



Pan American Health Organization



Regional Office of the
World Health Organization

<http://www.paho.org>

Protecting the Health of Health Care Workers: Experience from the Americas

Marie-Claude Lavoie

Decision Making for Using Community Mitigation Measures:
Planning for Influenza and Other Public Health Emergencies



January 20, 2011
Port-of-Spain, Trinidad and Tobago



“Be sure to secure your own oxygen mask first before helping another.”



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WHO Workers' Health Global Plan of Action (2008- 2017)

1. Devise national **policy** instruments on workers' health

Specific programs for the occupational health and safety of healthcare workers

Immunization of healthcare workers

2. **Protect and promote health** at the workplace

3. Improve the performance of and **access** to occupational health services

4. Provide and communicate evidence for **preventive action**

5. Incorporate workers' health into **other policies**



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Occupational Risk for Pandemic Influenza

Very High Exposure Risk:

- Healthcare workers performing aerosol-generating procedures on known or suspected pandemic patients.
- Healthcare or laboratory personnel collecting or handling specimens from known or suspected pandemic patients

High Exposure Risk:

- Healthcare delivery and support staff exposed to known or suspected pandemic patients
Medical transport of known or suspected pandemic patients in enclosed vehicles
- Performing autopsies on known or suspected pandemic patients (eg: mortuary employees).

Medium Exposure Risk:

- Employees with high-frequency contact with the general population (e.g:schools).

Lower Exposure Risk (Caution):

- Employees who have minimal occupational contact with the general public and other coworkers.



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Adapted from OSHA Guidance on preparing Workplaces for an Influenza Pandemic, 2007.

Health Care Workers and Influenza

What are the risks?

- Ø During influenza's high season, almost 25% of the surveyed health care workers developed flu syndromes similar to influenza (Ching et al., 2009);
- Ø Health care settings are highly risky and their personnel is highly exposed to the pandemic influenza. (OSHA*, 2009).



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* Occupational Safety and Health Administration

Table 1. Occupational situations leading to 2009 H1N1 pandemic influenza exposure for HCP

Unprotected exposure, isolation precautions not implemented, delayed or prematurely removed
Patients with viral shedding and absence of respiratory symptoms
Patients presenting primarily with nonrespiratory illness/injury: elective surgeries, trauma, cardiac events, gastrointestinal bleeding, stroke, etc
Patients with viral shedding and presence of respiratory symptoms
Respiratory symptoms attributed to different etiology: exacerbation of chronic obstructive pulmonary disease, asthma, community-acquired bacterial pneumonias (i.e., coinfections), congestive heart failure, etc
Patients with suspected or confirmed 2009 H1N1 with isolation discontinued prematurely because of false-negative test results, incomplete testing, or continued shedding after antiviral therapy
HCP with viral shedding with or without respiratory symptoms
Visitors with viral shedding with or without respiratory symptoms
Inadequately protected exposures
Improper use of PPE
Lack of N95 respirator fit-testing
Deficiencies in donning PPE
Self-contamination during PPE removal
Use of less-than-recommended level of protection
Use of droplet precautions when aerosolization occurs
Lack of PPE supplies
Lack of training and education, including HCP choosing to utilize less-than-recommended PPE
Lack of scientific evidence on transmission to make appropriate PPE recommendations

HCP, healthcare personnel; PPE, personal protection equipment.

Occupational situations leading to 2009 H1N1 pandemic influenza exposure to healthcare personnel

(Poalillo, E. et al., 2010)

