

PANDEMIC FLU FACT SHEET

1. What is “pandemic flu” and how does it differ from regular flu?

As defined by the Centers for Disease Control:

Seasonal Flu (or “common” flu) is a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.

Avian Flu (or “bird” flu) is caused by influenza viruses that occur naturally among wild birds. The H5N1 variant is deadly to domestic fowl and can be transmitted from birds to humans, usually as a result of close physical contact. There is no human immunity and no vaccine is available.

Pandemic Flu is a virulent human flu that causes global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person.

2. What is the difference between a “pandemic” and an “epidemic”?

An “epidemic” is the occurrence of more cases of a disease than would be expected in a community or region during a given time period. A relatively small number of cases of disease can be classified as an “epidemic”. A “pandemic” is a world-wide outbreak involving tens-of –thousands, or millions of persons.

3. Who determines when a pandemic situation is in effect?

The World Health Organization defines six “phases” of pandemics ranging from Phase 1 “No new influenza virus subtypes have been detected in humans” to Phase 6 “Pandemic – increased and sustained transmission in the general population.” We are currently in Phase 3 “Human infections with a new subtype, but no human-to-human spread, or at most rare instances of spread due to a close contact.” The World Health Organization would declare a pandemic if Phase 6 is reached.

In Los Angeles County, the responsibility for determining that pandemic flu has arrived and/or declaring a public health emergency rests with the Public Health Officer of the Los Angeles County Department of Public Health, Dr. Jonathan Fielding.

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4. What are the conditions for an outbreak of pandemic flu, and where are we now?

Three conditions must be met for a pandemic to start:

- 1) A new influenza type must emerge
- 2) It must infect humans and cause serious illness, and
- 3) It must spread easily among humans and be sustained (continue without interruption) among humans.

Currently there is no pandemic flu.

The H5N1 virus in Asia, Europe, the Near East and Africa meets the first two conditions: it is a new virus for humans (H5N1 viruses have never circulated widely among people), and it has infected more than 160 humans, killing over half of them.

However, the third condition, the establishment of efficient and sustained human-to-human transmission of the virus, has not occurred. For this to take place, the H5N1 virus would have to change in such a way that it could spread more easily among humans. This could occur either by “reassortment” or by adaptive mutation. Reassortment occurs when genetic material is exchanged between human and avian viruses during co-infection. This could happen in a human, or a pig. This would create a new strain that could be spread easily among humans, creating a pandemic.

5. How many people would be affected?

Experts estimate that between 15 and 35 per cent of the population would become ill. In the City of Los Angeles that translates into a range of 600,000 to 1.4 million persons. Estimates of fatalities are far more problematic. Based on the 1918-1919 pandemic, fatalities could range from 2.5 to 30 % of those infected (15,000 to 420,000 persons).

6. If an outbreak occurs, how long would it take to create, and manufacture large quantities of a vaccine?

Most health experts estimate that it would take at least six months – and possibly much longer – to develop and test an effective vaccine, and manufacture in large quantities.

7. Is there an effective medicine for treatment?

Tamiflu is an effective treatment for “seasonal” flu, and many health experts believe that Tamiflu may be an effective medication for treating new variants of flu. However, Tamiflu is currently not available in the large quantities that would be required for a pandemic flu outbreak. In addition, Tamiflu must be taken within 48 hours of onset of symptoms to be effective, and has never been administered *en masse*, so some side effects may be unknown.

8. What effects would a pandemic flu event have on City of Los Angeles operations?

The immediate effect would be significantly higher levels of absenteeism – up to 40% of the workforce by some estimates. This would result not only from personnel who were themselves ill, but by the necessity to stay home to care for ill family members...or just to care for children, since schools may be closed. High rates of absenteeism could be expected to continue for months, since pandemics often occur in “waves”.

Contractors and vendors serving the City would also experience high rates of absenteeism, potentially affecting service delivery and City supply chains. Public assembly (including commission meetings, public hearings, etc.) would be restricted, or possibly banned. Persons would be discouraged from using mass transit.

Hospitals, clinics and other facilities may be overwhelmed with persons demanding treatment, creating increased needs for police personnel to maintain order, and or to protect medical personnel or facilities. Sharp increases in 911 calls for medical assistance could be expected.

Every person-to-person contact is potentially an infection opportunity, since infected persons can transmit the disease for up to 2 days prior to showing symptoms.

10. In a pandemic flu outbreak, what assistance can we expect from the Federal government?

Little or no direct Federal assistance can be expected, since the outbreak will be nationwide, far exceeding any medical resources the Federal government can bring to bear. The Federal response will primarily be focused on developing effective vaccines, and facilitating the manufacture and distribution of large quantities of vaccines and treatment medications.

11. What can the City do to prepare?

The Emergency Preparedness Department, in collaboration with the Los Angeles County Department of Health Services, has completed a draft public health plan which identifies the actions that should be taken to prepare for public health emergencies, including pandemic flu. Actions that the City can take include:

- 1) Ensuring that first responders are provided with appropriate personal protective equipment.
- 2) Ensuring that all City staff are trained in techniques and procedures to minimize risk of person-to-person transmission in the workplace.
- 3) Preparation of departmental plans to continue essential services in the face of large scale absenteeism.
- 4) Educating employees on how to protect themselves, and their families at home.
- 5) Prepare to eliminate all non-essential meetings and public gatherings.
- 6) Establishing caches of supplies and that may be in short supply, or unavailable in a pandemic event.
- 7) Encouraging all personnel to obtain annual flu shots.
- 8) Develop appropriate sick leave, compensation, and other personnel policies.