



# Pan American Health Organization



*Regional Office of the*  
**World Health Organization**

## **Regional activities in Workers' Health**

### **Area of Sustainable Development and Environmental Health Seminar Series**

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<http://www.paho.org>



**12 June 2009  
Washington, DC**

# **Main Strategic Objective**

**To promote a healthier environment, intensify primary prevention and influence public policies in all sectors so as to address the root causes of environmental threats to health**



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# Intersectoral Strategic Alliances

## Governmental Organizations

OAS inter-ministerial collaboration  
NAFTA, SICA, CARICOM, MERCOSUR, CAN

## International Organizations

ILO, Employers' and Workers' Organizations  
Cochrane Collaboration

## Workers Health

## Collaborating Centers

14 Collaborating Centers  
2 new since 2007

## Non-governmental organizations

International Commission on Occupational Health (ICOH)

Professional Organizations

# Collaboration within PAHO

*Health promotion*

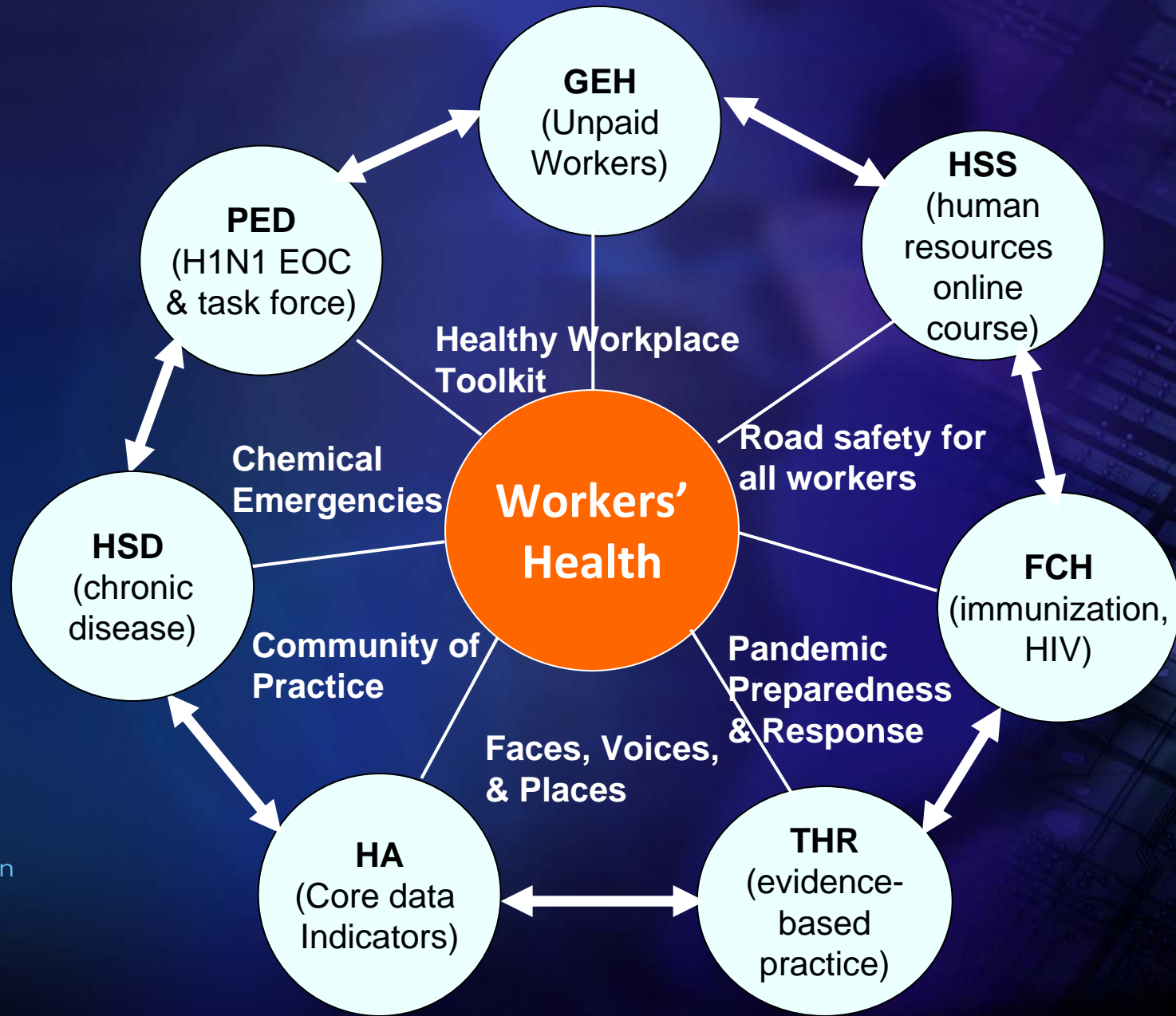
*Gender*

*Primary health care*

*Human rights*

*Social protection*

*Indigenous rights*



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# Regional Initiatives

- Protecting the health and safety of health-care workers;
- Preventing and controlling of lung diseases and occupational and environmental cancers
  - Regional Strategy on the Elimination of Silicosis
  - Elimination of asbestos-related diseases
- Emerging priorities: Influenza A(H1N1)