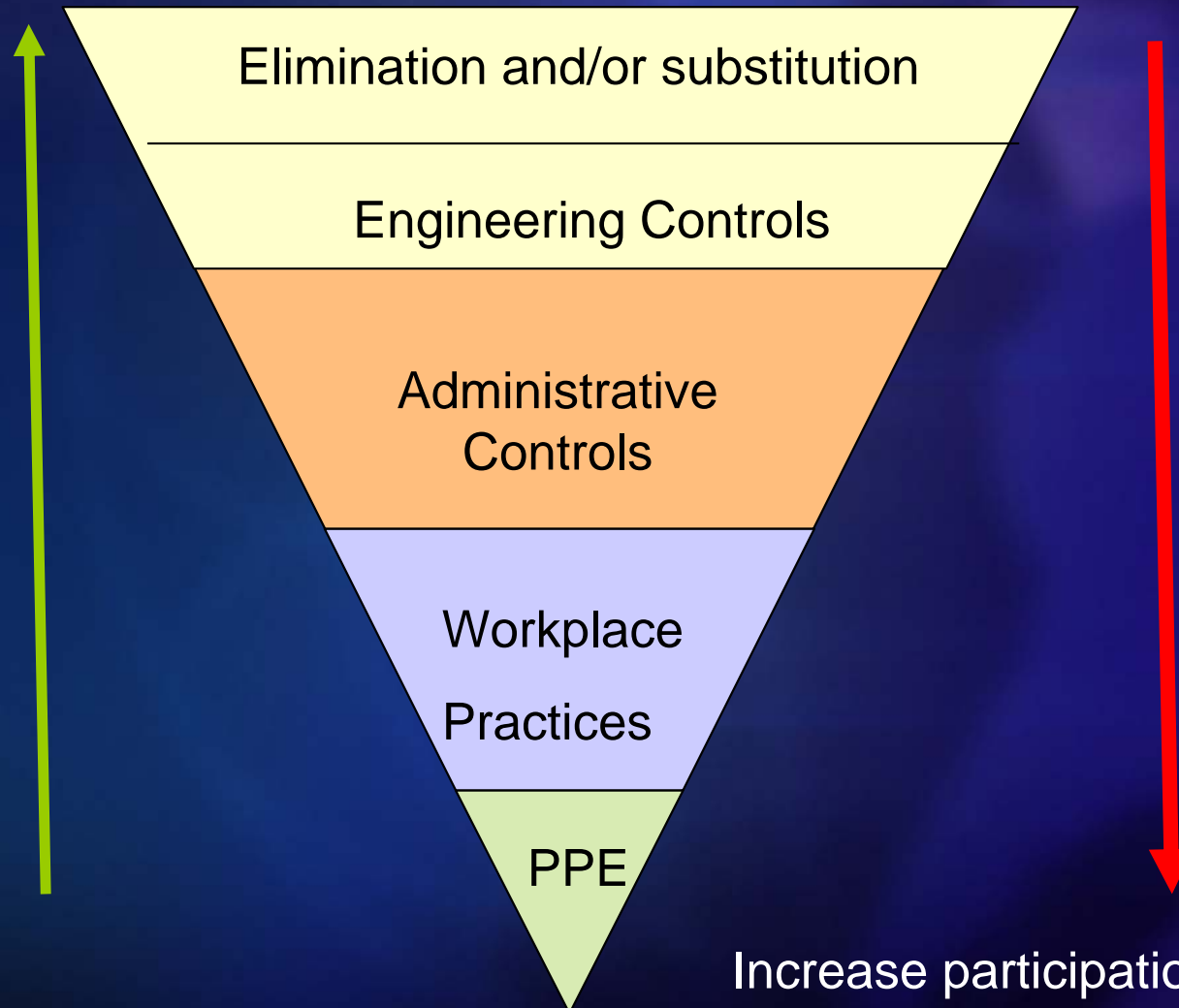


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Protecting Healthcare Workers

Occupational Health Hierarchy of Controls

Increase effectiveness and sustainability



Increase participation and supervision needed



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Transmission Prevention in Healthcare Settings- Hierarchy of controls

- Elimination of potential exposures
 - e.g.: adequate triage, postponing elective visits by patients with suspected or confirmed influenza until they are no longer infectious.
- Engineering Controls
 - e.g.: installing physical barriers such as partitions in triage areas.



Transmission Prevention in Healthcare Settings- Hierarchy of controls

- Administrative controls

- Instruct healthcare workers to stay at home if they have influenza symptoms (supportive environment);
- Free immunization program in the workplace for healthcare workers
- Implementing respiratory hygiene/cough etiquette strategies.



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- Workplace practices

- Adherence to universal standard precautions
- Training on OH and IC

- PPE

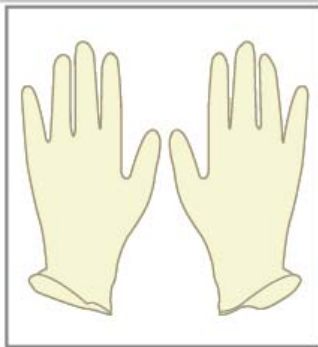
- Availability
- Training

Occupational Health and Infection Control Measures

Health care workers require appropriate personal protective equipments and the necessary knowledge to realize their work in a safety way in hospitals and health care settings.



Hand hygiene



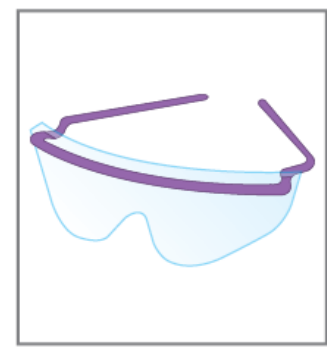
Gloves



Gown – other types and styles are also appropriate.



