



# Response to Pandemic (H1N1) 2009 in the Americas: Lessons and Challenges

Miami, Florida, 15-17 September 2009

## Introduction

As of 11 September 2009, 35 countries in the Region of the Americas had reported 124,219 confirmed cases of influenza A (H1N1) 2009, and 22 countries had reported 2,638 deaths. The numbers of confirmed cases and deaths reflect only cases for which laboratory testing was performed. Therefore, it is likely that these reports substantially underestimate the actual disease burden since the emergence of the pandemic strain in April 2009. Given the magnitude and rapid, global spread of this outbreak, PAHO decided to convene a meeting of experts from its Member States to share experiences. This report summarizes the discussions of the working meeting.

## Objective of the meeting

The specific objective of the meeting was to critically examine the experiences of the countries in the Region of the Americas in confronting the influenza A (H1N1) 2009 pandemic and share knowledge on ways to improve the future response throughout the Region.

# **Background**

Since the emergence of human infection with avian influenza H5N1 in 1997, the World Health Organization (WHO) and PAHO have been providing technical cooperation to their Member States on preparedness for an influenza epidemic caused by a new virus. The general public has also been sensitized to the potential risk of a pandemic and bioterrorism. Prior to the H1N1 pandemic in 2009, most countries had been preparing for potential emergencies, although levels of preparation varied across countries. The appearance of a new variant of the influenza virus in North America marked the beginning of a new stage that shifted pandemic preparedness discussions from a limited technical forum to the public arena.

After the first two cases of infection by a novel influenza A (H1N1) virus were detected in Southern California, the United States alerted the global community by employing the mechanisms set forth in the International Health Regulations. Retroactive case searches highlighted that transmission began some weeks before the first reports. Early detection was hindered by the speed of transmission, the lack of specificity of clinical illness, and the initial limitations in laboratory testing. Seven weeks after the first report, Phase 6 of the pandemic had been declared. Nine weeks following initial detection, all WHO regions had reported cases of the influenza pandemic (H1N1) 2009 virus.

The specific characteristics of pandemic (H1N1) 2009 were largely unknown in April 2009. Therefore, initial response measures needed to be flexible so that they could be modified as information and understanding of the disease improved. The response required multidisciplinary expertise and the engagement of stakeholders beyond the health sector. The response had to address the fears emerging from the general population, as well as from health care workers and personnel in charge of the response.

As the winter subsided in the Southern Hemisphere, in September 2009 participants from every country in the Region assessed their national preparations for and response to pandemic (H1N1) 2009. This assessment covered six essential areas of work: coordination and management, surveillance, International Health Regulations, health services response, risk communication and nonpharmaceutical measures, and vaccination. While these specific areas of work frequently overlapped in the response to the pandemic, they were adopted to facilitate the discussions and the writing of this report. The participants were divided into four multidisciplinary working groups so that individual participants could benefit from the range of knowledge and experiences acquired during the crisis on all relevant subjects. The multidisciplinary composition of the four working groups also attempted to avoid the natural grouping of epidemiologists, virologists, and clinicians into separate groups, since dealing with the pandemic required the simultaneous input of all disciplines in the decision-making process.

# Summary of the discussions

## **Coordination and management**

As most countries had prepared a national influenza pandemic preparedness plan, the first component of the review focused on determining the usefulness of such a plan in the response to a real-life situation, the H1N1 pandemic. The participants also discussed the modifications that were needed to respond to the pandemic (H1N1) 2009 virus. Planning in several countries was originally aimed at responding to an epidemic of avian influenza H5N1 virus. Plans for the avian influenza pandemic scenario addressed the increased severity of disease and rate of transmission. The prevention, containment, and impact reduction measures that had been planned were not entirely applicable to the pandemic in 2009, in which there was less severe disease but more efficient transmission. The focus of the 2009 health care response was not hospitals, as had been anticipated in preparedness exercises, but rather primary health care facilities. Effective containment of the 2009 pandemic was not possible because of the rapid spread of the virus.

