

ECDC HEALTH INFORMATION

Frequently asked questions on influenza A(H1N1)v virus

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Q1. What is the influenza A(H1N1)v virus?

The present influenza A(H1N1)v virus is a new virus subtype of influenza affecting humans, which contains segments of genes from pig, bird and human influenza viruses in a combination that has never been observed before anywhere in the world. New viruses are often the result of a re-assortment of genes from two other viruses (swap of genes). This A(H1N1)v virus is the result of a combination of two swine influenza viruses that contained genes of avian and human origin. There is no evidence that this re-assortment occurred in Mexico.

Q2. What is the difference between the new influenza A(H1N1)v and swine influenza?

The typical swine influenza (swine flu) is an acute viral infection of the respiratory tract in pigs, caused by type A influenza virus. The mortality rate is low in pigs and recovery usually occurs within 7–10 days. Swine-origin influenza infections also occur in wild birds, poultry, horses and humans, but transmission between species is considered a rare event. So far three influenza type A virus subtypes have been found in pigs: H1N1, H1N2 and H3N2.

Zoonotic human infections with swine influenza viruses have been detected occasionally since the late 1950s, usually in persons with direct exposure to pigs (e.g. people working on pig farms, etc.). In Europe, since 1958 a total of 17 cases have been reported. In the US in 1976, an outbreak of swine influenza virus infections in humans was detected among recruits in a military camp in Fort Dix, New Jersey. A link to pigs was presumed but never established. Instead there was limited human-to-human transmission, with over 200 infections resulting in 12 hospitalisations and one death.

In contrast to the swine influenza virus, the new influenza A(H1N1)v virus is capable of human-to-human transmission.

Q3. What are the symptoms of influenza A(H1N1)v?

Symptoms of influenza A(H1N1) in humans are usually similar to regular human seasonal influenza symptoms:

- Fever
- Respiratory symptoms such as cough or runny nose
- Sore throat
- Possibly other symptoms such as
 - Body aches (particularly muscle pain)
 - Headache
 - Chills
 - Fatigue
 - Vomiting or diarrhoea (not typical for influenza but reported by some of the recent cases of the new influenza)

In some cases, severe complications could occur even in normally healthy persons who become infected with the virus.

Q4. How do people become infected with influenza A(H1N1)v virus?

People become infected with influenza A(H1N1)v virus in the same way as for normal seasonal influenza. It spreads from person to person via droplets from an infected person who is coughing or sneezing; indirectly when droplets or secretions from the nose and throat settle on hands and other surfaces which then are touched by other people who touch their own mouth or nose.

Q5. How long is the incubation period? How long can an infected person spread the virus to others?

Ongoing investigations suggest that the incubation period is from one to seven days. At the current time, it is believed that this virus has the same properties in terms of spread as seasonal influenza viruses. Based on that, adults who are sick can infect others for approximately five days after symptoms start, and children are infectious for approximately seven days after symptoms start. However, it is prudent to consider someone infectious for the entire time they have symptoms.

Q6. Can this influenza virus be transmitted to humans by eating pork and pork products?

No. The influenza virus is not transmitted by eating properly handled and cooked pork and pork products. The European Food Safety Authority (EFSA) and ECDC are not aware of any scientific evidence to suggest that influenza viruses can be transmitted to humans through the consumption of meat such as pork and pork products.

Regardless of the present epidemic, longstanding food safety advice is to avoid eating raw meat in order to prevent possible risk of food-borne illness. It is always recommended to follow proper food hygiene practices in kitchens and to wash hands and all surfaces and equipment with soap after handling raw meat. Cooking pork thoroughly (to an internal temperature of 70°C) kills viruses and bacteria.

Q7. Can the A(H1N1)v virus be passed back and forth between humans and pigs?

Canadian officials reported on 2 May 2009 that a farm worker infected with the influenza A(H1N1)v virus had passed the virus to pigs in Alberta, Canada. WHO food safety scientists confirmed on 3 May 2009 that there was a risk that the disease could also infect people who worked closely with sick pigs on farms or in slaughterhouses. In the past, several cases were documented in which people caught other types of swine flu from contact with infected pigs.

However, health officials repeated that it is safe to eat properly cooked pork as the virus cannot be transmitted by eating properly handled and cooked pork or pork products (see Q6).

Q8. Is there a vaccine against the influenza A(H1N1)v virus?

Although there is a vaccine available for pigs against swine influenza, there is no vaccine to protect humans from influenza A(H1N1)v virus (see also Q9). The development of a vaccine against A(H1N1)v is in the pipeline.

Q9. Is the human seasonal influenza vaccine effective against this influenza A(H1N1)v virus?

There are certain similarities between the usual H1N1 human influenza viruses (covered by the seasonal vaccine) and the novel influenza A(H1N1)v but recent evidence suggests no significant cross-protection..

Q10. Can influenza A(H1N1)v virus be treated?

So far, most human cases of the new A(H1N1) are mild and probably most patients will recover by themselves. Current evidence suggests that the influenza A(H1N1)v virus is susceptible to antiviral medications such as neuraminidase inhibitors but resistant to amantadanes. Antivirals could alleviate symptoms and reduce the course of the disease.

Q11. What is the situation across Europe?

The situation is constantly evolving, therefore for latest information please consult the ECDC home page. More detailed updates can be found at:

http://www.ecdc.europa.eu/en/Health_topics/novel_influenza_virus/2009_Outbreak/

Q12. What is being done about the situation?