Medical mask – other types and styles are also appropriate.

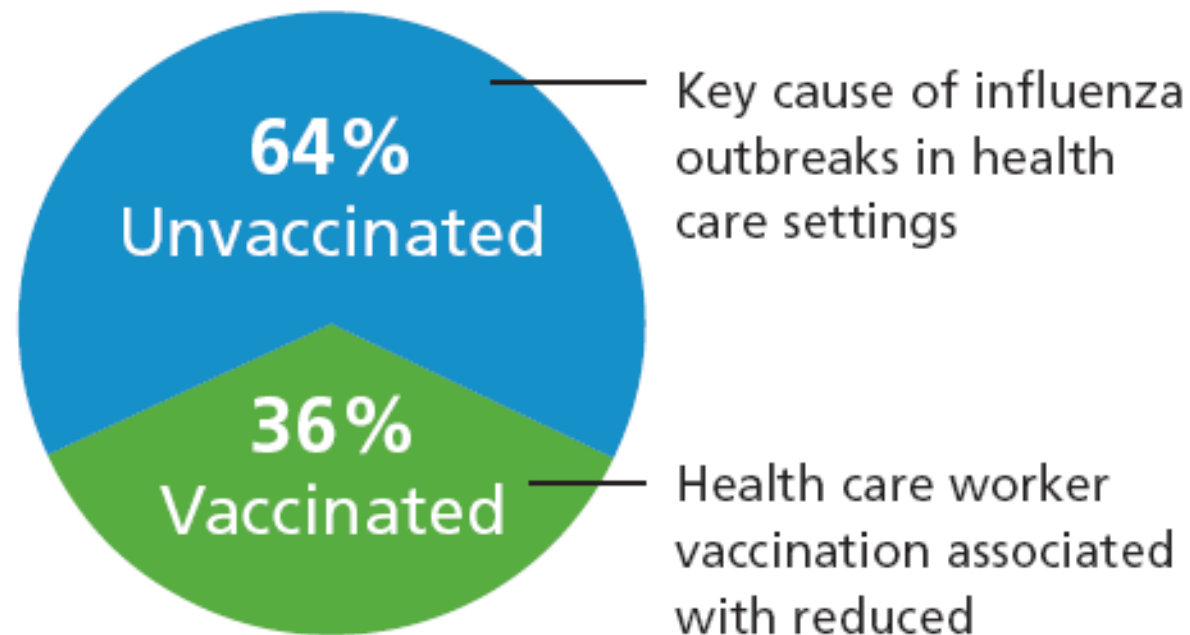


Protective eyewear - eye visors, goggles, and face shields are examples of protective eyewear



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Average Annual Influenza Vaccination Rates in Health Care Workers



Source: CDC. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 2003; 52 (RR8): 1-44.



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Vaccination for Health Care Workers

Healthcare workers should get top priority for vaccination, WHO says

John Zarocostas GENEVA

The World Health Organization said on Monday 13 July that healthcare workers in all countries should be vaccinated against the A/H1N1 flu virus “as a first priority.” They should be followed by high risk groups such as people with chronic conditions and pregnant women.

The decision comes after WHO’s adoption of recommendations

from its strategic advisory group of experts on immunisation, drawn up after the group held an extraordinary meeting on 7 July.

“Some groups, such as pregnant women and persons with asthma and other chronic conditions such as morbid obesity, appear to be at increased risk for severe disease and death from infection,” the advisory group said.

Prioritising vaccination of health workers and vulnerable groups, the group concluded, is necessary, as initially there will not be enough A/H1N1 vaccine for everyone.

At its special session the group also concluded that the A/H1N1 pandemic “is considered unstoppable” and that all countries will need to have access to the vaccine, WHO officials said.

At Monday’s press conference Marie-Paule Kieny, WHO’s director for vaccine research, said that “healthcare workers should be immunised in all countries in order to maintain a functional health system as the pandemic evolves.”

After healthcare workers, individual countries needed to set their order of priority.

Cite this as: BMJ 2009;339:b2877

http://www.bmj.com/cgi/section_pdf/339/jul15_1/b2877.pdf



Increasing immunization coverage

Verification list

To ensure a successful vaccination campaign directed to health care workers

ü Action plan for the immunization of health care workers

Identify the responsible authority (for example, occupational health unit)

- ü Implement the policies and guidelines on occupational health and immunization.
- ü Integrate the immunization activities in the health and safety actual plan.
- ü Assign human and financial resources.



