

IMPROVING WORKERS' HEALTH WORLDWIDE:

Implementing the WHO Global Plan of Action on Workers' Health

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News from WHO

Occupational health and safety challenges in the response to Ebola outbreak in West Africa

The current outbreak of Ebola Virus Disease (EVD) began in Guinea in December 2013 and now involves widespread transmissions in Guinea, Liberia, and Sierra Leone. It was declared a Public Health Emergency of International Concern on 8 August 2014 by the Director-General of the World Health Organization (WHO). Other countries, such as Nigeria, Senegal, Mali, USA and Spain were also affected.

By 22 February 2015 a total of 837 confirmed health worker infections have been reported in the 3 intense-transmission countries; there have been 490 reported deaths. Most occupational infections occurred outside of Ebola Treatment Centres, mainly in general healthcare facilities or while providing care in the community without sufficient protection. Other occupational groups such as community and burial workers, security officers, ambulance and taxi drivers, ground staff at points of entry, are also at risk of infection (cont.)

Inside this issue

News from WHO	1
News from WHO collaborating centres and partners	3
GOHNET Reader submissions	9
Upcoming events	18
Education and Training	19
Useful WHO links	20

Special points of interest

Return-to-work on work-related mental illnesses	10
ICOH and Wonca join forces	12&13
Employers worldwide step up investments in Workers' Health	14
Epigenetics: What Occupational Health Needs to Know	15



Photo: WHO/R. Sorensen

Occupational health and safety challenges in the response to Ebola outbreak in West Africa (cont.)

In addition to infection, workers involved in healthcare and epidemic response to EVD are also at risk of psychological distress, stigma, violence, long working hours, heat stress and dehydration from using heavy PPE as well as ergonomic problems from handling bodies and loads. This requires specific measures for occupational health and safety, psychosocial support, security and work organization.

On 25 August 2014 WHO and ILO issued a joint briefing note for employers and workers about the specific occupational health and safety problems related to EVD outbreak in West Africa.

Currently WHO and ILO are finalizing a technical manual on protecting occupational health and safety of health workers, emergency responders and other staff in outbreaks of Ebola and Marburg Virus Diseases. The WHO collaborating centres for occupational health at the University of British Columbia in Canada, the University of Maryland and the National Institute for Occupational Safety and Health in the USA, and the Health and Safety Laboratory in the UK were involved very actively in the development and review of the manuscript. The manual will be posted on the WHO occupational health website. WHO also issued formal guidelines for selection and use of personal protective equipment in providing clinical care to patients with EVD.

WHO has recruited national occupational health and safety coordinators in Sierra Leone and Liberia. The selection of the coordinator for Guinea is underway. The role of the national coordinators is to develop policies and standard operating procedures, to carry out risk assessments of facilities and recommend improvements for protecting occupational health and safety in WHO country operations as well as to provide occupational health advice to national governments as part of the EVD response.

See WHO vacancy notice for occupational health and safety specialist in Ebola response in West Africa at https://erecruit.who.int/public/hrd-cl-vac-view.asp?o_c=1000&jobinfo_uid_c=30814&vaclng=en

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WHO and ILO. *Ebola virus disease: occupational safety and health*. Briefing note for workers and employers (updated 5 September 2014), available in English, French, and Spanish is available at http://www.who.int/occupational_health/publications/ebola_osh/en/.

WHO. *Personal protective equipment in the context of Filovirus disease outbreak response*. Rapid advice guideline, available in English and French at <http://www.who.int/csr/resources/publications/ebola/ppe-guideline/en/>.

Additional information on protective measures for medical staff is available at <http://www.who.int/csr/disease/ebola/protective-measures-staff/en/>.

Latest information about WHO action on the Ebola outbreak in West Africa <http://www.who.int/csr/disease/ebola/en/>.

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Use of Mesothelioma Registry data to estimate the global impact of an asbestos-cement factory

Many studies have investigated the effects of occupational exposure to asbestos among cohorts of workers employed in asbestos-cement plants. However, there have been only a few studies on the impact of asbestos exposure on their families (familial, household, or domestic exposure) or among people who live near factories (environmental exposure), and very few studies have examined those sources of exposure comprehensively.

Based on data collected by the Lombardy Mesothelioma Registry (see GOHNET Newsletter n. 24/2014) we estimated the global impact on mesothelioma incidence of an asbestos-cement factory operating in the period 1932-1993 in Broni, a small town (<10,000 inhabitants) located in the "Oltrepò Pavese", a region partly covered by hills in the south-east, famous for their wines, in the Province of Pavia in Lombardy, which is located in North-Western Italy. The factory produced asbestos-cement pipes and sheets, employing 2741 men and 714 women overall. They used Portland cement 325 mixed with chrysotile and crocidolite, and small quantities of amosite. Only between the end of the 1970s and the 1980s measures were taken to reduce airborne fibre concentrations (installation of air filtering units and introduction of automated processes). Asbestos use was stopped following the asbestos ban by Law 257/1992, although residual use has been documented in 1993.

We calculated the number of observed and expected (over the regional average) Malignant Mesothelioma¹ (MM) cases among workers, their cohabitants, and people living in the area. We identified 147 MM cases (17.45 expected), 138 pleural and 9 peritoneal attributable to exposure to asbestos from the factory. Cases with past occupational exposures in the asbestos-cement plant were 38 (2.33 expected), 32 men (26 pleural, 5 peritoneal) and 6 women (4 pleural, 2 peritoneal). In workers' families we recorded 37 MM cases (4.23 expected), 5 men (all pleural) and 32 women (31 pleural, 1 peritoneal). Among residents in Broni or in the surrounding towns we identified 72 pleural MM cases (10.89 expected), 23 men and 49 women. The largest MM excess was found in the towns of Broni (48 observed, 3.68 expected) and Stradella (16 observed, 1.85 expected), a town adjacent to Broni.