- PAHO Health, Safety, and Well-being Committee;



Others  
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# Prevention of occupational transmission of infectious diseases: Initial Pilot, Venezuela

## Methodology

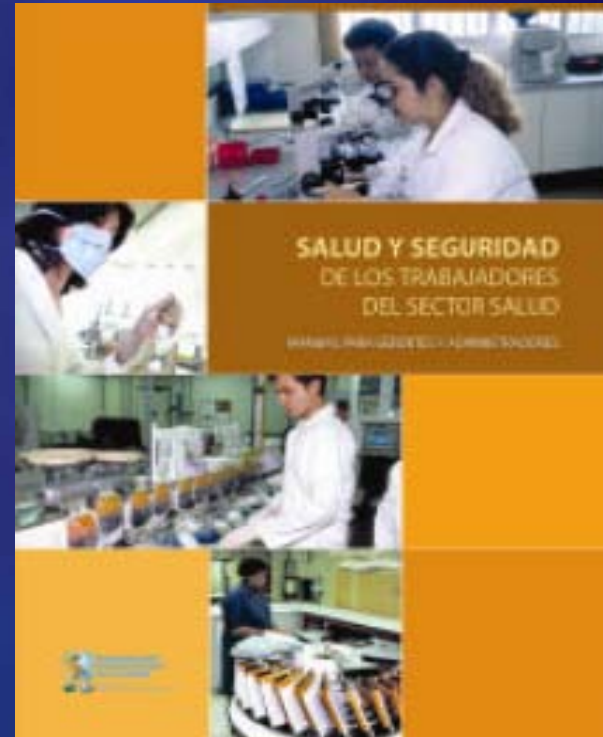
- Policy Development
- Building technical capacity
  - Information system
  - Human development in human resources
  - Inter-programmatic approach
- Reaching the local level for sustainability
  - Formation of health and safety committees
  - Local training: multi-disciplinary approach “institutional culture of prevention”
- Train-the-trainers workshop
  - train leaders from 4 pilot hospitals and state officials with the toolkit



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# Resources



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# Project outcomes: prevention of occupational transmission of blood-borne pathogens

2007

2009

1 State



12 states

4 hospitals



210 health-care facilities

2 partners



8 national institutions



10 state universities' public health curriculum

**Over 30 000 health care workers reached**



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# National immunization initiative for health care workers: achieving decent work in Peru

- **Policy Development**
  - Presidential Mandate
  - National Plan for preventing NSI among HCWs
- **Immunization Campaign Outcomes**
  - Over 500 000 health care workers vaccinated
  - Immunization in 34 regions
- **Training in Occupational Health & Safety**
  - 1,200 HCWs trained and 7,300 HCWs reached with the toolkit



