

**World Day for Safety and Health at Work 2014 - Commemoration  
PAHO/WHO Workers' Health/ Sustainable Development and Health Equity (SDE) Special Program**

## **Chemical Substances, Cancer and Work: enhancing the sound management of chemicals for cancer prevention**

***Webinar: 28 April 2014 – PAHO/WHO World Day for Safety and Health at Work***  
(In English with simultaneous translation to Spanish)

**Time: 09:00 am - 12:00 pm - EST (Washington, D.C.)** To check local time in WDC against your time zone, see the World Clock at: <http://www.timeanddate.com/worldclock/meeting.html>

Chemical substances have transformed human life and work in our modern societies. They have long contributed to technology development since the early industrialization in the XIX century, by transforming raw materials into a great amount of basic chemical components which are now permanently utilized for industry development. New materials and chemical developments are constant, and their presence has propelled great advances in industry, commerce, services and technology, particularly in high-tech areas such as electronics, bio-engineering and telecommunications. Thus, millions of chemical substances have been yield for use of humankind and are increasing yearly. By 23 April 2014, the Chemical Abstract Service (CAS) -updated daily by adding substance information to the CAS REGISTRY<sup>SM</sup>, reports the global presence of **86.4 million** of organic and inorganic substances. They mostly correspond to ingredients and sub-products of industrial, manufacture and combustion processes being capable of becoming pollutants of finished products and of the working and general environments (air, water and soil). Their increasing release into the environment is overcoming the capacity of echo-systems to assimilate, transform and eliminate toxic substances.

Although chemical substances contribute to establish and preserve current life styles in high income countries and landmark the pace for middle and low income ones trying to reach them, their benefits hide their toxic potential to human health. They expose workers to their hazardous and toxic effects in all economic sectors; and people in the general environment. They can cause injuries, acute and chronic poisonings/diseases, disability and death, playing a key role in the causes of cancer in humans. Today, the International Agency for Cancer Research (IARC/WHO) recognizes that more than 160 substances are human carcinogens, many of them being present in workplaces on our Region.

WHO estimates that cancer attributable to occupational exposures vary from 4 to 40% of the global cancer burden (Driscoll et al, 2001), and causes close to 200,000 deaths annually (WHO, 2007). In fact, occupational exposures to asbestos, silica and metallic fumes were estimated to be responsible of 9% of lung, trachea and bronchi cancers. In the region of the Americas, cancer is the second cause of death within the NCDs, and although occupational exposures and cancer estimates may vary between countries, they remain to be a public health concern. Canada estimates indicate that 25,500 persons were diagnosed with lung cancer and that 20,200 died of the disease in 2013. Although smoking is the best known risk factor, they consider that occupational exposures, such as asbestos play a very important role in causing lung cancer. IARC has identified at least 15 lung carcinogens for which workplace exposures are key in the burden of disease; and a number of occupational "exposure circumstances", such as painting and rubber production, also pose higher cancer risks. This indicates there is an urgent need to act in preventing people to being exposed to carcinogenic

chemical substances in the workplace. Thus, controlling or minimizing occupational carcinogen exposures could certainly contribute to decrease the toll of cancer in the region. This webinar aims to create awareness about the risk posed by chemical substances during the productive process; to present methods to quantify and control them; and, inform public policy makers to act upon them.

The Expert guests for this seminar are:

1. *Prof. Paul Demers, IH PhD:* is the Director of the Occupational Cancer Research Centre, based within Cancer Care Ontario. He is also the Scientific Director of CAREX Canada, a workplace and environmental carcinogen surveillance program, based at the University of British Columbia (UBC) in Vancouver. He is currently a Professor with the Dalla Lana School of Public Health at the University of Toronto and a Clinical Professor with the University of British Columbia. Paul is an epidemiologist whose research has focused primarily on occupational and environmental cancer, lung disease, and heart disease. He has a PhD in epidemiology and a Master's degree in occupational hygiene.
2. *Eng. Jose Carlos Espino, PE MBA Ed.M CIH:* is the President of the Latin American Council on Hygiene and Safety; and President and CEO of ITS Holding Central America. With 20 years of experience in the implementation and management of safety, occupational health and environmental programs with strong emphasis in construction safety and occupational hygiene, developing both field and analytical work. He was Manager for Occupational Safety Branch and Safety Division - Panama Canal Authority 1999 – 2003, and is certified as Occupational Hygienist, Construction Safety Professional and Lead auditor in ISO 14001 and OHSAS 18001. He is member the American Industrial Hygiene Association and other Regional and global professional associations related to occupational safety and hygiene.
3. *Dr. Maria Teresa Espinosa Restrepo, MD SOH Epi. Tox.,* is Professor of Occupational Health, Occupational Diseases and Occupational Epidemiology; and former Director of the Occupational Health and Occupational Hygiene Graduate Programs at El Bosque University, a WHO postulated CC in OH. She also leads the Occupational Cancer Team at the National Cancer Institute (INC) of Colombia, contributing to build the multiple components that the INC has developed on Occupational Cancer prevention with the joint support of the Ministries of Health and Labor, other academic institutions and workers' organizations. She is currently conducting pilot projects for validation of the occupational cancer surveillance system (SIVECAO) in Colombia.
4. *Dr. Melissa A. McDiarmid, MD, MPH, DABT,* is Professor of Medicine, Epidemiology and Public Health and Director of the University Of Maryland School of Medicine's Division of Occupational and Environmental Medicine, -a PAHO/WHO Collaborating Center in OH-, where she teaches, sees patients, and directs a surveillance program for Gulf War Veterans exposed to environmental agents. She received her B.A. degree from the University of Maryland Baltimore County, in Biological Sciences; her M.D. from the University of Maryland at Baltimore; and her M.P.H. from the Johns Hopkins School of Public Health where she also completed fellowship training in Occupational Medicine. She is board-certified in Internal Medicine, Occupational Medicine and Toxicology.