Our study documented a large impact of the asbestos-cement plant, with about 130 excess MM cases. The largest MM burden was among women, from non-occupational exposure. Almost half of MM cases were attributable to environmental exposures. This study underlines the importance of assessing impact of asbestos use not only among workers, but also among their family members and in the community at large. Quantifying the global impact of asbestos on health may have positive repercussions for countries that still use it and in which perception of the magnitude of health

¹ A rare form of [cancer](#) that develops from cells of the [mesothelium](#), the protective lining that covers many of the internal organs of the body. Mesothelioma is most commonly caused by exposure to [asbestos](#).

The full text of the study is published at:

Mensi C, Riboldi L, De Matteis S, Bertazzi PA, Consonni D. Impact of an asbestos cement factory on mesothelioma incidence: Global assessment of effects of occupational, familial, and environmental exposure. doi: 10.1016/j.envint.2014.10.016) is in press on the journal Environment International (Elsevier).

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News from WHO collaborating centres and partners (cont.)

IOHA Statement on Global Asbestos Ban and the Elimination of Asbestos-Related Diseases

The International Occupational Hygiene Association (IOHA) recently published a statement on Global Asbestos Ban and the Elimination of Asbestos-Related Diseases:

The International Occupational Hygiene Association (IOHA) calls for a global ban on the mining, sale and use of all forms of asbestos and the elimination of asbestos-related diseases. To accomplish the elimination of asbestos-related diseases, we urge each and every individual country to implement a total ban on production and use of asbestos. We also urge complementary efforts aimed at primary, secondary and tertiary prevention of asbestos-related diseases through country-specific “National Programmes for Elimination of Asbestos-Related Diseases” in line with ILO and WHO guidelines.

Even after a total ban on production and use of asbestos is achieved, occupational exposures to asbestos will persist due to the continued presence of asbestos from prior use in building materials and durable machinery/equipment. Workers who carry out maintenance, demolition and removal of asbestos-containing materials will thus continue to be at risk. Therefore a set of protective measures must be implemented to optimize effective prevention. The adoption of a total ban on all use of asbestos and products, equipment and materials containing asbestos implies a need to follow up on the implementation of the ban with supplementary regulations and national programmes for ensuring the

elimination of all use of asbestos and the required protection from exposure to asbestos. This includes, as appropriate, the review of legislation and regulatory systems regarding trade and the protection of consumers and external environment.

Primary prevention involves ensuring control of exposures to airborne asbestos fibres, monitoring concentrations according to established standards, and reporting exposure levels to appropriate authorities. Exposed workers should be informed about their working conditions and associated hazards, and provided with appropriate respirators. While respirators should not be relied upon as the sole means of routinely limiting exposure to asbestos fibres, workers provided with them should be trained for their proper use, and encouraged to wear them when warranted. Adequate fitting, changing of filters, sanitary storage and maintenance of respirators are also required for optimal protection because proper and safe handling of asbestos-contaminated waste is essential.

Achieving a worldwide ban on the mining, sale and use of all forms of asbestos and the elimination of asbestos-related diseases will require that occupational hygienists responsibly and persistently express their concerns, raise awareness and take necessary action regarding the need to prevent asbestos exposure. Recognizing the urgent need for coordinated actions, IOHA will continue to foster global and national collaboration in this endeavour, promoting the engagement of IOHA member organizations to support comprehensive national and international efforts to eliminate asbestos exposure.

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News from the International Occupational Hygiene Association (IOHA)

From its inception in Canada over 25 years ago, IOHA has grown into an important non-governmental organization in formal relations with the World Health Organization (WHO). As an “association of associations”, IOHA aims to reduce the 2 million job-related deaths and countless illnesses occurring annually by supporting and increasing the network of occupational hygienists worldwide. This unusual approach is a practical response to a diversity of workplace hazards embedded within unique cultural and political entities. Too often, a successful solution to mitigate occupational hazards in one country is not relevant in another context. Instead, creative, knowledgeable, and local occupational hygienists are essential to meet the needs of their respective countries (cont.)

News from the International Occupational Hygiene Association (cont.)

At the 18 October 2014 board meeting, the leadership of IOHA was transferred from Dr Chih Chieh Chen of Taiwan to Dr Jimmy Perkins of the United States (assisted by Secretary/Treasurer Andrea Hiddinga of The Netherlands and President-elect, Karen Niven of The Netherlands), and the IOHA board revised a Strategic Plan for 2015-2020. Some recent successes and upcoming projects in IOHA's efforts in the service of occupational health are highlighted below:

Membership: The membership of IOHA has grown to 28 countries with the recent happy addition of Spain to the ranks.

Scientific Conferences: One of IOHA's major upcoming events open to the public; the **10th IOHA International Scientific Conference: Building on Occupational Hygiene Together**, will be held in London 25-30 April 2015. This conference is an excellent way to interact with occupational hygienists because it is expected that close to 1,000 scientists from 50 countries will give more than 600 presentations. To register for this event, please visit www.iohalondon2015.org/registration.

Of note, the 9th IOHA International Scientific Conference, held in Kuala Lumpur in 2012, was a great success. Over 350 delegates attended and the work in the field of occupational health by Professor Michel Gillemain of Switzerland was recognized with a Lifetime Achievement Award. The next IOHA Conference, following the 10th Conference in 2015, will be in the United States in 2018.