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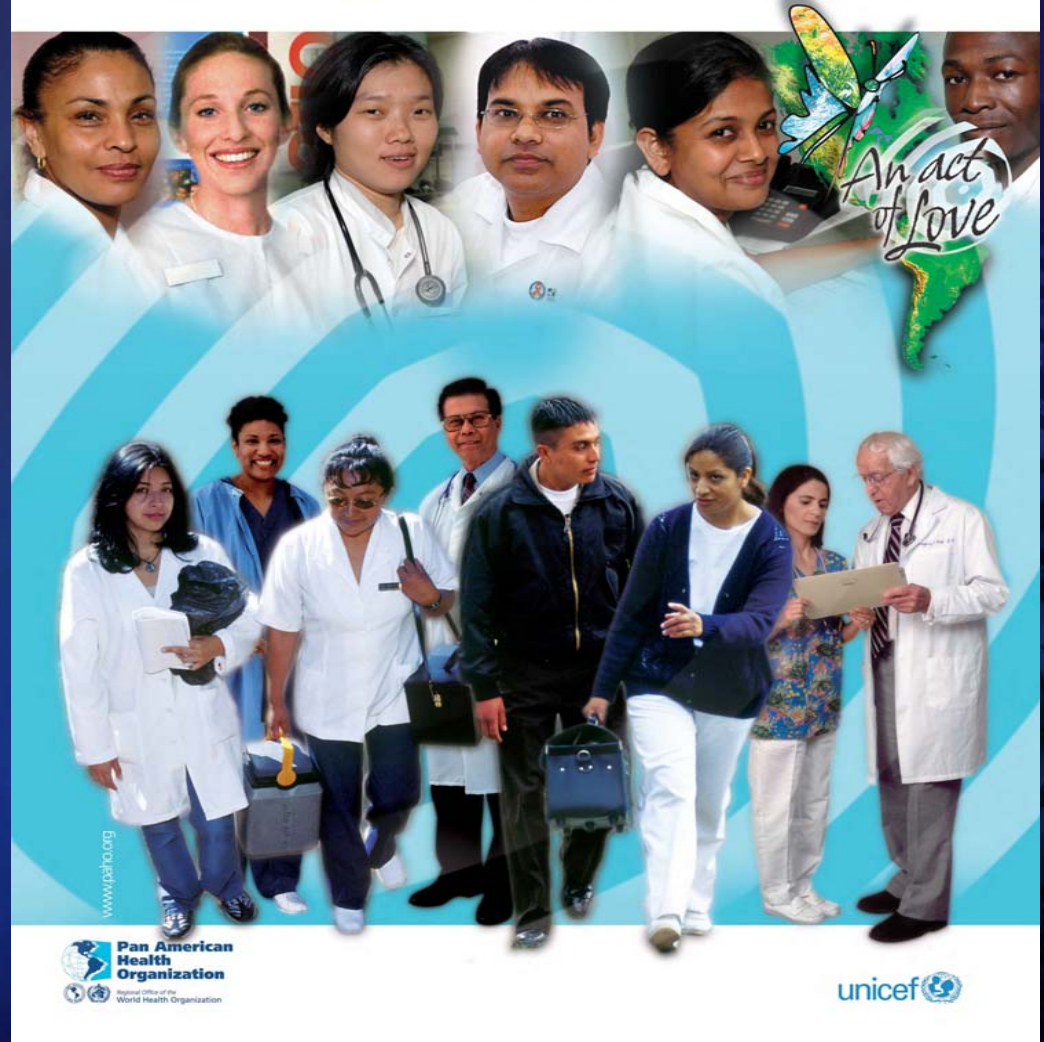


# 2009 Vaccination Week in the Americas

# Vaccination

Vaccination Week in the Americas 2009

Immunization begins with health-care workers: Get vaccinated



## Hepatitis B Immunization of Health Workers

### AIDE-MEMOIRE

for an effective approach to the immunization of health workers against hepatitis B

#### Are health workers at risk of exposure to hepatitis B virus (HBV)?

Yes: HBV is an important occupational hazard for health workers. Approximately 37% of hepatitis B infections among health workers worldwide are the result of occupational exposure.<sup>1</sup>

The World Health Organization (WHO) recommends that health workers be vaccinated against HBV.<sup>2</sup> The WHO Global Plan of Action on Workers' Health calls upon member countries to develop and implement occupational policies and programs for health workers, including hepatitis B immunization.<sup>3</sup>

#### What is hepatitis B?

HBV is a viral infection that attacks the liver and can cause both acute and chronic disease that can be life-threatening. Persons with chronic HBV infection have a 15 to 25% risk of dying prematurely from HBV-related cirrhosis and liver cancer.<sup>2</sup> Worldwide, an estimated two billion people have been infected with HBV, and more than 350 million have chronic liver infections.<sup>2</sup> Health workers can become infected with HBV by exposure to even small amounts of blood from needle-stick injuries or punctures with blood-contaminated equipment.