#### **Conclusions**

- The establishment and operation of a commission to coordinate the pandemic facilitated the
  national response. The formation of scientific and clinical advisory committees with
  representatives from the public, private, and academic sectors provided credibility and weight to
  the recommendations developed.
- Factors contributing to the success of the national pandemic plans included the following:
  - Major coordination mechanisms for managing the emergency had already been defined, avoiding the paralysis that could have resulted if no mechanisms had been in place.
  - The functions of the relevant personnel had been described and training had been provided.
  - In some cases, the appropriate information flow had been determined.
  - Many countries had a stockpile of antiviral drugs and other supplies, such as personal protective equipment (PPE) and laboratory reagents, from the beginning of the pandemic. However, not all countries had such stockpiles, reflecting the variation in the quality of the development and implementation of the preparedness plans prior to the event.
- The simulations/drills were useful for identifying logistical weaknesses in the plans, for uncovering gaps in the intersectoral coordination with the public and private sectors, and in general for determining areas of need.
- The declarations of national alerts, emergency decrees, or other similar mechanisms:
  - Empowered the ministry of health or the coordinating entity to implement the response and create the conditions for mobilizing personnel.
  - o Facilitated allocation of resources, assignment of duties and responsibilities, and procurement of supplies through extraordinarily rapid routes.

- o Permitted the use of students or retired health care personnel to assist in the response.
- With only a few exceptions, the guidelines for public health measures set forth by the International Health Regulations were observed.
- The existence of a "situation room" or "emergency operations center" was essential to centralize the analysis and coordination of the pandemic. The situation room catalyzed efficient coordination and decision making at all levels of the response (global, regional, national, subnational, and local).
- Previous coordination with universities helped mobilize students close to graduating from healthrelated disciplines to assist in the response. Similarly, coordination with professional societies helped mobilize retired professionals.
- Support from international organizations was essential in the procurement of supplies, as well as cooperation among countries.

#### **Recommendations**

- General understanding of the WHO criteria for raising pandemic phases needs to be improved, given that there was a perceived delay in the change from Phase 5 to Phase 6. In the future, more information on the process should be disseminated to avoid the perception of a delay.
- National plans were not always sufficiently detailed. They should have been complemented with operational plans for the different spheres of local action.
- The plans need to be flexible so that a single plan can be adapted to different pandemic scenarios and fine-tuned to respond to the nature and course of the pandemic.
- National plans should be appropriately disseminated to all pertinent workplaces and geographical areas.
- In some countries, implementation of public health measures was hindered by concern over the impact on tourism. The measures that could be implemented during a pandemic and the triggers that would signal their implementation should be well defined in the multisectoral national plans. Achieving multisectoral agreements prior to the pandemic would simplify plan implementation.
- In the cases where only some sectors participated in pandemic preparedness, the response remained limited to those sectors. In such cases, an early opportunity was missed to integrate groups critical to an adequate response. Plans are more useful when they can be applied to both the public and private sectors. Similarly, it is important that all relevant individuals and sectors participate in simulation exercises and drills.
- Having a national coordinator to manage the response was extremely useful. The plan requires sound leadership to coordinate the preparation and implementation phases. Leadership needs to ensure that personnel are adequately trained in epidemic-related subjects. In most countries, this leadership is exercised by the ministry of health.
- Many countries had not allocated the necessary financial resources to implement the plan. Part of the process in developing a national plan should include identification of the resources needed to execute all components.
- Resource planning should account for dwindling political and economic support after the initial phase.
- A human resources plan is essential. Invariably in emergencies additional health workers must be
  mobilized. Not having a plan well in advance to deal with this challenge ultimately threatens a
  nation's health.

#### **Surveillance**

In the Americas Region, the epidemic generally began in large cities and among higher-income populations, and from there it spread to the rest of the country. Unlike seasonal flu, the majority of cases occurred in younger population, predominantly affecting the age group between 10–19 years of age. Pregnancy and concomitant chronic disorders such as obesity, asthma, diabetes, and chronic respiratory and cardiovascular and immunosuppressive diseases were risk factors for increased mortality. The number of confirmed cases is a gross underestimate of the number of actual cases and reflects only the laboratory capacity for processing specimens. The conclusions of the discussions about epidemiological surveillance appear below.

#### **Conclusions**

There was no general consensus among country representatives on interventions at points of entry, such as ports and airports. Many participants stated that such interventions provided little benefit and consumed many resources. In contrast, some participants believed that point-of-entry surveillance and subsequent monitoring of patients helped delay the spread of the epidemic to their country.