The National Accreditation Recognition (NAR) Scheme: IOHA's role in developing international criteria for occupational hygienists (OHs) is crucial to improve, standardize, and maintain qualified OHs around the globe. For example, in May 2013, the Hong Kong Institute of Occupational and Environmental Hygiene became the 12th member to be accepted and recognized under the IOHA NAR Scheme. In the August edition of **IOHA World**, Dr T W Tsin elucidates why it was so important for his Institute to receive this validation from IOHA and why the NAR Scheme is the way of the future.

Associated with accreditation of OHs is the strong support provided by IOHA for the Occupational Hygiene Training Association (OHTA). OHTA has developed an innovative international educational program, which continues to grow and will allow OHs to receive recognized and validated training, both general and specialized, at a reasonable cost to students. Such training is obviously an important component to advance occupational health by allowing interested individuals, including those in developing countries, to acquire skills and certification needed for successful careers.

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Grenada's WHO Collaborating Centre Works to Promote Health for Healthcare Workers

There are effective measures to prevent infections from occupational exposure of healthcare workers to the bloodstream. These include:

- immunizing against Hepatitis B Virus (HBV),
- eliminating unnecessary use of needles and sharps,
- implementing universal precautions,
- eliminating needle recapping and disposing of the sharp into a non-reusable sharps container immediately after use,
- using safer devices such as needles that sheath or retract after use,
- providing and using personal protective equipment, and
- providing training of workers to protect from risks involved and prevention of transmission (cont.)

Grenada's WHO CC Works to Promote Health for Healthcare Workers (cont.)

In Latin America and the Caribbean, the healthcare labour force includes approximately 22 million workers. The repercussions of work-related injuries and diseases among healthcare workers have an impact on patient safety, quality of care, and communities at large. Also, the proportion of HBV, HCV and HIV infections among healthcare workers due to occupational sharps injuries are the highest in the world at 55%, 83% and 11%, respectively. Sharps injuries are the most common cause of occupational exposure to blood and the main cause of infection by blood-borne pathogens such as hepatitis. It is estimated that about 90% of occupational exposures occur in developing countries, causing severe illness and death (PAHO, 2007).

Within this context, St. George's University Department of Public Health and Preventive Medicine (SGU-DPHPM), a WHO Collaborating Centre (WHO CC) on Environmental and Occupational Health, partnered with the Pan American Health Organization (PAHO), Caribbean Programme Office, Barbados to establish an initiative to promote the health of healthcare workers in the Caribbean. With the support of regional Ministries of Health, a campaign was launched on the "Prevention of Needle Stick Injuries and Blood Borne Pathogen Exposure among Healthcare Workers" from 2011 to 2014. The WHO CC hosted a regional "Training for Trainer" workshop from which 35 participants from 9 regional countries participated. This workshop brought together a unique collaboration that included PAHO's

offices in both Barbados and Washington DC, the Centers for Diseases Control and Prevention (CDC), National Institutes for Occupational Safety and Health (NIOSH) in Washington DC, and the Ministries of Health of 9 regional territories.

The continuation of the train-the-trainer program across the region provided baseline data from 386 healthcare workers on the history of needle stick injuries and blood borne pathogen exposure that was collected and served to develop a surveillance system. Sixty-six (18%) of workers reported needle stick injuries. Occupational risk factors data was sourced which determined the practice of recapping needles by healthcare workers was present in the workplace. In addition, workplace assessments identified that inappropriate containers are used for sharps disposal, there are no designated isolation areas, no hand washing materials and no sites provided for infection control, and general lack of awareness of Occupational Safety and Health (OSH) policies. The campaign has also realized the establishment of OSH committees in each participating territory and institution, regional surveillance system for needle stick injuries among healthcare workers and attention to building awareness for workers on policies and proper waste disposal.

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[Regional goals for human resources for health 2007-2015](#), Pan American Health Organization (PAHO), Washington

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SESI Institutes of Innovation on Workplace Health Promotion in Brazil

A good-practice example of global collaboration between WHO Collaborating Centres from Brazil, United States, and Finland



SESI & NIOSH Collaboration (Washington, September 2014)

Brazil is facing a challenge to reduce work-related injuries and worker diseases occurring in extractive, manufacturing, and construction industry workers. The main direct causes of absenteeism in these workers are: Work Injuries and traumas (62,3%), Musculoskeletal Diseases (26,3%) and Mental/Behavioral Disorders (3,9%). Although chronic cardiovascular and metabolic diseases are not displayed as main direct causes on frequency, the cost of the chronic diseases is one of the highest among Brazil's Government Compensation expenses. Also, the demographic transition of the Brazilian population raises concerns. Projections show that in 2030 Brazil will be the 6th oldest population on the globe.

Therefore, SESI (Social Service for Industry), a WHO Collaborating Centre (WHO CC), is creating an infrastructure of seven Innovation Institutes to foster Research, Development and Innovation (RD&I) on Workplace Health Promotion in healthy ageing, absenteeism, ergonomics, workplace injury prevention, psychosocial factors, technologies for safety and health and health promotion. The main objectives of these Innovation Institutes are promoting employee's healthy productiveness, reducing preventable injuries, disease, sick leave compensation costs, absenteeism and promote workers' health. The institutes will work based on national and international partnerships with other institutes and universities, seeking knowledge and technology transfer, and joint pilot projects.

In August and September 2014, SESI signed partnership agreements with two WHO CCs; FIOH (Finnish Institute of Occupational Safety and Health) and NIOSH (National Institute for Occupational Safety and Health, US). These partnerships will help to build capacity, key competencies and the development of pilot intervention projects to improve workplace health conditions for Brazilian industry workers. Currently, three institutes are in the planning phase to become operational 2016.