#### How can health workers be protected against HBV?

- ☐ Immunize
- ☐ Adhere to standard precautions
- ☐ Train health workers about mode of transmission and preventive measures
- ☐ Ensure access to post-exposure management services
- ☐ Record and report exposure to blood and body fluids

#### Be prepared: addressing commonly asked questions related to the hepatitis B vaccine

##### > What is the efficacy and safety of the hepatitis B vaccine?

The hepatitis B vaccine is 95% effective in preventing HBV infection and its chronic consequences. The hepatitis B vaccine has been used since 1982 and over one billion doses have been administered worldwide.<sup>2</sup>

##### > What are the benefits of being vaccinated against hepatitis B?

Hepatitis B vaccination protects and promotes the health of health workers, patients, and families. For employers, a vaccinated workforce contributes to the availability of a healthy workforce.

##### > What are the potential adverse effects of the hepatitis B vaccine?

Potential adverse effects include redness, swelling, and pain at the injection site. Serious effects are very rare; difficulty breathing, rash, and shock have been reported.<sup>2</sup>

### Checklist

#### Ensuring a Successful Vaccination Campaign Targeting Health Workers

##### Action Plan for immunizing health workers

- ☐ Identify responsible authority (e.g., occupational health unit)
- ☐ Implement occupational health and immunization policy and guidelines
- ☐ Integrate immunization activities within existing health and safety plan
- ☐ Allocate human and financial resources

##### Effective strategies to increase vaccination coverage

- ☐ Demonstrate management commitment towards the health of employees including providing resources needed to prevent exposure
- ☐ Provide and promote accessible and free on-site vaccination
- ☐ Establish participation in vaccination by signed consent or declination
- ☐ Educate health workers about the occupational risks associated with HBV, the efficacy of vaccination and other preventive measures
- ☐ Repeat reminders to ensure completion of all three doses of hepatitis B vaccine
- ☐ Integrate immunization into pre-employment orientation for employees and students
- ☐ Monitor immunization coverage regularly

##### Who should be immunized?

- ☐ Any health worker who performs tasks involving direct patient contact or handles blood-contaminated items is at risk:
  - ☐ Physicians, nurses, laboratory workers, dentists, pharmacists, aids, and allied health professionals
  - ☐ Support staff, such as transporters, cleaners, and waste collectors
  - ☐ Students training in the field of health care

##### Hepatitis B immunization

- ☐ Recommended schedule: 0, 1, and 6 months<sup>4</sup>
- ☐ Dose: 1mL intramuscular injection
- ☐ Serological testing:
  - ☐ Pre-vaccination: not indicated<sup>4,7</sup>
  - ☐ Post-vaccination: not required as part of a routine program<sup>2</sup>



# Other country initiatives

- **Ecuador: Healthy Hospitals (grant recipient)**
  - Strengthening health and safety committees in urban and rural (Amazon)
  - Preventing occupational transmission of infectious diseases among HCWs: more than 400 HCWs trained
- **Trinidad and Tobago: OH and infection control in health care facilities (grant recipient)**
  - Sub-regional training
  - Technical assistance to MOH during the Summit of the Americas, Caribbean Games, Heads of States of Commonwealth meeting
  - Development of resources and tools
    - Online course for health-care workers
    - Workplace assessment tool



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LA GESTIÓN DE LA SALUD Y  
SEGURIDAD EN EL TRABAJO  
ASEGURA EMPLEADOS  
SALUDABLES, MOTIVADOS,  
Y MEJORA LA CALIDAD DE  
LOS SERVICIOS PRESTADOS

