

2009 H1N1 Influenza Issue Brief

June 11, 2009

A Closer Look at WHO Pandemic Declaration

By Jennifer Nuzzo, SM

On June 11, 2009, the World Health Organization (WHO) officially declared that the 2009 H1N1 virus had reached pandemic status, or Pandemic Alert Phase 6.¹ U.S. Centers for Disease Control and Prevention (CDC) Director Thomas Frieden noted at a June 11, 2009, press conference that the declaration of a pandemic does not indicate a change in severity of the 2009 H1N1 virus, but rather describes what health officials have observed for several weeks—that transmission of the virus is occurring across the globe.²

The WHO pandemic alert phases were initially outlined in WHO's 2005 global influenza preparedness plan. The 2005 plan made recommendations for international and national measures to be taken during each of the 6 phases of pandemic alert. However, in April 2009, WHO revised its pandemic plan and alert scale to reflect "advances in many areas of preparedness and response planning" that have occurred since 2005, including "increased understanding of past pandemics, strengthened outbreak communications, greater insight on disease spread and approaches to control, and increasingly sophisticated statistical modeling of various aspects of influenza."³

A brief overview of WHO's 2009 pandemic alert levels is provided below:

Phase 1: Influenza viruses may be circulating among animals, but there are no reports of such viruses causing infections in humans.

Phase 2: An animal influenza virus has caused infection in humans.

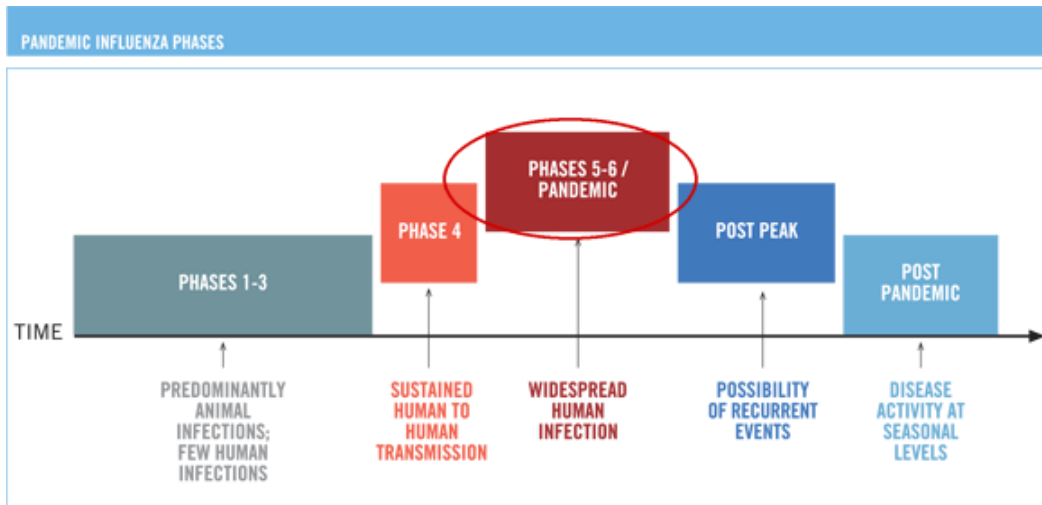
Phase 3: An "animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks." WHO notes that in some circumstances, limited human-to-human transmission of this virus may occur (eg, between "infected person and unprotected caregiver"), but transmission does not appear to be sustained beyond those circumstances.

Phase 4: An "animal or human-animal influenza reassortant virus that is capable of human-to-human transmission has caused verifiable 'community-level outbreaks.'" WHO notes that "Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a forgone conclusion."

Phase 5: An animal or human-animal influenza reassortant virus has caused human-to-human transmission in at least 2 countries in 1 WHO region. WHO notes that while "most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short."