Several measures were considered feasible and successful:

- Pandemic preparedness efforts served to bolster a respiratory virus surveillance system and, in some cases, aided in resource allocation for such surveillance.
- Surveillance of pneumonias, which have a longer surveillance history, helped in monitoring the influenza epidemic and detecting the most affected age groups.
- Certain basic indicators—the number of patients hospitalized daily, the number of hospitalized patients in intensive care units, the number of patients requiring mechanical ventilation or oxygen, and the number of deaths—were useful and necessary for monitoring the situation.
- Coordination between clinicians and surveillance personnel was important, since clinics are often the setting where the first cases of any new disease appear and are detected.
- Innovative information-sharing and surveillance methods included surveillance in school settings, dissemination of information through community brigades, surveillance in hotels, free telephone screening, use of online information systems to publish laboratory results, and use of new modalities such as teleconferencing and video conferencing for clinicians, epidemiologists, and journalists.
- In many countries, epidemiological and virological surveillance had not been previously integrated, and the pandemic provided an opportunity to coordinate the two components.
- The pandemic resulted in an increase in countries' diagnostic capabilities, with decentralization of testing and improved microbiological techniques at the central level.
- Confirmation of cases at the international level by the PAHO/WHO Collaborating Center (U.S. Centers for Disease Control and Prevention) and reporting of results worked well.
- During the pandemic, many countries received international delegations of PAHO/WHO experts.
   Country representatives felt their expertise was useful in assessing the alert and response system and uncovered weaknesses that could be corrected on a timely basis.
- Although expensive, nationwide enhanced surveillance (vs. sentinel surveillance) complemented with laboratory confirmation generated a great deal of information relevant for decision making.
- The simulations conducted prior to the pandemic helped detect weaknesses in the surveillance system, guide its strengthening, and improve communication flows.

#### **Recommendations**

- The national pandemic preparedness plan needs to be more specific with respect to operational interventions and needs to integrate the lessons learned. The plan should also clearly establish information flows and indicate how to disseminate updates to the general public.
- National plans should detail the resources needed for the implementation of enhanced surveillance efforts, including human resources and funding to purchase laboratory reagents.
- Controlling the arrival and departure of passengers consumes a great deal of resources and is not effective. Air travel should not be suspended.
- Private-sector participation should be coordinated from the outset. The epidemic began in the highest socioeconomic groups, which tend to seek health care in the private sector.
- Surveillance should be adapted to the evolving pandemic. If the virus is known to be circulating widely in the community, confirmation of each case becomes less useful.
- The use of standardized case definitions should be promoted in every country so as to not create confusion. Many countries had a surveillance case definition and a clinical case definition. Changes in the case definitions and surveillance strategy led to confusion.
- Confirmation tests should be used rationally. Testing for diagnostic purposes should not compete
  with testing for surveillance purposes. Clear and specific sampling strategies should be defined to
  prioritize specimens for testing in the laboratory.
- Critical competencies such as laboratory diagnosis and data analysis should be decentralized.
- Pandemic preparedness plans should include a human resources plan for rotation of personnel in epidemiological and virological surveillance to avoid "burnout."
- In many countries, the individuals conducting field investigations are the same individuals who tabulate and analyze the epidemiological data. Their participation in investigations implied a gap in the compilation and analysis of data. Sufficient personnel should be trained in core competencies to ensure redundancy and continuity of operations.
- Efforts to share detailed information on the first 100 confirmed cases were not effective. This strategy needs to be addressed in future research. As this information was not rapidly available, levels of awareness of the risk factors associated with pandemic (H1N1) 2009 were not generally known until several weeks after the emergence of the pandemic.
- Information analysis capacity needs to be strengthened. The capacity to collect data existed, but
  the usefulness of the data was limited because of the inability to analyze and disseminate it on a
  timely basis.
- Some countries felt that using qualitative indicators to monitor the pandemic allowed easy
  explanations of the pandemic to authorities and the general public, and recommended that this
  type of monitoring be adapted for use subnationally.

# **International Health Regulations**

The purpose and scope of the International Health Regulations (IHR) (2005) are "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and the trade." The regulations also describe the obligation of Member States to develop minimum core public health capacities, including policies to support implementation of public health measures, surveillance of response efforts, and risk communication. Implementation of the IHR also includes the establishment of National IHR Focal Points and WHO IHR Contact Points for urgent communications between State Parties and WHO. Under the IHR,

<sup>&</sup>lt;sup>1</sup> World Health Organization. International Health Regulations 2005. http://www.who.int/ihr/en/

State Parties have the obligation to notify WHO of events that may constitute a public health emergency of international concern according to defined criteria. Further, it defines procedures for the establishment of an Emergency Committee to advise the Director General as well as procedures for the determination of a public health emergency of international concern and issuance of corresponding temporary recommendations.

