

WHAT SHOULD YOU KNOW ABOUT PANDEMIC INFLUENZA A(H1N1) OR “SWINE FLU” *

1. What is pandemic H1N1 influenza virus?

The pandemic A(H1N1) influenza (flu) virus (germ) is a new member of the influenza virus family. Different influenza viruses cause the annual seasonal (winter) flu and, every few decades, a global pandemic

Influenza viruses infect birds and mammals and are usually species specific. Occasionally viruses cross over from one species to another. The pandemic A(H1N1) virus seems to have originated in pigs; however it is not spreading in pigs or from pigs to humans but only between human beings.

Seasonal human influenza results in 6000 to 10 000 deaths every winter in South Africa and between 250 000 - 500 000 deaths globally, mostly in people over 65 and those with certain chronic medical conditions. In contrast, during pandemic influenza many of the deaths occur in younger and apparently healthy individuals. The number of deaths during an influenza pandemic varies greatly, depending mostly on the virulence of the virus, but also on factors like crowding, individual health, access to health care, and preventive measures. For the 1918 flu pandemic estimates of 25 to 40 million deaths worldwide are often quoted. The estimates for excess deaths worldwide in the 1957 and 1968 pandemics are between one and two million.

2. How does the flu virus spread?

Influenza viruses are very infectious. It is almost impossible to stop influenza viruses, whether seasonal or pandemic, from spreading from person to person mainly through coughing or sneezing by infected people. Touching surfaces such as counters and doorknobs with influenza viruses on them can also infect people and afterwards their mouth, nose or eyes. This is why hand-washing helps. However influenza viruses are very infectious and all precautions can only decrease, but not eliminate, risk.

3. How can the spread be limited?

You can reduce the risk of getting or spreading influenza by taking standard precautions:

- Wash your hands or clean them with alcohol-based hand rubs frequently, especially after you cough or sneeze and before you eat.
- Cover your nose and mouth with a clean tissue when you cough or sneeze, and throw the tissue in a rubbish bin immediately after you have used it.
- Alternatively, cough and sneeze into your sleeve.
- Avoid touching your eyes, nose or mouth, as you could infect yourself that way.
- Limit close (1 to 2 meter) contact with people who are sick with flu.

- If you get sick, stay at home and limit contact with others to keep from infecting them.

4. Symptoms of an influenza like illness:

These are the same for pandemic and seasonal influenza. Typical symptoms include a sudden onset of high fever, cough, runny or stuffy nose, sore throat, headache, body aches, chills, tiredness, and lack of appetite. Some of those affected have reported nausea, vomiting, and diarrhea.

5. What to do if you or your child has symptoms?

- Children and adults who are sick should stay at home for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer.
- Drink clear fluids (such as water, broth, sports drinks, electrolyte beverages for infants) to keep from being dehydrated.
- Dishes etc. can be cleaned with hot soapy water.
- Throw away tissues and other disposable items used by the sick person in the trash. Wash your hands after touching used tissues and similar waste.
- Have everyone in the household wash hands often with soap and water, especially after coughing or sneezing. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- A person who is sick should recover in his or her own room as far as possible.
- If someone in your home is sick, as far as possible keep the person away from those who are not sick
- If a household member needs to come into the room keep at least an arms length away (1 to 2 meters) and do not sit on the bed.

6. Take medications as prescribed:

- Take medications for symptom relief as needed for fever and pain such as paracetamol or ibuprofen. These medicines do not need to be taken regularly if your symptoms improve.
- Do not give aspirin (acetylsalicylic acid) or products that contain aspirin to children or teenagers 18 years old or younger.
- Children younger than 4 years of age should not be given over-the-counter cold medications without first speaking with a health care provider.
- Should you be prescribed antiviral medication take it as directed (where applicable – see 5 below).

- Continue to cover your cough and wash your hands often (even when taking antiviral medications), to prevent spreading influenza to others.
- Call the clinic/GP if you (or your child) experience any side effects; i.e. nausea, vomiting, rash, or unusual behaviour.

7. When to seek emergency care

If your child experiences any of the following:

- Fast breathing or trouble breathing
- Bluish or grey skin colour
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough

In adults, emergency warning signs that need urgent medical attention include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve but then return with fever and worse cough

8. Who should be tested?

Laboratory testing of people with a flu like illness is NOT generally recommended, as it is expensive and does not affect the treatment.

Laboratory testing is only recommended for the following patients with the above symptoms and a clinical picture of severe respiratory disease **where a positive test will affect patient management.**

- Patients with co-morbid disease and at risk for serious complications (see 10 below) and who have the symptoms and signs of severe acute respiratory illness.
- Clusters of cases where a diagnosis of the cause of the outbreak is needed.
- An individual who has died where pandemic influenza A(H1N1) is suspected as the cause of death.

9. What medications are available to treat H1N1 flu virus infections?

The antiviral drugs oseltamivir or zanamivir are only recommended for those at risk of complications: see below.

10. Who is at risk of complications

1. Persons (adults or children) with underlying medical conditions and who are receiving regular medical care for chronic pulmonary disease (including asthma) and cardiac disease (excluding hypertension), chronic renal and hepatic diseases, diabetes mellitus and similar metabolic disorders;
2. Individuals who are immunosuppressed (HIV-infected, on immunosuppressive therapy, etc.);
3. Adults and children who have any condition (e.g., difficulty in understanding, spinal cord injuries, seizure or other neuromuscular disorders) which make it difficult to cough and are at risk of inhaling respiratory secretions;
5. Children and adolescents on aspirin therapy and at risk of Reye's syndrome if contracting any kind of flu;
6. Residents of nursing homes, and other chronic-care facilities;
7. Pregnant women.

Contacts who do not have flu symptoms should continue with their regular daily activities, including going to work or school, whether or not they have or been in contact with someone who is reported to have

Outbreaks in Institutions

Should a significant number of learners or students or residents of an institution be affected by the spread of influenza, an outbreak investigation may be indicated to quantify the size of the impact and assess the trends to inform decision making. (useful site www.eurosurveillance.org)

** The source of most of this information is from the Revised Health Workers Handbook on Pandemic Influenza A (H1N1) 2009 "Swine Flu" by the National Institute for Communicable Diseases, updated on 22 July 2009*

Center for Infectious Diseases • Faculty of Health Sciences
University of Stellenbosch • www.sun.ac.za