## HOSPITALES SALUDABLES

LOS TRABAJADORES DEL SECTOR SALUD  
ESTÁN EXPUESTOS A RIESGOS LABORALES  
QUE AFECTAN SU SALUD

Biológicos • Químicos • Ambientales  
Psicosociales • Ergonómicos • Físicos



PROYECTO:  
"FORTALECIMIENTO DE LA GESTIÓN DE  
SALUD Y SEGURIDAD OCUPACIONALES  
EN LOS HOSPITALES DEL ECUADOR"

RESULTADOS:

- ELABORAR MAPAS DE RIESGO OCUPACIONALES
- FORTALECER LOS COMITES DE SALUD Y SEGURIDAD
- PROMOVER CAPACIDADES DE LAS PERSONAS PARA  
PREVENIR Y CONTROLAR LOS PROBLEMAS DE SALUD  
RELACIONADOS CON EL AMBIENTE HOSPITALARIO.



Ministerio de Salud Pública



BC Centre for Disease Control  
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

# Canada



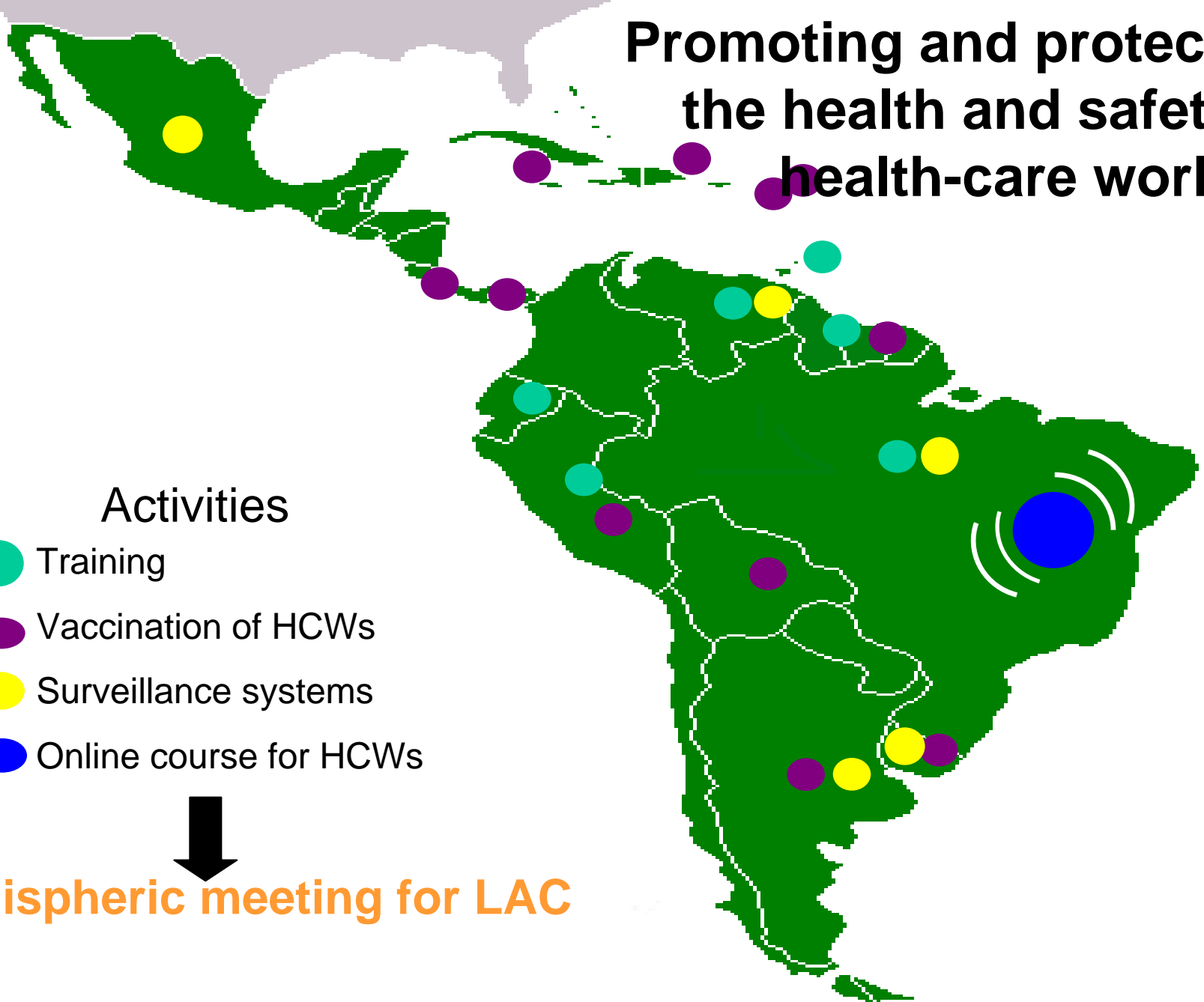
# Promoting and protecting the health and safety of health-care workers