#### **Conclusions**

- The IHR fulfilled the key function of providing international support for the country health authorities' recommendations. The IHR also helped activate the system and facilitate the response.
- The transparency promoted by the IHR enhances the credibility of the national system from the perspective of the population, especially health care personnel.
- The IHR National Focal Points served as an efficient mechanism for alerting the Member States and for ongoing and timely exchange of information. The IHR was critical for requesting or sharing information in the Regional area and directly among countries.
- As part of the IHR implementation process, most countries had carried out assessments of their core surveillance and response capacities. Having such recent assessments helped in identifying areas that needed to be strengthened as part of the pandemic response.
- The qualitative indicators proposed for use as of July 2009 for monitoring the pandemic are easy to understand and apply.
- The IHR assisted in formalizing the procedures for timely notification and the implementation of national public health measures.

#### **Recommendations**

- International guidelines are needed for the termination of emergency measures. There should be more clarity as to when event reporting is no longer necessary.
- Advocacy should be directed at addressing existing gaps in the risk assessment process of many National IHR Focal Points. Appropriate perceptions of risk and alert will help shorten reporting times.
- Some IHR definitions related to this event—for example, event of international concern, emergency, affected area, and affected country—need to be improved.
- Before an alert is issued, careful thought should be given to the way in which it is communicated so as to avoid economic and other unintended repercussions, especially in the country where the event originated.
- Information about the IHR should be adequately disseminated subnationally so that it is not only the national-level authorities who are aware of the regulations.
- Collaboration in the implementation of the IHR should be sought from other sectors so that the onus of responding to the epidemic does not fall exclusively on the health sector.
- The information generated and reported by the countries was published, and some invalid country-to-country comparisons were made. Surveillance systems should attempt to harmonize basic concepts to ensure that comparisons are valid.
- The pandemic highlighted legal gaps within the countries that prevented full compliance with the IHR, and these gaps should be addressed.
- National influenza commissions should adopt an "all-hazards" approach, using capacities developed for influenza to support all public health events of national interest.
- The experience of the countries where the epidemic first appeared should be used to benefit those countries where it has not yet arrived.

## **Health Services Response**

The influenza pandemic (H1N1) 2009 virus caused signs and symptoms that ranged from mild upper respiratory symptoms to severe symptoms requiring hospitalization and complex clinical care in intensive care units at tertiary care institutions.

In some countries, the epidemic placed a heavy burden on the emergency services. There was an increased demand from patients with respiratory symptoms, in some cases exceeding the capacity of health care facilities.

#### **Conclusions**

- Specific plans for health care services helped countries organize and implement triage measures
  to reduce the burden of patient care. These measures were more effective when they had been
  programmed and tested prior to the pandemic.
- Several countries took steps to reduce demand for treatment in hospitals:
  - o Installation of "call centers" or "hotlines" to answer questions from the public helped in reducing unnecessary visits to the health services and referring patients.
  - In some countries, the primary care units were reinforced to provide more services and thus prevent congestion in hospitals.
  - The expansion of house calls by primary care physicians was very useful and efficient; it is important to ensure that health workers providing home care have personal protective equipment.
- Centralized bed management supported by a call center and a computerized system provided an
  accurate count of available beds and where they were located so that transfer of patients
  between different regions and hospital institutions in the country could be coordinated.
- The establishment of patient cohorts and the use of specifically designated areas for patients with respiratory symptoms were successful strategies for infection control.
- Acute respiratory infection wards were established in hospitals in many countries. This permitted
  the concentration of specialized resources and resulted in improvements in quality of care.
- In terms of health service personnel, it was useful to:
  - Draft treatment protocols for outpatient consultation and hospitalization and adjust them as experience dictated.
  - o Keep personnel informed through a variety of media, including posters, video conferences, educational activities for clinicians, and telephone communication.
  - Develop detailed plans for continuity of operations, especially with respect to human resources management.
  - o Train personnel in the use of PPE and other preventive measures, such as hand hygiene.
  - o Offer mental health services to deal with the heavier workload and provide personal protection tools and supplies to reduce anxiety about infection in the workplace.
- It was useful to monitor health care centers to assess and solve problems, manage supplies, and generally manage the crisis, especially when checklists and other PAHO tools were used.
- Centralizing the management, but not the dispensing, of antivirals was useful, since it facilitated rational and equitable use.
- In national and international conferences (on infectious diseases, for example), there were opportunities to share evidence, findings, and experiences in case management.