SESI and FIOH Collaboration Agreement (Helsinki, August 2014)

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A study on Total Workplace Safety and Health (TWSH) Services in Singapore

Total workplace safety and health (TWSH) services involve having the components of safety, occupational health, and health promotion elements in the workplace. It is only when these three components are in place, can true integration of workplace safety and health services be effectively carried out. It is a holistic approach to managing safety and health in the workplace and includes a proactive, comprehensive and integrated assessment of all risks in the workplace, including safety, occupational health and employee well-being. This is in line with the WHO approach to healthy workplaces.

The National University of Singapore, a WHO Collaborating Centre (WHO CC) for Occupational Health, in conjunction with the Ministry of Manpower, Singapore, recently completed a study of 30 workplaces (ten manufacturing; seven construction; five marine; four hotels; four pest-control) involving more than 10,000 workers. Their current workplace safety and health services and basic health needs were assessed by three tools; WSH Services Questionnaire, WSH360 interview, and the Basic Health Survey.

It was found that only about one-quarter of the participating companies applied the principles of TWSH in their organizations. Among those companies that have TWSH, workers were 4.4 times ($p < 0.001$, 95% CI 2.33-8.25) more likely to be proud to work for their company,

7.4 times ($p < 0.001$, 95% CI 3.96-13.90) more likely to be satisfied with their current job and 1.7 times ($p = 0.002$, 95% CI 1.21-2.32) more likely to report being able to easily balance the demands of work and home life.

Most of the companies in the study did not recognize the importance and usefulness of TWSH for both the organization and the workers. We have the tools to assess TWSH at the workplace and there is a need to enhance education and awareness of the benefits of TWSH to increase its acceptance in companies. TWSH service is key to protecting and promoting the health of workers. The WSH360 interview questionnaire is presently interviewer administered but it is also being modified for self-administration.

We would like to share two of these tools **:

- the WSH Services Questionnaire and the Basic Health Survey
- the questionnaires are available for free download at <http://www.sph.nus.edu.sg/index.php/about/who-collaborating-centre>

**Please kindly acknowledge the source

A guide has also been developed to assist companies in their approach to TWSH; Guide to Total Workplace Safety and Health: Holistic Safety, Health and Wellbeing in Your Company. This is available at: <https://www.wshc.sg/wps/themes/html/upload/cms/file/>

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GOHNET Reader submissions

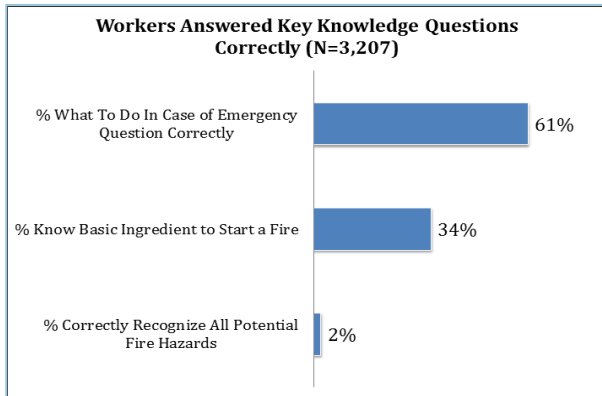


An Alliance that responded to the Garment Factory Disasters in Bangladesh

Bangladesh is the world's second-largest garment exporter and out of its total garment exports of \$21.5 billion in 2013, 23% arrived in the United States. Bangladesh currently has more than 4,000 garment factories which employ more than 4 million workers, most of whom are young woman. The garment industry's phenomenal success has helped Bangladesh achieve and maintain a steady 6% GDP growth rate for the last few years despite a global economic downturn and is critical to the national economy as the primary source of employment for women and foreign currency (cont.)

An Alliance that responded to the Garment Factory Disasters in Bangladesh (cont.)

However, a series of major disasters over the last several years including the 2012 Tazreen factory fire that killed 112 workers and the 2013 Rana Plaza building collapse that killed over 1,120 workers have provoked widespread calls domestically and internationally to improve workplace health and safety in the industry. Workplace policies and practices to ensure building and electrical safety, proper storage loading, and access to emergency exits could have prevented the loss of many lives.



Findings from the Alliance conducted baseline survey on garment workers, 2013

Established in the aftermath of recent factory tragedies, the [Alliance for Bangladesh Worker Safety](#) was founded by a group of apparel companies, retailers, and brands with members in the United States, Canada, and Australia that collectively source from over 600 factories. With a legally-binding five-year initiative, the Alliance aims to substantially improve worker safety in the ready-made-garment (RMG) industry by upgrading factories, educating workers and management, empowering workers, and building institutions that can enforce and maintain safe working conditions throughout Bangladesh.

Since its formation in July 2013, the Alliance has developed and adopted a common safety standard for fire and electrical safety and structural integrity that is harmonized with other initiatives. All Alliance factories have been inspected against this standard with 19 factories submitted to the Government established Review Panel for consideration of factory suspension or closure, and the remainder must remediate safety gaps over the next 18 months. Alliance factories have also completed basic fire safety training for workers and managers and a 3rd party worker helpline (*Amader Kotha*) has been piloted for workers to confidentially share safety concerns without fear of retaliation.

Bangladeshi garment sector has long operated with minimal health and safety regulations and little research has been conducted to systematically evaluate working conditions and health outcomes among workers. In 2013, the Alliance conducted a baseline survey of workers' knowledge, attitudes, and perceptions regarding health and safety with a focus on fire safety. The survey found significant gaps with only 2% of workers surveyed able to correctly identify common fire hazards, and informed the development of the Alliance's first training module.

“[...] the Alliance for Bangladesh Worker Safety was founded by a group of apparel companies, retailers, and brands [...]”



