

## **What is pandemic influenza?**

Influenza, commonly called “the flu”, is caused by a virus that primarily affects the nose, throat, bronchial airways, and lungs. Influenza viruses are divided into two types, A and B. Both influenza types typically circulate in the United States during late fall and winter. Each type of influenza virus has many different strains, which tend to change from year to year. Pandemic influenza is a widespread outbreak of disease which would affect a large number of people worldwide caused by a new subtype of an influenza A strain. Since people have not been infected with the new influenza A virus before, most or all people will not have any natural protection (immunity) against the new pandemic influenza A virus.

## **How is pandemic influenza different from regular influenza season?**

Every year influenza A viruses undergo small seasonal changes called genetic drifts. Whenever an influenza A virus undergoes a major change called genetic shift, a new subtype of an influenza A strain is created that may cause more severe illness than the seasonal variation of influenza A strains. Most people will have little or no natural resistance to the new subtype of the influenza A strain.

## **How often do pandemics of influenza occur?**

Pandemics of influenza have occurred naturally throughout history. There have been three pandemics of influenza in the 20th century. The most severe pandemic on record occurred from 1918-1919 which may have killed up to 50 million people worldwide.

## **Why is pandemic influenza so serious?**

Since most people would not have immunity to the new subtype of the influenza A strain, large numbers of people around the world are likely to be infected and many people are likely to develop severe disease. A pandemic of influenza would likely spread throughout the world and may affect as much as 25% to 30% of the United States population.

## **Would vaccinations be available during a pandemic of influenza?**

Depending on the new subtype of the influenza A strain that causes the pandemic, it is estimated that it would take at least six months to develop vaccine once the virus is identified. Also, it will take time for manufactures to produce adequate quantities of vaccine.

## **What impact might a pandemic of influenza have?**

The impact of a pandemic would depend on the severity of the virus and how fast it was spread from one population to another. Also, the number of people affected during the pandemic and the severity of their symptoms would determine the impact. Depending on these factors, there could be an interruption of normal operations of local municipalities and the health care system.

## **When is a pandemic of influenza expected to occur?**

Unfortunately, it is not possible to predict exactly when a pandemic of influenza will occur or how severe the pandemic may be.

## **Why is there so much concern associated with the H5N1 Asian strain type A influenza in Asia and Europe?**

Pandemics of influenza occur as a result of a major change creating a new subtype of an influenza A virus strain which can readily spread from person-to-person causing severe disease. In 1997, the H5N1 Asian strain type A influenza virus jumped directly from poultry to humans. Since then, it has caused serious illness and death in birds and humans throughout Asia. Public health officials have been monitoring the situation to determine the spread of the H5N1 Asian strain type A influenza in humans. To date, there have been no instances of continued human-to-human transmission.

**Will the H5N1 Asian strain type A influenza cause the next pandemic of influenza?**

No one knows which subtype of a strain of influenza A virus will cause the next pandemic of influenza. The last three pandemics in history were caused by a combination of avian and human influenza A viruses. To date, the H5N1 Asian strain type A influenza virus has not developed the ability to spread easily from person-to-person and there is no indication that it will. However, public health officials are monitoring the spread of the H5N1 Asian strain type A influenza in birds and humans in the event that it does occur.

**What is the risk to people in Oklahoma from the H5N1 Asian strain type A influenza outbreak in Asia and Europe?**

The current risk to Oklahomans from the H5N1 Asian strain type A influenza outbreak in Asia is extremely low. The strain of the H5N1 type A influenza found in Asia and Europe has not been found in the United States. There have been no avian or human cases of the H5N1 Asian strain type A influenza in the United States. There is a H5N1 North American strain type A influenza virus that regularly circulates in wild bird populations throughout the continent. It is possible that travelers returning from affected countries in Asia could be infected if they were exposed to the virus most likely through contact with poultry. Since February 2004, medical and public health personnel have been watching closely to find any such cases.

**What is the Oklahoma State Department of Health doing to prepare for a pandemic influenza?**

- The Oklahoma State Department of Health (OSDH) has formed a Pandemic Influenza Committee which has developed a management plan to address the public health response to a pandemic influenza event. It is intended to be a resource document for public health preparedness at the state, regional and local level to help maximize and distribute our available resources. The plan undergoes an annual review and revision. More information on the plan may be found on the pandemic influenza web page of the OSDH website.
- The Oklahoma State Department of Health monitors influenza activity working with many community partners. During influenza season, OSDH works with 30 physicians from 24 Oklahoma counties and ten laboratories regionally distributed throughout the state to record influenza activity and spread.
- During influenza season, OSDH publishes weekly influenza activity reports on its website.
- The OSDH Public Health Laboratory (PHL) receives specimens from physicians throughout the state to test for influenza and other respiratory viruses. The PHL has the ability to test for the H5 subtype Asian strain type A influenza virus in order to rapidly detect occurrence of the this strain in Oklahoma.
- When outbreaks of respiratory viruses occur in schools, nursing homes or other institutional settings, they are reported to the local county health department. Once outbreaks are reported, specimens are collected and submitted to the PHL for viral identification.

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