#### **Recommendations**

Risk factors for severe disease need to be assessed and disseminated more promptly. In many
countries, insufficient dissemination of severity criteria prevented health workers from using
algorithms to determine which cases called for earlier or more aggressive treatment or both.

- Treatment of patients should not depend on laboratory confirmation, as it is not feasible for central laboratories to rapidly diagnose all suspected cases.
- The countries' strategic stocks should include sufficient amounts of oseltamivir in pediatric formulations.
- Dispensing of antivirals should not be centralized, since this imposes an additional burden on public services and can lead to delays in access to treatment.
- With regard to clinical protocols:
  - Measures should be in place before emergencies to ensure that training reaches all personnel and protocols are rapidly disseminated. Shift work and staff rotation impacted the reach of the training conducted, since in emergency rotations it is difficult to share protocols, guidelines, and other directives.
  - The protocols for personal protection and the equipment for this purpose did not reach all health workers. Ambulance personnel did not want to transport patients because they feared infection.
  - In some countries, treatment guides and protocols were more well received and used when they had been prepared or disseminated by scientific and professional associations.
- Planning for the pandemic response should consider logistical aspects such as the payment of overtime for administrative staff who must accompany clinicians as part of the response.
- Appropriate hospital-level contingency plans are necessary to:
  - Manage patients with severe disease in light of the scarcity of beds and respirators.
  - Maintain routine services such as elective surgery.
  - Address the scarcity of PPE and lack of training on its appropriate use, especially in primary health care centers.
  - Address how to cope with nosocomial infections, either in patients hospitalized with the pandemic (H1N1) 2009 virus or in patients admitted for other reasons who become infected with pandemic influenza in the hospital.
  - Plan for absenteeism among health care workers, which in some cases was as high as 30%.
  - Clearly identify referral practices.
- It is important to ensure the procurement of supplies with high standards of quality or with appropriate certification, for example N95 masks that are certified.
- Mechanisms should be put in place to ensure that antivirals are dispensed only by prescription.
- Operational indicators should be developed and disseminated to measure demand and response and to institute appropriate corrective measures.

# Risk communication and nonpharmaceutical measures

#### **Risk communication**

#### **Conclusions**

- Risk communication must be credible. Elements that contribute the most to credibility include the following:
  - Messages should be issued by a high-level spokesperson of the ministry of health, backed by technical committees. Messages should be consistent, and the authorities should show leadership in the face of uncertainty.
  - Timely, frank, clear, and coherent messages improve credibility, build confidence, and reduce anxiety among the public. Messages targeting specific groups (schools, prisons, religious congregations) also were well received.
  - Early contact with the press, initiated by health authorities as part of an awareness program, transforms the press into an ally. Workshops for the press are indispensable, as is providing up-to-date information based on perceptions of risk and the expansion and magnitude of the epidemic.

- Training in risk communication should be provided to all official health personnel at all levels.
- Communication with health workers is essential. Several mechanisms to achieve such communication were established, including telemedicine systems and contact by cell phone.
- It is highly advisable to modify messages based on the clinical course of the epidemic and the perception of risk in the community.
- Use of innovative and varied communication channels in addition to traditional media, for example text messaging, the Internet, and Facebook, proved helpful.
- Protecting the identity and privacy of patients when dealing with the press is essential.
- Partnering with the private sector to transmit coordinated messages is important.
- Call centers helped convey messages and instructions in individual cases.

#### **Recommendations**

- There is a need to achieve tighter coordination between federal or central authorities and provinces or states to avoid contradictory messages.
- Messages on the pandemic were perceived as negatively impacting tourism; it is necessary to counteract these messages with others that help allay the fears of the population and potential tourists.
- Counteract rumors alleging conspiracy theories with respect to antivirals and the vaccine.
- Avoid political uses of information that play on the fears of the population.
- Minimize public statements by patients and limit public appearances of health workers wearing PPE. In some cases, cured patients were asked to give statements and this led to stigmatization of the affected individuals. Also, the appearance of health workers wearing PPE frightened the population.

## Nonpharmaceutical measures

#### **Conclusions**

- The support provided by clear guidelines from international organizations was essential for the national teams responsible for mitigation measures.
- Voluntary isolation measures were effective for patients but not for contacts.
- The establishment of triage mechanisms to prevent children, teachers, and other school personnel from going to school sick was effective. For example, a useful strategy was training school bus drivers to recognize sick students and send them home.
- Case-detection activities at borders were ineffective, but they helped boost the capacity at points
  of entry under the IHR and raise travelers' awareness of personal protection measures.
- Information provided to household contacts of patients to prevent transmission was useful.
- Teaching personal hygiene measures to children in schools was an effective strategy as children can act as disseminators of information at home.
- Promoting hand hygiene and respiratory etiquette (for example, covering a cough with tissue, coughing into one's sleeve) helped reduce the transmission of influenza and other diseases.
- In some countries, extending winter vacations helped minimize or delay transmission among school-aged children.