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Efficient Strategies to increase Vaccination coverage

- Ø Demonstrate the commitment of managers to the employees health, such as providing the resources needed to prevent exposures.
- Ø Provide and promote accessible and free vaccination in the workplace.
- Ø Establish participation in vaccination by signing the consent form or its decline.
- Ø Educating health workers about occupational hazards associated with influenza, the efficacy of vaccination and other preventive measures.
- Ø Regularly monitor vaccination coverage.



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Immunization Week in the Americas

April
2011

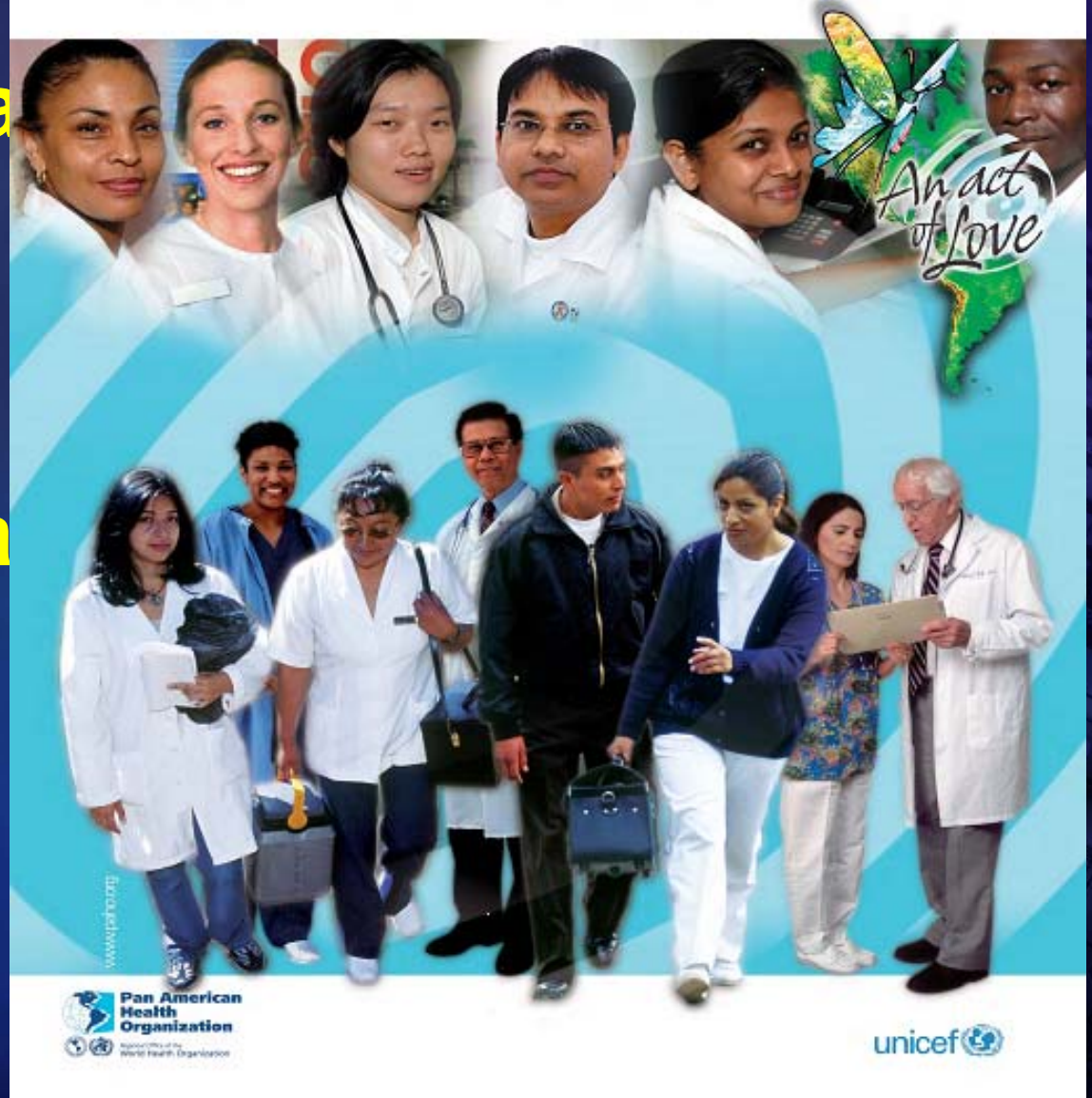


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Vaccination

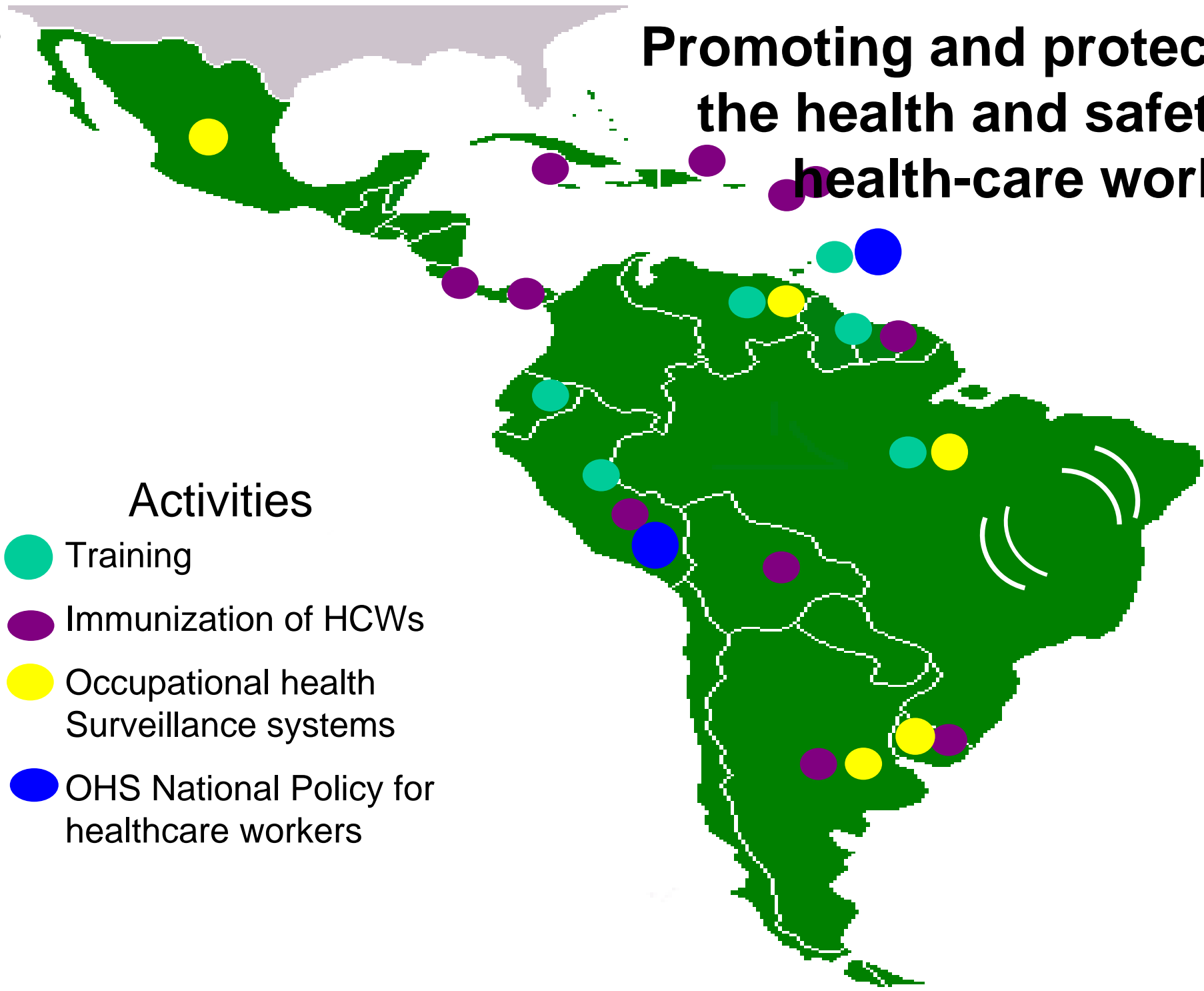
Vaccination Week in the Americas

Immunization begins with health-care workers: Get vaccinated



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

- Activities
- Training
 - Immunization of HCWs
 - Occupational health Surveillance systems
 - OHS National Policy for healthcare workers



Comprehensive Approach for Occupational Health and Safety

Policies

Occupational Health and Safety Committees

Health prevention, protection and promotion

Essential occupational health services

Surveillance

Investigation

Communication

Gender

Primary Health Attention

Human Rights

Social Protection



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Summary

- Ø Health care workers are at risk of exposure to influenza in the workplace.
- Ø Implement in the local level policies and comprehensive programs in the prevention of occupational health and safety.
- Ø Participation of different stakeholders is critical (occupational health and infection control professionals, HR, managers, labor representatives, etc.).
- Ø Health care workers: priority group for immunization against influenza.
- Ø Immunization activities need to be combined with measure trainings for occupational health and infection control.



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Thank you



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