

Section 4 World Health Organization Pandemic Periods and Phases

Tables

Table 4.1 World Health Organization Phases of Pandemic Influenza

Table 4.2 Current WHO Pandemic Phases

Table 4.3 Example of WHO and Canadian Pandemic Activity Levels

In 1999, to help guide response planning for an influenza pandemic, the World Health Organization (WHO) identified the phases of a pandemic. In April 2005, the WHO revised the pandemic phases to reflect recent developments, including the risk to human health posed by infection in animals and the benefit of focusing more attention on the early phases when rapid intervention may contain or delay the spread of a new influenza virus.

The designation of phases, including decisions on when to move from one phase to another, is made by the Director-General of WHO.

For planning purposes, Phases 1-2 correspond to the "*interpandemic*" period, Phases 3-5 correspond to the "*pandemic alert period*" and Phase 6 is the "*pandemic*" period.

Table 4.1 World Health Organization Phases of Pandemic Influenza

Period	Phase	Description
Interpandemic period	Phase 1	No new influenza subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk* of human infection is considered low.
Interpandemic period	Phase 2	No new influenza subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human diseases.
Pandemic alert period**	Phase 3	Human infection(s) with a new subtype, but no human to-human spread, or at most rare instances of spread to a close contact.
Pandemic alert period**	Phase 4	Small cluster(s) with limited human-to-human spread, but spread is highly localized, suggesting that the virus is not well adapted to humans.
Pandemic alert period**	Phase 5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).
Pandemic period	Phase 6	Increased and sustained transmission in general population.
Postpandemic period		Return to interpandemic period

* The distinction between phase 1 and phase 2 is based on the risk of human infection or disease from circulating strains in animals.

** The distinction between phase 3, phase 4 and phase 5 is based on the risk of a pandemic.

Source: World Health Organization, 2005

Examples:

WHO “Phase 3”

- One or more unlinked human cases with a clear history of exposure to an animal or
- Other non-human source (with laboratory confirmation in a WHO-designated reference laboratory);
- Rare instances of spread from a case to close household or unprotected health-care contacts without evidence of sustained human-to-human transmission;
- One or more small independent clusters of human cases (such as family members) who may have acquired infection from a common source or the environment, but for whom human-to-human transmission cannot be excluded; and/or
- Persons whose source of exposure cannot be determined, but who are not associated with clusters or outbreaks of human cases.

WHO “Phase 4”

- One or more clusters involving a small number of human cases, e.g., a cluster of less than 25 cases lasting less than two weeks; and/or
- Appearance of a small number of human cases in one or several geographically linked areas without a clear history of a non-human source of exposure, for which the most likely explanation is considered to be human-to-human transmission.

WHO “Phase 5”

- Ongoing cluster-related transmission, but total number of cases is not rapidly increasing, e.g., a cluster of 25–50 cases lasting from two to four weeks;
- Ongoing transmission, but cases appear to be localized (remote village, university, military base, island);
- In a community known to have a cluster, appearance of a small number of cases whose source of exposure is not readily apparent (e.g., beginning of more extensive spread); and/or appearance of clusters caused by the same or closely related virus strains in one or more geographic areas without rapidly increasing case numbers.

The world is presently in phase 3: a new influenza virus subtype is causing disease in humans, but is not yet spreading efficiently and sustainably among humans. For more information refer to the link below:

Table 4.2 Current WHO Pandemic Phases

Inter-pandemic phase New virus in animals, no human cases	Low risk of human cases	1
	Higher risk of human cases	2
Pandemic alert New virus causes human cases	No or very limited human-to-human transmission	3
	Evidence of increased human-to-human transmission	4
	Evidence of significant human-to-human transmission	5
Pandemic	Efficient and sustained human-to-human transmission	6

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

The WHO phase number reflects the international risk or activity level with respect to the new influenza virus subtype, but it may not reflect virus activity in Canada especially during the pandemic alert period. To help guide pandemic planning and response in Canada, the Public Health Agency of Canada has developed a numbering system to reflect pandemic influenza activity in Canada:

- 0 indicates no activity in Canada
- 1 indicates low activity and low risk in Canada
- 2 indicates higher activity and risk in Canada.

The Canadian activity level number will be used with the WHO phase number to confirm the level of pandemic activity in Canada (see Table 4.3).

The Ministry of Health and Long-Term Care and the local public health units will use the same indicators (no activity, low activity and higher activity) but without a numbering system to confirm pandemic activity in the province and at the local level.

Table 4.3 Example of WHO and Canadian Pandemic Activity Levels

WHO Phase	CAN Phase	WHO/CAN Phase	Definition
6	0	6.0	Outside Canada increased and sustained transmission in the general population has been observed. No cases have been detected in Canada.
6	1	6.1	Single human case(s) with the pandemic virus detected in Canada. No cluster(s) identified in Canada.
6	2	6.2	Localized or widespread pandemic activity observed in the Canadian population.