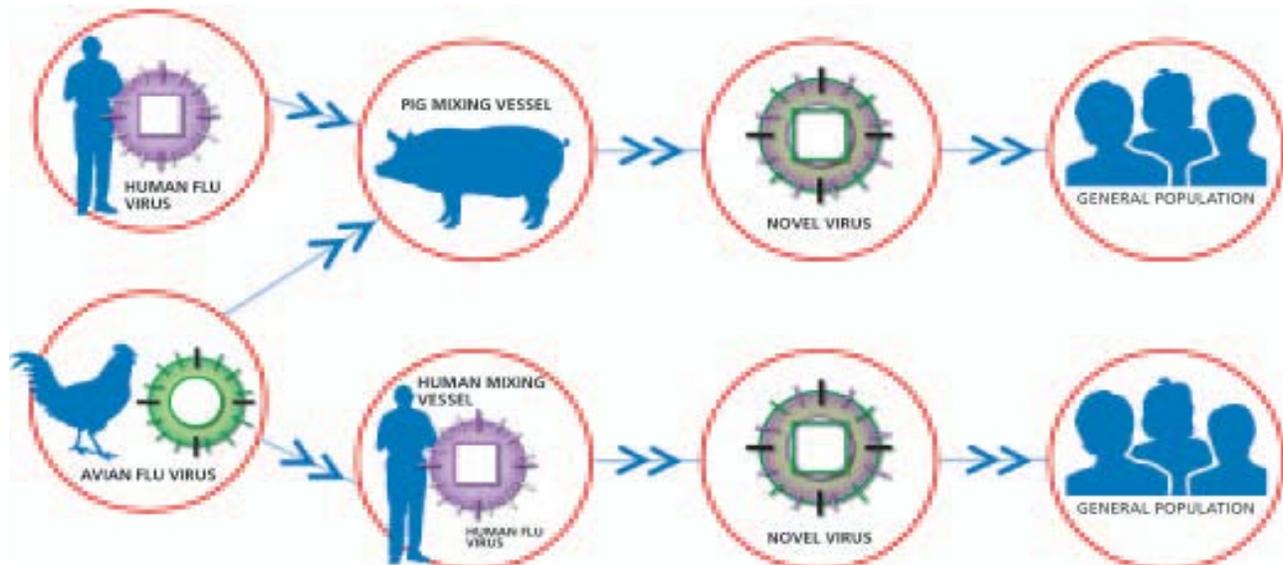


What Causes Pandemic Influenza? Information for the Public

What causes Pandemic Influenza?

Only type A influenza virus can cause a pandemic, because it is the only type that is found in both animals (pigs, birds, horses) and humans. Type A influenza is less genetically stable than type B. It is in a family of viruses that uses RNA to reproduce and viral RNA is notoriously fickle about swapping genetic material with other RNA that it meets. When this unpredictable swapping occurs between human flu and bird flu it leads to a new virus in a population that has not been exposed to it before. Our bodies will not know how to respond to this threat.

We used to think it took an animal like a pig to serve as the ‘mixing vessel’ for the avian flu strain and a human flu strain. However, more recently experts fear that people may also serve as ‘mixing vessels’. In 1997, in Hong Kong, experts learned that a new strain can occur directly when an avian influenza strain infects a human who has a human virus at the same time.



This possibility that people could act as ‘mixing vessels’ has caused particular concern with the avian flu (A/H5N1) currently circulating in Asia. This strain of avian flu has demonstrated the ability to infect people. Experts fear that people infected with avian flu could also become infected with a human flu strain at the same time, allowing the exchange of genes that could lead to the emergence of a pandemic strain.

While we typically think of this scenario playing out in Asia, it can occur anywhere these species come together. In the last few years, this has happened in Delaware, the Netherlands and the

Fraser Valley of British Columbia.

Once the pandemic flu strain has established itself in humans, it is spread like any other flu. Droplets are produced and spread by coughs and sneezing. These droplets are infectious in adults from 1 day prior to the onset of symptoms to about 5 days after onset. This means it will spread very easily.

Once the flu is in you, it takes about 1 to 4 days to become ill. Once you are ill, you experience the normal fever, aches, pains, cough and other symptoms associated with the regular flu.

With pandemic flu treatment options are limited. Vaccination is the preferred option, however, the vaccine requires at least 5 months to be developed. Development depends on adequate seed stock to grow the virus and enough chicken eggs to grow the virus in.

For more information on influenza:

- Contact your local public health department. Check <http://www.malpb.org/page.cfm/108/> for your jurisdiction. A list of local public health departments is also available at http://www.michigan.gov/documents/June2003LHDList_69658_7.pdf
- Visit the Michigan Department of Community Health website: <http://www.michigan.gov/flu>
- Visit: www.pandemicflu.gov
- Call the Centers for Disease Control and Prevention Public Response Service Hotline:
English: 1-888-246-2675, Español: 1-888-246-2857, TTY: 1-866-874-2646