There is still a great deal of work to come including training security guards and contractors and establishing and supporting worker safety committees. The Alliance will be partnering with the University of the Texas School of Public Health to conduct an independent assessment of the Alliance basic fire safety training, recognizing that it is more important than ever to understand the effectiveness of these interventions.

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Return-to-work on work-related mental illnesses: a call to Latin American Social Security Policies



In recent years there has been an increasing prevalence on work-related mental illnesses (WMI) significantly increasing the annual average on lost working days. However, we found almost no research and publications in Latin America about return-to-work. Moreover, there are significant challenges in terms of both prevention and treatment for the return-to-work in this field. Evidence shows that the return-to-work process in WMI is significantly complex when compared to the return-to-work process for other illnesses.^{1,2,3,4,5,6,7} In 2013, the Ministry of Health in Chile published a guide for the psychosocial surveillance at work which is mandatory in its application in organizations, but there is not enough knowledge and agreement among stakeholders as to what are the best routes to ensure a successful return-to-work when a worker becomes ill related to the job.

To deepen knowledge in this arena, a research project was carried out⁸ to show good practices in the return-to-work process in people with WMI. A systematic review of the scientific evidence was conducted and clinical teams were interviewed (psychiatrists, psychologists and occupational therapists). Based on this, we developed a guide for return-to-work in people with WMI, which was validated by a panel of Latin American experts.

Among others, the systematic review identified the return-to-work coordinator as important, but seldomly in place in Latin America. Triggers for early return-to-work currently rest with the worker in terms of feelings of self-efficacy or motivation for the job among others. Important in the work environment is competent support by the supervisor, an appropriate assessment of the worker's ability to handle the workload, and agreement of expectations between

employee and employer about what is possible to change on the job when returning to the workplace. Finally, a multidisciplinary approach as part of a plan focusing on stress reduction and training in specific coping skills is necessary.

The return-to-work process for people who experienced WMI is extremely complex, and the evidence shows that successful re-integration and relapse prevention depend not only on factors related to psychotherapy and/or pharmacotherapy, but foremost on a set of systemic dimensions and all actors involved in this process.

The guide that was developed, provides useful orientation focused on health teams involved in the return-to-work process, but it would also be useful for others stakeholders who perform functions related to the general process of return-to-work, occupational therapists, risk prevention experts, social workers, occupational physicians, joint committees, health and personnel managers, from the company and/or the state.

In conclusion, return-to-work is a process of continuous exchange of information and expectation management between stakeholders (patient/worker-clinical team-employer), with common goals of treatment and re-integration, and the recognition of links between illness and risk agents at work. The enormous disability and costs generated by WMI on people, organizations and the state, urgently questions the social security systems. On November 11th, the Diego Portales University performed an international seminar to discuss the Chilean institutional challenges on the return-to-work policies in people with WMI. The return-to-work guide developed was made available.

Link to the guide: http://www.pept.udp.cl/Publicaciones/guia_salud_laboral.pdf

Return-to-work on work-related mental illnesses (cont.)

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Developing a National Policy on Safety and Health at Work in Chile

In 2011 Chile ratified ILO Convention 187 (Promotional Framework for Occupational Safety and Health at Work), which demands promotion of continuous improvement of safety and health at work to prevent injuries, illnesses and deaths caused by work by developing a national policy on health and safety at work, a system and a national program, in consultation with the most representative organizations of employers and workers.

Chile is currently in the process of discussing the development of a National Policy on Safety and Health at Work. It should be noted that this will be a major change towards the development of the national policy process, which must have as a focus of action the participation of all stakeholders' points of views.

On September 23 in Santiago, Chile, the Undersecretary of Public Health, Dr Jaime Burrows, initiated the Occupational Health Colloquiums 2014, which were organized by the Department of Occupational Health at the Ministry of Health, led by Dr Silvia Riquelme. Guests included the Undersecretary of Social Provident, Mr. Marcos Barraza; the president of the Confederation of Workers of Chile (CUT), Ms. Barbara Figueroa; the president of the National Association of Public Employees, Mr. Raul De La Puente; the rector of the University of Chile, Dr Ennio Vivaldi, Ms. Ximena Diaz researcher at the Center for the Study of Women (CSW), Dr Orielle Solar researcher at Latin American Faculty of Social Sciences, FLACSO Chile, Mr. David Escanilla the Head of Department Occupational Health at Institute of Public Health of Chile and Dr Tito Pizarro, Head of the Division of Healthy Public Policy and Promotion (cont.)



Developing a National Policy on Safety and Health at Work in Chile (cont.)

There were nearly 180 participants including trade union leaders, employers' representatives, academics from universities, professional associations, occupational doctors, responsible persons for prevention risks, ergonomists, sociologists and others.

This was the first of six Colloquiums that were held in six regions of Chile, during the months of October and November 2014. In each colloquium there were eight workshops that address priority issues of the Ministry of Health:

1. Recognition of Occupational Accidents and Diseases and Access to the rights
2. Regulations on Occupational Health
3. Participation of workers
4. Upgrades of the System of Health and Safety at Work
5. Model of Work Health Inspection
6. Inequality and vulnerability in preventing health damage associated with working
7. Gender inequalities and their impact on Health and Quality of Life at Work
8. Research in Occupational Health and Quality of Life at Work

Each workshop addresses the question: "How we can improve the system of health and safety at work to achieve a better quality of life for working men and women?". Responses will be very useful for the addition of the public health perspective in the development of the National Policy for Safety and Health at Work, under the ILO Convention 187, which is in line with the Global Plan of Action for Workers' Health 2008-2017 endorsed by the World Health Assembly in 2007 and consistent with the principle of "Health in all policies" promoted by Chilean Ministry of Health.