Dr. Julietta Rodriguez Guzman, PAHO Regional Advisor on Workers' Health, SDE serve as Moderator of the Seminar; and Dr. Agnes Soares, SDE Regional Advisor on Environmental Epidemiology/SDE will make the closing comments.

## Agenda

- 09:00 **Introduction**  
Dr. Julietta Rodríguez Guzmán, Moderator
- 09:15 **Welcome Greeting**  
Dr. Anselm Hennis, Director Department of Non Communicable Diseases and Mental Health  
Dr. Luiz Augusto Galvão, Chief of SDE Special Program
- 09:30 *Chemical Carcinogens: Priorities for Prevention in the Americas*  
Dr. Paul Demers, IH PhD
- 10:00 *Occupational Hygiene Challenges to control carcinogenic chemicals in the workplace*  
Eng. Jose Carlos Espino, CIH
- 10:30 *Selection of carcinogenic substances of special interest to a country: matching the path to Prevention of occupational cancer*  
Dr. Maria Teresa Espinosa Restrepo, MD SOH Epi. Tox.
- 11:00 *Safe handling of hazardous Chemotherapy Drugs in Limited –Resource settings*  
Dr. Melissa A. McDiarmid, MD, MPH, DABT
- 11:30 **Comments from the Moderator & Debate**  
Questions and Comments from participants
- 11:50 **Closing Remarks**  
Dr. Agnes Soares

## How to participate

The Webinar will be open for participation in person at PAHO Headquarters, or via Blackboard Collaborate on-line. This Webinar will be in English with simultaneous translation to Spanish. For those who cannot follow the live seminar, we will have the summaries available later online in our webpage.

### **In person:**

9:00 am to 12:00 pm ET  
PAHO/Headquarters  
525 23rd St. NW **Room C**  
Washington, D.C. 20037

**Online:** via Blackboard Collaborate in the following links:

- Spanish: <http://www.paho.org/virtual/saluddelostrabajadores>
- English: <http://www.paho.org/virtual/workershealth>
- Twitter: @pahowho / @opsoms

### About the World Day for safety and Health at Work:

The World Day for Safety and Health at Work declared by the International Labor Organization (ILO) is an international commemoration for the workers who suffered injuries, diseases or were fallen at work. It also celebrates those health events that were successfully prevented. As every year, PAHO has joined it, aiming to strengthening capacities in the countries for improving and promoting worker's health and wellbeing, and to address the prevention of occupational cancers caused by chemical substances, one of the many Occupational Diseases (ODs) occurring in the Americas.

This webinar is aimed to raise awareness and share knowledge about the creation and implementation of policies and strategies to prevent and diagnose occupational cancers caused by chemical substances in the region, and particularly, to introduce some strategies for safe handling of antineoplastic drugs in healthcare settings.

### Suggested readings:

- **ILO (2014) The World Day for Safety and Health at Work in 2014 focuses on “Safety and health in the use of chemicals at work”.** Continual development of production and use of the chemicals in workplace represents a real challenge for the society, as well as for the world of work. Finding appropriate balance between the benefits of chemical use and the preventive and control measures of potential adverse impact on workers, workplaces, communities and environment must represent a permanent concern for governments, employers and workers and their organizations. Thus, concerted efforts must be orientated to offer a coherent global response to the continuous the global growth in chemicals production and changes in the organization of work in this field. ILO web site of the World OSH Day has been updated with promotional materials in English, French and Spanish. Available at: [http://www.ilo.org/safework/events/meetings/WCMS\\_235058/lang--en/index.htm](http://www.ilo.org/safework/events/meetings/WCMS_235058/lang--en/index.htm)
- **WHO (2014) Scaling up health coverage of workers, aligning with WHO priority on universal health coverage.** Communication materials for the World Day for Safety and Health at Work 28 April include: Fact sheet “Protecting Workers’ Health”; and information “WHO calls for scaling up of workers’ health coverage”. Materials are available on WHO’s website in all six HQ official languages (English, French, Spanish, Russian, Arabic and Chinese) and at the media website at: <http://www.who.int/mediacentre/factsheets/fs389/en/> WHO Department of Communications will disseminate key advocacy messages through WHO social.
- **Strategic Approach to International Chemicals Management SAICM (2014):** policy framework to foster the sound management of chemicals. Available at: <http://www.saicm.org/>
- **CAREX Canada (2014).** A national surveillance project that estimates the number of Canadians exposed to substances associated with cancer in workplace and community environments, aiming to provide significant support for targeting exposure reduction strategies and cancer prevention programs in Canada. Available in English and French only, at: <http://www.carexcanada.ca/en/>