Phase 6 [PANDEMIC PHASE]: In addition to meeting the criteria of Phase 5, an animal or human-animal influenza reassortant virus has caused community outbreaks in humans in at least 2 WHO regions.⁴

Figure: Illustration of WHO Pandemic Influenza Phases (2009)



Source: http://www.who.int/csr/disease/avian_influenza/phase/en/index.html

The new pandemic plan recommends actions according to groups of pandemic alert phases. For example:

- For Phases 1-3, WHO describes a set of actions that are aimed at overall strengthening of pandemic preparedness response capacities at local, national, regional, and global levels.
- For Phase 4, WHO recommends actions for containing a new virus “within [a] limited area” or for delaying its spread.
- For Phases 5-6, WHO’s recommendations switch from preparedness to focus on response “at a global level to reduce the impact of a pandemic.”³

It is encouraging that WHO revised its 2005 pandemic plan to accommodate new evidence. However, even under the new system of pandemic alert phases, WHO’s declaration that 2009 H1N1 has reached pandemic status is not likely to change action at the national level, particularly in those countries that have been dealing with widespread outbreaks of the illness for many weeks.

In the United States, cases of 2009 H1N1 have been reported by 52 states and territories. As of June 11, WHO reported that there have been 28,774 cases of 2009 H1N1 infection and 144 deaths reported by 74 countries.⁴ As WHO points out, the reported number of cases and extent of spread are likely a gross underestimate of the true extent of illness. Many countries continue to consider travel to North America in their case definitions, which would not capture cases resulting from community-wide transmission. Other countries, including the U.S., in an effort to conserve laboratory resources, encourage testing only severe cases. Focusing surveillance efforts on severe cases would likely miss the majority of 2009 H1N1 cases that experience mild symptoms and make a full recovery, often without seeking medical attention. Finally, in many parts of the world laboratory capacity is not sufficient to perform on even a limited scale the laboratory tests necessary to confirm 2009 H1N1 infection.⁵

In a recent report, the Trust for America's Health, the Robert Wood Johnson Foundation, and the Center for Biosecurity urged WHO and member nations to reevaluate their approaches to managing pandemic influenza in light of evidence from the outbreaks of 2009 H1N1.⁶ Specifically, the report pointed out that WHO's 2005 pandemic alert phases caused confusion and did not address the fact that the 2009 H1N1 outbreaks were relatively mild.

It is critically important that both scientific evidence and operational feasibility be key determinants of pandemic response. WHO recognizes that during a pandemic, individual countries will make decisions regarding the control of the virus based on local conditions; however, WHO strongly urges that countries' response be evidence based.⁷ To that end, we feel that it is important to point out that, based on what is known about 2009 H1N1, WHO recommends that countries DO NOT employ the following actions during the pandemic:

- "Pandemic-related international border closures for people and/or cargo.
- General disinfection of the environment during a pandemic.
- The use of masks in the community by well persons.
- The restriction of travel within national borders during a pandemic, with the exception of a globally led rapid response and containment operation, or in rare instances where clear geographical and other barriers exist."³

We strongly support WHO's recommendation against these measures, as there is no compelling evidence to support their effectiveness or practicality in the current situation. It is critically important that WHO and member nations continue to consider all available data in responding to this pandemic.

References

1. WHO. Statement to the press by WHO Director-General Dr Margaret Chan. June 11, 2009. http://www.who.int/mediacentre/news/statements/2009/h1n1_pandemic_phase6_20090611/en/index.html. Accessed June 11, 2009.
2. CDC. CDC press conference on investigation of human cases of novel influenza A H1N1. June 11, 2009. <http://www.cdc.gov/media/pressrel/2009/a090611.htm>. Accessed June 11, 2009.
3. WHO. Pandemic Influenza Preparedness and Response. 2009. <http://www.who.int/csr/disease/influenza/PIPGuidance09.pdf>. Accessed June 10, 2009.
4. WHO. Current WHO Phase of Pandemic Alert. http://www.who.int/csr/disease/avian_influenza/phase/en/index.html. Accessed June 10, 2009.
5. WHO. Influenza Influenza A(H1N1) - update 47. June 11, 2009. http://www.who.int/csr/don/2009_06_11/en/index.html. Accessed June 11, 2009.
6. Trust for America's Health. Pandemic Flu Preparedness: Lessons from the Frontlines. June 2009. <http://healthyamericans.org/assets/files/pandemic-flu-lesson.pdf>. Accessed June 9, 2009.

Center for Biosecurity of UPMC

7. World Health Organization. Summary report of a High-Level Consultation: new influenza A (H1N1) Geneva, 18 May 2009. http://www.who.int/csr/resources/publications/swineflu/High_Level_Consultation_18_May_2009.pdf. Accessed June 3, 2009.

Press Contact

Molly D'Esopo

443-573-3307

molly_desopo@upmc-biosecurity.org