Reference sources:

<http://web.minsal.cl/node/1654>

<http://www.ispch.cl/noticia/21333>

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A Pledge for more attention in Primary Care to Workers' Health: ICOH and Wonca join forces

During a Wonca (World Organization of Family Doctors) conference in Lisbon on 7 March 2014, President Prof. Kidd announced a Wonca-ICOH initiative to join forces regarding workers' health, especially in developing countries, stating: "*We recognise that health and safety are threatened by poor working conditions (...and) that most health care and preventive services for workers and their families is provided in primary care settings by family doctors.*" So WONCA and ICOH pledge "*...to work with our partner organizations (including WHO and ILO) to address the gaps in services, research, and policies for the health and safety of workers*

and to better integrate occupational health in the primary care setting."

This is a significant consequence of the successful first WHO Conference "Connecting Health and Labour; What Role for Occupational Health in Primary Health Care" (The Hague, 2011), co-organized by TNO Work&Health and the Dutch Government. An important next step formulated was: "Encouraging collaboration between professional associations of occupational health and primary care (Hague Statement, 2012¹)."
(cont.)

A Pledge for more attention in Primary Care to Workers' Health (cont.)

Pledge : WONCA and ICOH pledge to work with our partner organizations (including WHO and ILO) to address the gaps in services, research, and policies for the health and safety of workers and to better integrate occupational health in the primary care setting, to the benefit of all workers

This is a significant consequence of the successful first WHO Conference "Connecting Health and Labour; What Role for Occupational Health in Primary Health Care" (The Hague, 2011), co-organized by TNO Work & Health and the Dutch Government. An important next step formulated was: "Encouraging collaboration between professional associations of occupational health and primary care (Hague Statement, 2012)."

From the ICOH-site Dr Peter Buijs and Prof Frank van Dijk negotiated a Joint Statement and Pledge during the Wonca World Congress (Prague, 2013). Given the worldwide importance, particularly because for years OHS-coverage worldwide was stuck at 10-15% for the global workforce, while Primary Care covers 70-80% of the world population, we present nearly the full text:

Joint Statement

Health and work are intimately linked. Work under good conditions can have positive effects on health and wellbeing. On the other hand, health and safety are threatened in poor working conditions, which are a daily reality for many workers around the world. Workers exposed to hazards at work suffer various work-related diseases. Failure to adapt working conditions to the capabilities of workers with chronic health problems may limit their ability to work. Poor health, injuries and disabilities prevent many from working at all or at full capacity. Those who do not work frequently suffer worse health because of limited resources or social isolation. Yet, the health and safety of people at work are too often addressed separately from their health outside of work. Similarly, the health and safety of those at work are often viewed in isolation from the health and safety of their families and communities. Each of these affects the others. WONCA and ICOH recognize that most health care and preventive services for workers and their families in the formal and informal health system is provided in primary care settings along with variously organized occupational health services. A global challenge is to make more systematic use of the primary care setting and available occupational health services. It is essential to improve the health and productivity of workers by increasing the number, expertise and capacity of health professionals able to prevent and manage work-related health problems. In addition there is an urgent need to increase the number and capacity of occupational health experts and services. This is especially true for those working in low and medium resource countries, the informal economy, small businesses, and agriculture.

¹ http://www.who.int/occupational_health/publications/hague_executive_summary/en/index.html

Submitted by:
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Employers worldwide step up investments in Workers' Health

While business drivers and health challenges at the workplace are similar across countries, with some variations, programs and communication strategies differ considerably as documented by the 2014 Global Survey on Health Promotion, Workplace Wellness

and Productivity Strategies (by Buck Consultants and sponsored by the Global Centre for Healthy Workplaces). The survey analyzed responses from more than 1,000 organizations in 37 countries.

Respondents identified the following as top objectives driving health promotion strategies:

- 1.Improving workforce morale/engagement
- 2.Reducing sick leave and disability
- 3.Improving workplace safety
- 4.Reducing presenteeism/improving employee productivity

Only United States employers cite reducing health care costs as the main objective due to its unique healthcare system in which employers feel the direct cost impact of unhealthy employees.

Stress still represents the leading health challenge faced by employers and employees globally followed by lack of physical activity/exercise and unhealthy eating habits. This is not surprising as the number of mental illness cases and long-term absentees has increased sharply in recent years in many countries. It is important to point out that workplace safety remains the top challenge in Asia, Latin America and Middle East/Africa.

Employer objectives driving wellness strategy

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	All regions*	Africa/ Middle East	Asia	Australia/ NZ	Canada	Europe	Latin America	United States
Improving workforce morale/engagement	1	4	6	1	3	1	1	4
Reducing employee absences due to sickness or disability	2	1	2	7	1	3	4	3
Improving workplace safety	3	2	1	3	5	4	2	7
Improving worker productivity/ reducing presenteeism	4	5	8	4	2	2	3	2
Maintaining work ability	5	3	3	5	6	5	6	5
Furthering organizational values/mission	6	9	4	2	7	6	5	6
Reducing health care or insurance premium costs	7	7	10	10	4	10	8	1
Promoting corporate image/brand	8	8	5	6	9	9	9	9
Fulfilling social/community responsibility	9	5	7	9	10	7	10	10
Attracting and retaining employees	9	10	9	8	8	8	7	8

1 = most important, 10 = least important

Ranked 1st Ranked 2nd Ranked 3rd

Potentially one of the most alarming findings from the Global Survey is that only 52 percent of employers worldwide measure specific outcomes from their wellness programs. In the U.S., 59% of employers say they do not know if their wellness programs are having an impact on health care cost trend which is their top-stated objective. These findings underline the need for more awareness and education around evaluation as well as for systematic planning aligned with a continuous improvement cycle.

