

OD Factsheet No. 1, March 2013







# PREVENTIONOR OCCUPATIONAL **World Day for safety** and health at work 28 April 2013

#### **ILO GLOBAL** FACTS<sup>1</sup>

- ♦ 160 M Non-fatal OD/year
- ◆ 2.02 M deaths/year (86% of all work-related deaths)
- ♦ 5,500 deaths per day

#### HIDDEN GLOBAL **OLD EPIDEMICS**

- ♦ Millions of workers exposed to dusts capable of causing Pneumoconiosis
- ♦ Millions exposed to asbestos fibers in six countries of Western Europe are estimated to yield 200,000 deaths due to mesothelioma during 1995-2029

#### HIDDEN GLOBAL **NEW EPIDEMICS**

- ♦ Musculoskeletal disorders (59% of all OD) accounted for highest # of absenteeism in EU
- ♦ Work-related Stress causing unhealthy behaviors and linked to other chronic diseases
- ◆ Diseases caused by emerging technologies

<sup>1</sup>ILO The Prevention of OD Geneva: 2013 Available at: http://www.ilo.org/wcmsp5/groups/public/-

#### INTRODUCTORY REMARKS

The International Labor Organization (ILO) declared April 28 as the World Day for Safety and Health at Work. Each year this date is observed in commemoration of the workers who suffered injuries, diseases or were fallen; and to celebrate those effectively prevented. It also aims to promoting prevention of occupational injuries and diseases. It takes place around the globe involving all stakeholders. In our Region, countries like Argentina and Peru extended it to a week long national celebration.

The Pan American Health Organization (PAHO) will celebrate the World Day for Safety and Health at Work 2013 in harmony with the initiative that ILO has launched this year on: "Prevention of Occupational Diseases." (OD) This world event aims to create awareness in the general public on the severity of the silent epidemic of occupational diseases, which is estimated to cause 86% of deaths at work1.

#### **COMMEMORATIVE EVENTS**

Non-Communicable Diseases (NCD) are the leading cause of death in the Americas, occurring mostly during the productive period of life and probably being originated at work. Considering the massive under-diagnosis/under-reporting of OD. PAHO has organized three on-line seminars, aiming to start dialogues addressing alternative solutions to improve control of the work hazards that cause OD, and different approaches to strengthen the prevention, detection, diagnosis, treatment, and registry of OD.

The Webinars will be held as follows:

- 1. Monday, 8 April 2013: "Occupational Hygiene: a necessary science for the prevention and diagnosis of Occupational Diseases".
- 2. Monday, 29 April 2013: "Occupational Diseases: the global path for prevention and diagnosis."
- 3. Wednesday, 29 May 2013: "Launching of the Knowledge Network on Occupational Diseases: a regional effort to improve prevention and diagnosis of Occupational Diseases."

#### SAVE THE DATES!!

We kindly invite people from the Ministries of Health, Labor and Environment, healthcare systems, primary healthcare providers; delegates of unions, employer & industry, technical & professional OHS associations, and all other institutions interested in knowing about Occupational Diseases.

PAHO Headquarters will host the Webinars with simultaneous translation. The agenda of each seminar will be sent timely. Join us at:

**Spanish**: http://www.paho.org/virtual/saluddelostrabajadores English: http://www.paho.org/virtual/workershealth

#### **PAHO REGIONAL** FACTS<sup>2</sup>

Work force distribution: (ILO estimates 2011) LAC..... 283 M (60.2%) North America... 185 M (39.5%) Total......468 M (100%)

**Occupational Diseases:** (PAHO estimates based on 2009 data of 9

- ♦ 281,389 cases per year
- ♦ Probable 770 cases per day
- ◆ During the last decade rate trends seem to decrease
- ♦ Under-registration estimates are in average > 95% in LAC

#### HIDDEN REGIONAL **OLD EPIDEMICS**

- ♦ Occupational lung diseases (Asbestosis, pneumoconiosis)
- ♦ Occupational skin diseases
- ◆ Occupational hearing loss
- ♦ Pesticide and other chemical poisonings (Mercury, lead, arsenic, benzene, toluene, xylene)
- ♦ Allergies (Asthma, rhinitis, hypersensitive dermatitis)

#### HIDDEN REGIONAL **NEW EPIDEMICS**

- ♦ Musculoskeletal Disorders MSD (Low back pain, carpal tunnel syndrome)
- ◆ Cardiovascular diseases
- ◆ Mental and emotional disorders (Stress, burnout, depression)
- ◆ Emerging diseases: such as multiple chemical sensitivity, occupational cancers, endocrine disruptors and those caused by new technologies (nanotechno-logy and others)

<sup>2</sup>Rodríguez-Guzmán, J. Occupational Health in the Americas. In: Proceedings book of the ICOH 30th International Congress. Cancun, Mexico 2012

## WHO GLOBAL FACTS<sup>3</sup>

World Day for Safety and Health at Work 2013

**Prevention of Occupational Diseases** 

WHO Global Observatory on GBD indicates that non-communicable diseases are spread globally as shown in the graphic below.