## Activities

- Training
- Vaccination of HCWs
- Surveillance systems
- Online course for HCWs



Hemispheric meeting for LAC





# Preventing and controlling occupational and environmental cancers

- **Cancer Policy and Advocacy**
  - Integrate occupational and environmental cancer in PAHO Regional Plan on Cancer Prevention and Control
  - World Day for Safety and Health at Work 2008
  - Part of Partners' Forum to prevent and control chronic disease focusing on workplace interventions
- **Monitoring and Surveillance**
  - Integrate occupational cancers into national cancer registries, Colombia,
  - Capacity-building and resource allocation for surveillance (Costa Rica, Nicaragua)
- **Health Promotion and Disease Prevention**
  - Translation of e-course on occupational cancer (CCOHS, Universidad El Bosque), 2009
  - Workplace surveys and interventions to prevent chronic disease and promote health (SESI Brazil)



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# The Americas Regional Initiative to Eliminate Silicosis (2005)

- WHO, PAHO, ILO
- U.S. National Institute for Occupational Safety and Health (NIOSH)
- Chile Institute of Public Health and Ministry of Health
- Brazil FUNDACENTRO
- Peru CENSOPAS
- Other countries joining: Mexico, Uruguay, Argentina, etc



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# Americas Initiative Components

1. Implementation of control methodology
2. Laboratory Analytical Techniques
3. Respiratory Protection Training
4. Silicosis Surveillance Systems
5. Training courses on spirometry and on radiologic reading using the ILO technique
6. Publications and dissemination of technical guidance



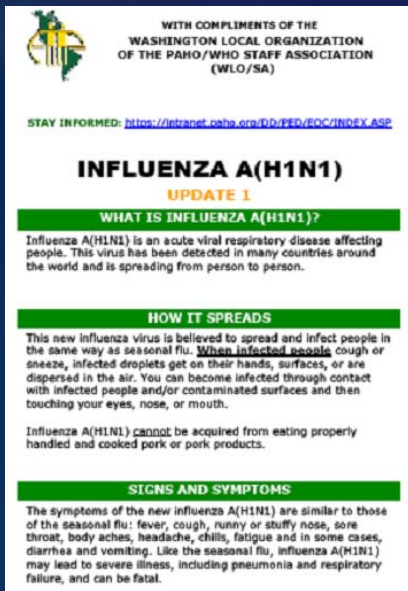
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# Responding to emerging priorities: case of influenza A(H1N1)

- Workers' health represented in the Task force
- Support to the PAHO EOC
- Information session for PAHO-HQ cleaning service staff and country administrators on influenza prevention at the workplace
- FluCOMM online course for communities health-care workers and businesses
- Technical support to the countries: using the WHO/PAHO e-Geolibrary
- Staff association for educational materials (over 1500 copies distributed)
- Video on the use of personal protective equipment for health care workers recorded in Trinidad



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# PAHO Health, Safety, and Well-being Committee

- Coordinate workshop to identify workplace risks with collaboration of Executive Management & Dr. Roses
  - Facilitated by IAPA, University of Maryland, NIOSH, Canadian Embassy, Veteran Affairs Administration
- Assist in the preparation of the Committee's terms of reference and action plan, and policy (CD 2010)
- Support the organization and implementation of a 3-day traveler's health campaign for PAHO workers
- Information session to PAHO cleaning service staff and country administrators on the prevention of influenza at the workplace with NIOSH
- Respond to staff requests (indoor air quality, noise)



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**¿Está realmente preparado para su próximo viaje?**




La inmunización comienza con usted.