Encouragement is the trend of increasing globalization of employers' wellness programs among multinational companies with 56% of the multi-nationals surveyed implementing a global wellness strategy. This has occurred in spite of major challenges due to differing cultures, laws and practices around the world. Other key findings of the Global Health Promotion Survey include:

- Human Resource (HR) polices related to flexible work arrangements and paid time off ranked as the number one component of wellness programs globally, with Employee Assistance Programs (EAP) ranking number two, driven by their prevalence in the U.S., Canada, Africa and Australia.
- Health risk appraisals (HRA) are a common programming tool with 69% offering a HRA today (83 percent in the US).
- Employee wellness communication – with personalization of employee messages – is closely linked to health care cost trend reduction. 100% of the U.S. companies reporting a lower health care cost trend of six or more percentage points send their employees targeted wellness emails. The use of wellness mailings to employees' homes also is on the rise, recognizing the influence that household members have on each other's health.
- Posters/flyers remain a widely used communication channel and just as popular as a web portal/intranet (cont.)

Employers worldwide step up investments in Workers' Health (cont.)

The Global Survey findings show that programs often lack a systematic approach aligned with a continuous improvement cycle. The field is still young on a global scale, which has not yet fully established itself in the global business world. Given the concerning disease and demographic trends and the resulting negative impact on productivity, continued growth and investment in health is inevitable. Nevertheless, more evidence and standardization is needed. While a number of quality

studies show that workplace health promotion programs produce a return-on-investment, the field still lacks widely adopted quality standards. The WHO Healthy Workplace Model for Action provides an opportunity in this regard as the framework gives global guidance on how to create healthy workplaces and propagates a comprehensive as well as integrated approach which is applicable universally.

The full text of the survey report is published at:

Buck Consultants. Working Well: A Global Survey on Health Promotion, Workplace Wellness and Productivity Strategies. 6th Edition July 2014.

Submitted by:

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Epigenetics: What Occupational Health Needs to Know

Currently at the frontier of scientific recognition and understanding of disease is epigenetics, the study of the heritable changes in gene expression without alterations in genetic sequence¹. These epigenetic mutations have been detected at exposure levels significantly lower than previously thought and have been linked to a variety of diseases. Occupational health professionals need to act on this new science to ensure the safety of workers.

The human epigenome consists of structures on the outside of the DNA molecules that alter how the DNA itself is read. This means that epigenetic mutations to the genome alter gene expression without altering the DNA itself. Mutations to the epigenome occur through multiple mechanisms such as methylation events and histone modification. These events are naturally occurring processes in the body. However, frequencies and regulation of these events are altered via environmental exposures². Epigenetic mutations can be a result of exposures to chemicals such as metals, air pollutants, pesticides, and endocrine disrupting toxicants, as well as lifestyle factors such as diet, exercise, and stress level. These mutations are based on the interplay between an individual's experiences over a lifetime and their gene expression – serving as a possible link between environment and human health. Epigenetic alterations have been linked to a variety of illnesses including cancer, heart disease, and reproductive disorders³.

“Before specific occupational health actions can be considered, more needs to be known about exposure thresholds and epigenetic mutations “

Studies have shown that epigenetic mutations occur at very low levels of exposure⁴. Given this information, epigenetics research has significant implications for exposure threshold setting, risk assessment, and occupational disease management. The actual health detriments of current allowable levels of chemical exposures could be grossly underestimated due to a lack of knowledge about long-term epigenetic effects of exposure and associated health outcomes. Chemicals may do more damage at lower concentrations than is currently known. Studies have also shown some epigenetic mutations to be heritable, implying the possibility that mutations and diseases associated with epigenetic mutations might not be due to exposures in the lifetime of the individual but rather, the parents' or grandparents⁵.

Before specific occupational health actions can be considered, more needs to be known about exposure thresholds and epigenetic mutations. Research needs to be conducted by toxicologists and microbiologists directly linking various chemical exposures to detrimental health outcomes. Occupational health professionals and organizations should actively encourage this research through funding, collaboration, and integration into training curricula (cont.)

Then, scientists need to explore an epigenetic dose-response relationship to determine acceptable thresholds and serve as a basis for regulatory action. To understand the relationship between low level exposures and epigenetic mutations, occupational health researchers should also prepare and initiate cohort studies on worker populations and their families to further explore the impacts of these exposures.

Meanwhile, occupational health must be considering actions to take based on current scientific data and findings. Regulation of exposure limits in the workplace may need to be re-evaluated and finding thresholds that will be protective for the public, as well as feasible for industry, will be a challenge. Risk assessment protocols and practices may need to be modified to include new detection technologies. Occupational health must include epigenetic research into its research paradigm to successfully fulfil its obligations for safety and protection of the population.

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Work-related upper limb disorders: Can prevention and management be improved?

Work-related upper limb disorders remain a challenge to the clinician because an estimated 75% are regarded as diagnostically unclassifiable¹. Evidence-based prevention and treatment of these frequent and disabling disorders have therefore



been limited and largely unsuccessful. It is essential to identify the involved tissues and structures as well as the responsible pathologies. To do so would require improved diagnostic approaches.

Upper limb pain is frequently accompanied by weakness/heaviness and/or sensory abnormalities, e.g. numbness. Although this combination of symptoms suggests a peripheral nerve-involvement, clinicians and researchers tend to attribute most pathology to muscles and tendons. Even when peripheral nerve-involvement is alleged, the focus is mostly restricted to carpal tunnel syndrome and nerve root compression in the neck. The intermediate nerve receives less attention.

Rather specific neurological patterns follow focal nerve affliction: weakness in muscles with nerve supply distally to the lesion, altered sensibility in supplied skin territories, and abnormal soreness with slight pressure on the nerve trunk (cont.)