### Key criteria for defining OD:

- 1. **Causal relationships** between a hazardous exposure in a specific work environment or activity and a specific disease.
- 2. **Higher frequency rates of the disease** occurring amongst exposed persons than the average morbidity of the rest of the population.
- OD have varied and long latency periods (>20 years). *Exposure-effect relationships* (between exposure and the severity of the person's impairment) and *exposure-response relationships* (between exposure and the relative number of persons affected) are important occupational epidemiological criteria for defining OD. However, they are often quite difficult to establish, thus framing one of the big challenges for diagnosis.

Occupational risks were the 10th leading cause of death in high income countries. And were ranked 15th within the 19 selected health risks causing death and disability n 2004. Low and mid –income countries do not seem to have them, most probably because of under-reporting. Occupational risk factor causing OD contribute significantly to the toll of death and disability, as shown in the following figures:



## Assessing exposures and working conditions

Reliable and sufficient information about hazardous exposures is difficult to obtain in LAC due to weak national information systems and lack of occupational hygiene services. These information gaps reflect directly in the low numbers of occupational injuries, diseases and fatalities, and even some countries mix registries of injuries and disease, making OD invisible.

Probably only 1 to 5% of OD are effectively reported in the Region. This is due to factors such as lack of knowledge of Occupational Safety and Health (OHS) and OD in Primary Health Services, limited coverage of workers' compensation systems and OHS services (< 30%), increasing growth of informal economy, invisibility of rural workers, general knowledge gaps, negligence to report, workers' intimidation, amongst others. In consequence, effective implementation of hazard control and risk prevention are quite limited.

### Efforts proposed

for closing gaps, strengthening capacity building, sharing experiences and knowledge between and within PAHO's Member States and in complement to ILO's recommendations are:

- conducting national surveys for building hazard/risk profiles;
- \* defining the characteristics of work processes and building exposure matrixes;
- \* strengthening the practice of occupational hygiene, ergonomics, safety and occupational medicine; and ,
- organizing sub-regional/local OHS networks with OD research teams and expert groups.

Deaths from selected occupational risks in 2004

Noise

Ergonomic stressors

Carcinogens

12

352

Airborne particulates

High income

DALYs from selected occupational risks in 2004

Ergonomic stressors

B\$ 898

Carcinogens

Carcinogens

276

1897

Noise

992

4510

Airborne particulates

710

5,000

DALYs in thousands

High income

Low and middle income

15,000

DALYs in thousands

High income

Low and middle income

Source: WHO/IER 2009

<sup>3</sup> WHO Global Burden of Disease GBD 2004. Available on line at: <a href="http://apps.who.int/gho/data/#">http://apps.who.int/gho/data/#</a>
<sup>5</sup> Disability adjusted life years
LAC: Latin America and the Caribbean

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### PAHO REGIONAL FACTS<sup>2</sup>

# MAIN DIFFERENCES OF OCCUPATIONAL INJURIES & DISEASES:

- Usually happening as sudden and unexpected events, injuries at the workplace are mostly caused by unsafe working conditions
- Injuries are usually more visible, needing immediate healthcare and are better reported.
- PAHO estimates of injuries based on data of 16 countries indicate:
  - ◆ 7.6 M/year in 2007
  - ♦ Average 20,825 per day
  - ♦ 11,343 fatalities in 2009, 46.2% in LAC & 53.8% in NA
  - ◆ Trends during the last decade seem to increase
  - ◆ Under-registration estimates vary: 38% in Chile, 226% in Nicaragua, 39-90.4% Brazil

# Occupational Risk estimates from the GBD 2010 Study<sup>4</sup>:

- ◆ Premature attributable mortality
  by occupational hazards accounts
  58,200 deaths (2% of the burden of
  disease), and 5 M of healthy life
  lost years, being 1 M more than in
  1990.
- ◆ Disability and premature deaths were high in the South Cone (860 DALYS in BRA & PAR, and 640 DAYS in ARG, CHI & URU) in comparison with 360 DALYS in NA.
- ◆ Low-back pain is the OD that contributes the most to disability (highest DALYS)
- ◆ Most prevalent exposure to occupational carcinogens in NA was Asbestos (27,5 DALYS per 100.000), followed by second hand smoke and diesel fumes in the South Cone (11.7 and 13.8 DALYS respectively).

<sup>4</sup>Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 2012;380:2224-60.