**Usted cuida a otros.  
Ahora cuídense a sí mismo.**

Para información sobre recursos disponibles para viajar, visite la exposición de Salud del Viajero en la cafetería de la OPS los días 27, 28 y 29 de abril del 2009 entre las 12:00 y 1:00 pm, o haga una cita con la Unidad de Bienestar.

Travel Kit



Comité de Salud, Seguridad y Bienestar  
**Organización Panamericana de la Salud**  
Organización Mundial de la Salud

# Promotion and implementation of the Strategic Alliance

## **Collaboration with the OAS with the inter-american conference with MOL III Hemispheric Workshop on Occupational Health and Safety, Peru, 2008**

- Provided technical advice to the OAS:
  1. Occupational health and safety policy and inspection,
  2. OH Surveillance system,
  3. HIV prevention in workplace
- Promoted the intersectoral strategic alliance with the labor sector, government, civil society, and the private sector (SO 7)
- Prepared analysis and summary of country surveys on OHS presented at preparatory meeting for the Regional meeting with the Ministers of Labor (September 2009, Trinidad)

## **United Nations Economic and Social Council (ECOSOC)**

### **Regional Ministerial Meeting on HIV and Development in LAC, Jamaica, 2009**

- Promote the inter-ministerial and inter-sectoral collaboration on HIV prevention in the workplace
- Promote bilateral collaboration on policies and programs related to HIV prevention in the workplace in collaboration with ILO



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# Dissemination of Information

## Publications

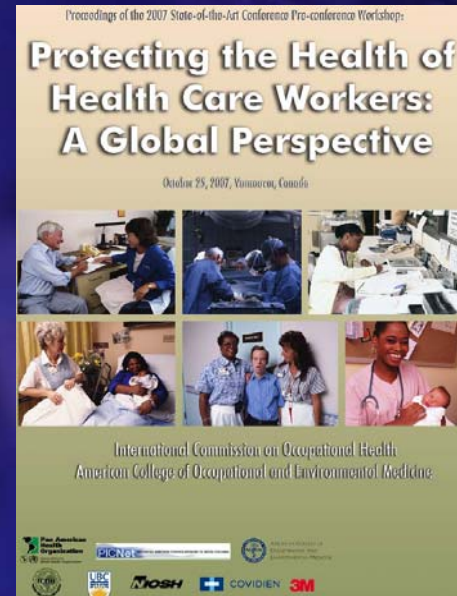
- Cochrane systematic review
- Regional contribution to WHO code of practice on the recruitment and retention of health care workers, *WHO*
- Healthy Hospital project in Ecuador, *Pan American Journal of Public Health*
- **Protecting Health Care Workers from Infectious Diseases in Latin America**, Prevention through Design Newsletter
- Protecting the health of health care workers, *NIOSH*
- Aide memoire on immunization for health-care workers
- Elimination of Silicosis Fact Sheet
- Health, Safety, and Working Conditions of HCWs Fact Sheet

## Presentations

- *International* (5)
- *Sub-regional* (10)
- *Elluminate* (10)



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### ELIMINATION OF SILICOSIS: AMERICAS INITIATIVE

#### WHAT IS SILICA?

Crystalline silica is one of the most common minerals in the earth's crust. Crystalline silica dust is released during numerous operations in which rocks, stones, raw materials, sand, concrete, cement, roofing tiles, bricks, pottery, some ores and soils, and silica-containing products are crushed, broken, hammered, drilled, polished, cut, dumped, swept, blown, or subjected to any process that could create visible or invisible dust particles.

Inhaled crystalline silica (in the form of quartz or cristobalite) from occupational sources is classified by the International Agency for Research on Cancer as a Group 1 human carcinogen<sup>1</sup>. This means that occupational inhalation of crystalline silica is known to cause cancer in humans.



**WHERE ARE WORKERS POTENTIALLY EXPOSED?**  
Workers may be exposed to crystalline silica in many different workplaces and processes. These include:

- Mining, quarrying, tunnelling, stone crushing operations, highway repair, masonry workshops
- The construction, excavation, and demolition sites
- The manufacture, cutting, and finishing of glass
- Creation of ceramics, stone arts and crafts
- Abrasive powders
- Dusty cleaning and removing paint from ship hulls, stone buildings, metal bridges, and other metal surfaces<sup>2</sup>

Exposure to silica dust may occur in unexpected or unknown places. Not all jobs with the risk of silica exposure have been identified. Any job that creates respirable dust from a crystalline silica-containing material, whether raw or manufactured, could place workers at risk of silica-related disease. Preventative action should be initiated before exposure occurs.

