The purpose of this Global Framework for National Occupational Health Programmes for Health Workers as directed by the WHO *Global Plan of Action (GPA) on Workers' Health* is to strengthen health systems and the design of healthcare settings with the goal of improving health worker health and safety; patient safety and quality of patient care; and ultimately support a healthy and sustainable community.

The Ministry of Health will need to consult and work together with other relevant Ministries on the development of the National Occupational Health Programme for Health Workers such as the Ministry of Labour, Social Security, and/or other organization(s) responsible for the protection and promotion of health worker health and safety in the private as well as public sector.

1. Identify a responsible person with authority for occupational health at both the national and workplace levels.
2. Develop a written policy on safety, health and working conditions for health workforce protection at the national and workplace levels.
3. Establish and provide access to Occupational Health Services and allocate sufficient resources/budget to the program, occupational health professional services, and the procurement of the necessary personal protection equipment and supplies.
4. Create joint labour-management health and safety committees, with appropriate worker and management representation.
5. Provide ongoing (or periodic) education and training that is appropriate to all to all parties, including occupational health practitioners, senior executives, front-line managers, health and safety committees, front-line workers, and the general public.
6. Identify hazards and hazardous working conditions to prevent and control hazards and manage risks by applying the occupational hygiene hierarchy of controls, which prioritizes elimination or control at the source.
7. Provide immunization against hepatitis B and other vaccine preventable diseases at no cost to the employee and ensure all three doses of the hepatitis B immunization have been received by all workers at risk of blood exposure (including cleaners and waste handlers).
8. Promote exposure and incident reporting, eliminating barriers to reporting and providing a blame-free environment.
9. Promote health worker access to diagnosis, treatment, care and support for HIV, TB and hepatitis B and C
10. Utilize appropriate information systems, to assist in the collection, tracking, analyzing, reporting and acting upon data to promote health and safety of the healthcare workplace and health workforce
11. Ensure that health workers are provided with entitlement for compensation for work-related disability in accordance with national laws.
12. Promote research on OHS issues of concern to health workers, particularly with respect to combined exposures and applied intervention effectiveness research.