In the European Union, ECDC is following the epidemiological situation and assessing the risks: daily situation updates including regular risk assessments are published on the Centre's website, and different types of guidance documents have been prepared, such as information on personal protective measures to be taken, information for travellers, guidance for management of cases and contacts and others. A common European case definition has been developed, which is used for the daily reporting of cases on the EU level. In addition, the diagnostic capacity for this novel virus is being strengthened in the European Member States.

The European Commission is working closely with the EU Member States on all risk management issues within the Early Warning and Response System (EWRS). The Health Security Committee is also meeting to discuss the situation and the Global Health Security Initiative is exchanging information on the current status of the situation and countermeasures. EU Health Ministers held an extraordinary meeting to discuss the situation on 30 April 2009, where they reinforced the need for the EU to work together and join forces.

The US Centers for Disease Control and Prevention (CDC) in Atlanta, ECDC, the European Commission together with its Member States, and the WHO Regional Office for Europe are monitoring and assessing the situation closely. The health authorities in Mexico are undertaking a number of measures for control and management of the outbreak such as closure of schools, advising avoidance of mass gatherings and distribution of face masks and antivirals. Furthermore, they have issued advice on hygiene measures to avoid the spread of flu. The US public health authorities have implemented their emergency response and are sending antiviral drugs, personal protective equipment, and respiratory protection devices to all States and US territories to help them respond to the outbreak. They are also issuing updated interim guidance daily in response to the rapidly evolving situation.

Q13. The development of a pandemic: how does flu spread?

One of the components of the definition of a pandemic virus is that it is a novel influenza virus; therefore many people, if not most people, have little or no immunity to it – less than to ordinary seasonal virus. We do not yet know what proportions of people will be in this situation.

In a pandemic, some people will have no symptoms at all (asymptomatic infections) and many will have mild symptoms. However, a small proportion will have more severe symptoms and will benefit from hospitalisation and a very small proportion of the group will die prematurely, usually from complications of the influenza infection.

The best way of estimating these proportions is to look back to the experience of previous pandemics: those of 1918, 1957 and 1968. These three pandemics differed in many of their characteristics, especially in their severity. More information about this can be found at:

http://www.ecdc.europa.eu/en/files/pdf/Health_topics/The_way_flu_spreads.pdf

Q14. What should I do if I want to travel to areas with reported transmission?

In a statement on 27 April 2009, the Director-General of WHO recommended not to restrict international travel, though it is considered prudent for people who are ill to delay international travel. Anyone who develops symptoms following international travel should seek medical attention.

Persons who intend to travel to areas with reported transmission of influenza A(H1N1)v virus are advised to consult the WHO website and websites of their ministries of foreign affairs or national public health institutes. All travellers are advised to follow some general hygiene measures, such as:

- Avoiding close contact with people who are sick. Isolate yourself. When you are sick, keep your distance from others to protect them from getting sick too.
- Staying home from work, school, and avoid running errands when you are sick. This will help prevent others from catching your illness.
- Avoiding crowding or mass gatherings.
- Covering your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick. Throw the tissue in the bin after you use it and wash your hands afterwards.
- Washing your hands will help protect you from germs. Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners may also be effective. Avoid touching your eyes, nose or mouth because germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

Q15. What precautions are needed for travellers returning from areas with reported transmission?

Travellers returning from areas with reported transmission should observe their personal health and should immediately contact a physician if, within seven days of return, they experience:

- Fever

and one or more of the following symptoms:

- Respiratory symptoms such as cough or runny nose
- Sore throat
- Possibly other symptoms such as:
 - Body aches (particularly muscle pain)
 - Headache
 - Chills
 - Fatigue
 - Vomiting or diarrhoea (not typical for influenza but reported by some of the recent cases of influenza infection)

Q16. What should I do to keep from getting the flu?

There is no vaccine available right now to protect against this new A(H1N1)v virus. There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. Take these everyday steps to protect your health:

First and most important: wash your hands. Try to stay in good general health. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food. Try not to touch surfaces that may be

contaminated with the flu virus. Avoid touching your eyes, nose or mouth: germs spread this way. Avoid close contact with people who are sick and avoid crowds and mass gatherings.

Q17. What surfaces are most likely to be sources of contamination?

The virus can be spread when a person touches something that is contaminated and then touches his or her eyes, nose, or mouth. Droplets from a cough or sneeze of an infected person move through the air. The virus can be spread when a person touches respiratory droplets from another person on a surface like a desk, books and door handles, for example, and then touches their own eyes, mouth or nose before washing their hands. Studies have shown that the influenza virus can survive and infect a person for up to 2–8 hours after being deposited on the surface.

Q18. What household cleaning should be done to prevent the spread of influenza virus?

It is important to keep all surfaces clean, especially bedside tables, surfaces in bathrooms and kitchen counters, by wiping them down with a household disinfectant according to directions on the product label.

Q19. What is the best way to keep from spreading the virus when I am sick?

- If you are sick, limit your contact with other people as much as possible. Do not go to work or school if ill for seven days or until your symptoms go away (whichever is longer).
- When you cough or sneeze, cover your nose and mouth with a tissue. Throw the tissue in the bin after you have used it and wash your hands afterwards.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.

Q20. What is the best technique for washing my hands to avoid getting the flu?

Washing your hands often will help protect you from germs. Wash with soap and water or clean with alcohol-based hand cleaner. We recommend that you wash your hands – with soap and warm water – for at least 20 seconds. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitisers may be used. You can find them in most supermarkets and pharmacies. If using gel, rub your hands until the gel is dry. The gel does not need water to work; the alcohol in it kills the germs on your hands.

For more information on influenza A(H1N1)v please visit our website at www.ecdc.europa.eu