#### WHAT IS SILICOSIS?

Silicosis is one of the oldest occupational diseases, yet it still kills thousands of people worldwide each year. It is an incurable and irreversible lung disease caused by inhalation of dust containing free crystalline silica.

The global burden of silicosis is substantial. In fact, in 2000 an estimated 3000 deaths and 400,000 disability-adjusted life years were attributed to silicosis<sup>3</sup>. These figures do not include the burden from silico-induced lung cancer<sup>4</sup>.

- In one Brazilian state, more than 4500 workers have been diagnosed with silicosis. Among stone carvers crafting over 5000 sculptures in Petropolis, Brazil, silicosis had a 53.7 per cent prevalence rate<sup>5</sup>.
- In the USA, it is estimated that more than one million workers are occupationally exposed to free crystalline silica dust each year; some 25,000 of whom will eventually develop silicosis<sup>6</sup>.
- In Quebec, Canada, between 1988 and 1994 40 newly diagnosed workers were compensated for developing silicosis in the workplace. Twelve workers were less than 40 years old<sup>7</sup>.
- The Colombian Government estimates that 1.8 million workers in the country are at risk of developing silicosis<sup>8</sup>.

#### OTHER CONCERNS

- Silicosis cases and deaths are greatly underreported;
- Lack of primary prevention measures such as controlling dust generation, release and spread into the workplace, and respiratory protection;
- Continuous reports of silica dust exposures in a variety of occupations and industries that are at least several times higher than standards in developed and developing countries;
- Continuous reports of silicosis deaths in young workers in developing and developed countries<sup>9</sup>;
- Shortcomings in legislation and inspection for enforcement; and,
- Lack of resources allocated for the prevention of silica dust exposure.

#### HOW CAN SILICOSIS BE PREVENTED?

Alice Hamilton (1869-1970), a pioneer occupational physician and hygienist who conducted major studies on silicosis in the USA stated: "Observe the way to attack silicosis is to prevent the formation and escape of dust".

Diagnosis and health surveillance are essential components of any silicosis elimination programme. Although medical and radiological examinations can only detect and not prevent silicosis, these are important complements to primary prevention. Surveillance should be considered a supplement for control strategies and never as a replacement for primary prevention.

# World Day for Safety and Health at Work

- Recognize and generate broad awareness of workers' health in the Americas
- Engage Executive Management, other teams and technical areas at PAHO/WHO, Collaborating Centers, academia, civil society, workers, employers, labor groups, media, and governments
- Hundreds of participants from over 25 countries



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# The way forward

## Health-care Sector

- Expansion to other occupational risks in the health care sector (e.g.: elimination of mercury, ergonomics and workplace violence)
- Strengthening countries in the implementation of surveillance systems in the health-care sector
- Expansion of the initiative to other countries
- Promoting and supporting country-to-country technical cooperation
- Continue updating materials and toolkits

## Influenza pandemic

- Business continuity plan
- Launch of online course



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# The way forward

## **Regional Initiative to Eliminate Silicosis**

- Expansion of initiative to other countries

## **Strengthening policies, registries, surveillance, and interventions to prevent and control occupational and environmental cancers**

- Country profiles
- Smoke-free workplaces
- Asbestos atlas

## **PAHO Health, Safety, and Well-being Committee**

- Developing health, safety, and well-being policy
- Implementing action plan

## **Dissemination of information on workers' health**

- PAHO workers' health website and social communication channels (e.g. list serv)



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# **The way forward**

**Apply evidence-based policy and practice**

**Expand initiatives to the informal sector**

**Healthy workplace framework on best practices with WHO**

**Strengthening technical work in alcohol, tobacco, and mental health**

## **Consumers' Health**

- Partnership with OAS
- Use networks to disseminate information
- Follow consumers' health alert service with FDA
- BVSDE for consumers' health



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