All physicians have been trained in an examination based on these principles. Still, a thorough neurological examination is rarely applied, in particular with respect to the superior portions of the upper limb nerves. It may be regarded as difficult and time consuming, and the validity of such examination may be questioned if a nerve affliction cannot be demonstrated by electrophysiology. Although electrophysiological studies are regarded as “golden standard” for nerve entrapment, a mixed and partial nerve affliction and a repair process that has taken place may, however, result in entirely normal findings and often does².

A feasible physical examination should target the nerves from the roots to the supply of muscles and skin by including neurological items representative to upper limb nerve afflictions with various locations. It should be reproducible and preferably identify and exclude abnormalities in symptomatic and healthy subjects, respectively.

Our team has developed a detailed but still rapid semi-quantitative upper limb neurological examination comprising an assessment of the strength in selected individual muscles³, of sensory deviations from normal in defined territories of skin, and of the presence of nerve trunk soreness⁴. Patterns of findings in accordance with the topography of the nerves and their muscular and

sensory innervation were frequent – and also identified in patients that could not be diagnosed by conventional means. The patterns were reliably identified⁴ and related to symptoms⁵. The brachial plexus (in particular the portion located behind the pectoral muscle, so-called pectoralis minor syndrome) was the dominant location and often combined with median and radial nerve-involvement at elbow level. Whether diagnosed by conventional diagnostic criteria or criteria developed by the authors, upper limb disorders related to nerve afflictions were also common among patients in general practice.

This low-tech examination demands no equipment beside a needle and a 256 Hz tuning fork. Manual assessment of individual muscle strength is easy to learn by any physician³. A simple screening based on assessment of the strength in six muscles has been found to be a sensitive first step approach to the upper limb nerves⁶. The manual character of the examination indicates its feasibility by medical practitioners in any setting in industrialized countries as well as in the developing world.

Therefore, the developed and validated diagnostic approach may eventually constitute a step towards improved prevention and treatment of work-related upper limb disorders.

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Upcoming events

APRIL 2015

25-30

London, United Kingdom

10th IOHA International Scientific Conference: Building on Occupational Hygiene Together

This conference is an excellent way to interact with occupational hygienists because it is expected that close to 1,000 scientists from 50 countries will give more than 600 presentations.

To register for this event, please visit www.iohalondon2015.org/registration

MAY 2015

27-30

Jeju Island, Republic of Korea

Global meeting of the WHO Collaborating Centres for Occupational Health

Wednesday, 27 May: Pre-meetings of the Planning Committee and the Technical Working

Thursday, 28 and Friday, 29 May: CC Global Meeting
Afternoon of 29 May: Parallel meetings of the Regional CC Networks

Saturday, 30 May: Parallel meetings of the Technical Working Groups and a tour of Jeju Island in the afternoon

Provisional Agenda

1. Progress made on GPA implementation
2. Planning for GPA implementation 2015-2017
3. Strategic action by WHO after 2017
4. Terms of reference and ways of working of the Global Network of CCs for Occupational Health

MAY—JUNE 2015

31-5

Seoul, Republic of Korea

31st International Conference on Occupational Health

The Congress is organized as the triennial congress of the International Commission on Occupational Health (ICOH). The 2015 Congress, aiming at global harmony for occupational health, will be an important milestone in meeting our challenges in protecting and promoting the health of workers at the time of rapid changes in work life and working conditions in globalizing economy.

For more information please visit: <http://www.icoh2015.org/eng/>

Education and Training

Interdisciplinary Diploma of Advanced Studies in Work & Health, Switzerland

Beginning in March 2014, the University of Zurich and the University of Lausanne has offered the new, interdisciplinary Diploma of Advanced Studies DAS Work+Health. This postgraduate program integrates the three specializations: Organizational Health Development, Occupational Hygiene and Occupational Medicine.



Work imposes numerous demands and health hazards on employees and can, at the same time, provide diverse health promoting resources. Addressing both requires understanding the human being in the larger organizational and societal context. Our program aims to provide deep insight into the current and future health needs of the working population as well as practical skills how to prevent work related health problems and how to promote positive health at work.

To achieve this aim, the program provides both a strong scientific basis and best practice skills. During the joint modules, students will learn common perspectives and procedures across disciplines, completed by in-depth knowledge in their specialization area. The continuous mutual exchange between the specialization areas provides for a strong knowledge transfer throughout the program. During the final, interdisciplinary group project, students will demonstrate their acquired knowledge and skills in solving real life work & health issues in the field.

Overall, the balance of highly interactive on-campus courses and complementing, guided distance learning, the well qualified lecturers as well as the strong previous on-the-job experience of the participants will provide for a stimulating learning environment.

Formally, the English speaking 4-semester part-time program comprises 30 ECTS-points, reflecting about 60 on-campus days in total, 12-13 modules per specialization, and a concluding interdisciplinary small-group project. Lectures will be held in Lausanne and Zurich, Switzerland. We foster an interdisciplinary learning environment, giving students with various professional and educational backgrounds the opportunity to work together. The course is open to everyone in or outside Switzerland meeting the admission criteria.

Please find further information on our homepage www.mas-workandhealth.uzh.ch

Submitted by and requests to Sven Hoffmann, DAS program manager; Head Division Public and Organizational Health, University of Zurich, Switzerland, sven.hoffmann@uzh.ch

Useful WHO links

Become a GOHNET member:

http://www.who.int/occupational_health/publications/newsletter/en/index.html

WHO Occupational Health web site:

http://www.who.int/occupational_health/en/

WHO CC web site:

http://www.who.int/occupational_health/network/en/

WHO publications:

http://www.who.int/occupational_health/publications/en/

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