#### Recommendations

- Lack of coordination between federal or central government measures and provincial measures needs attention.
- School closings negatively impact the economy and society. School closings and the cancellation
  of other gatherings should be undertaken with caution, with consideration of unwanted

- consequences. For example, when schools provide meals for children, suspension of classes can have serious repercussions unrelated to the outbreak.
- Lack of coordination between the political agenda and technical recommendations should be addressed.
- Detection at borders is ineffective in terms of case capture.
- Suspension of flights was not useful in reducing global transmission of the virus.

#### **Vaccination**

As pandemic vaccine was not available in most countries at the time of this meeting, PAHO provided information to participants on vaccination plans and preparations. It was emphasized that each country would have to set priorities with respect to its target population groups. The information shared with all participants on this subject is highlighted below.

#### Availability and procurement of pandemic influenza vaccine

- According to a WHO survey, in 12 months there will be approximately 4.9 billion doses of vaccine (yield of the strain).
- There are precontractual commitments in the industrialized countries for 80% of this global production (980 million doses).
- In September 2009, the PAHO Revolving Fund called for bids for 400 million doses, not including Canada, the United States, and Mexico.
- WHO will coordinate the distribution mechanisms for the donation of 150 million doses to developing countries on the GAVI list.
- The regulatory entities will assure quality control of the vaccine: the U.S. Food and Drug Administration, the Australian Therapeutic Goods Administration, the European Medicines Agency, the Biologics and Genetic Therapies Directorate (BGTD) of Canada, and JRA-Japan.
- PAHO/WHO is determining equitable allocation among the countries of vaccines from the Revolving Fund, following the guidelines of the Technical Advisory Group (TAG).
- Efforts are being made to promote development of regional capability for the production of seasonal and pandemic influenza vaccines, as well as technology transfer processes (in Brazil and Mexico). Regional initiatives are under way in other countries for the substantive development of other vaccines.

#### Priority groups to vaccinate

- Pursuant to the TAG guidelines with the goal of reducing morbidity and mortality and ensuring
  that the health infrastructure remains operational, the priority groups for vaccination are health
  workers, pregnant women and patients with conditions entailing the risk of complications and
  death, and patients with chronic illnesses more than six months in duration (heart disease,
  respiratory disease, diabetes, immunodeficiency, obesity).
- Depending on the epidemiological situation and available resources, other priority groups are healthy children aged 6 months to 4 years, healthy children aged 5–18 years, and healthy adults aged 19–49 years.

## Vaccination strategy

As part of the vaccination strategy to fight the pandemic, countries should have the following components in place: a national action plan, training, social mobilization and communication, cold chain, logistics (transportation), capture of target population, information systems, ESAVI surveillance (base rate of Guillain-Barré syndrome), and financial and human resources.

#### PAHO support activities

To facilitate preparation or updating of plans for introducing the pandemic vaccine, three subregional workshops will be offered for national pandemic-response coordinators and EPI managers. These workshops will be held in Panama on 21–23 October 2009 for the Central American and Latin Caribbean countries and Mexico, in Peru on 27–29 October for the South American countries, and in St. Kitts & Nevis on 12–14 November for non–Latin Caribbean countries. PAHO is also preparing risk communication guidelines to promote use of the vaccine among higher-risk groups.

#### Participants' discussions on the vaccine

The participants' comments about vaccination included the following concerns:

- The same health care workers will have to continue to implement normal EPI activities in addition to administering the vaccination for the pandemic influenza (H1N1) 2009 virus.
- It is necessary to begin to plan the mobilization of additional funds for influenza vaccination.
- Training activities must raise awareness among health workers about the shift in the priority groups for vaccination, which differ from the usual groups, including the priority of health workers themselves, who in the past have not followed recommendations that they be vaccinated against seasonal influenza.
- Clear information must be provided about the two vaccines (seasonal and H1N1), since vaccination activities will overlap and it is necessary to avoid confusion among users.
- Some participants expressed concern that the vaccine will be produced very quickly with insufficient time to fully test its efficacy and adverse effects.