



Telephone Lines

Educational Information for Telephone Triage Nurses

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Swine Flu for Telephone Triage Nurses

Special Edition of AAP Telephone Lines

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This is not an official publication of the AAP nor does it supersede any material written by the CDC or other public health officials. The purpose is to provide information to pediatric telephone triage nurses, both in the office and medical call centers.

Public Health emergencies offer the opportunity for telephone triage nurses to provide calm, evidence-based reassurance and guidance to thousands of concerned parents. First, please remember that the Swine Flu that has been identified in the US has not caused significant morbidity (illness) and has not been associated with any deaths in the US.

The triage nurse will mainly receive calls related to one of the following scenarios which will each be addressed separately, followed by some common expected questions and answers.

1. Information only call about Swine Flu
2. My child is sick, parent does not realize that the symptoms may be consistent with Swine Flu
3. My child is sick, parent is concerned it could be Swine Flu
4. My child has been diagnosed with probable Swine Flu and I have further questions.
5. My child is not sick but has been in contact with someone who is sick and may have Swine Flu.

Information only Call about Swine Flu

General information on Swine Flu is best located at the CDC website at www.cdc.gov. This website is updated at least daily. See the *Common Questions* below for more detail.

Definition: Swine Flu is an influenza A virus.

Diagnosis: Many offices and EDs do have rapid antigen tests that can diagnose influenza A from a swab of nasal secretions. However, the offices do not have the sophisticated testing needed to confirm the virus as Swine Flu.

Treatment: Swine Flu can be treated with both oseltamivir (Tamiflu) or zanamivir (Relenza). It has been reported from Mexico that this strain of Swine Flu is sensitive to these antivirals, but it has to be given within 48 hours of onset.) Prophylactic treat-

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Swine Flu



Section on Telehealth Care

The SOTC is part of the American Academy of Pediatrics. The SOTC is dedicated to promoting the delivery of quality telephone care.

For More Information

To learn more about the SOTC contact Julie Ake, AAP Section Manager at Jake@aap.org or 800-433-9016, ext. 7662.

Swine Flu (Cont)

ment of close contacts is likely to decrease the risk of infection. Table 1 below shows the recommendations of high risk individuals who should receive chemoprophylaxis.

Prevention: No vaccine is currently available for swine flu and won't be for many months. Last winter's flu vaccine is not protective.

My child is sick, parent does not realize that the symptoms may be consistent with Swine Flu

Triage the child per your routine. Use the following Guideline:

- If fever is the only symptom, use the Fever Guideline.
- If the child has fever and cough, use the Cough Guideline.
- If the child has fever, cough, sore throat, general malaise, consider using the Influenza Guideline.

Do not use the Avian Influenza Exposure Guideline (Bird Flu). It is not relevant. Bird Flu is very rare and much more serious than Swine Flu. (The Avian Influenza guideline is only available on the computerized call center guideline product).

If you suspect the signs and symptoms are consistent with Swine Flu, still triage to the appropriate level. In the future it may change that for patients with signs and symptoms consistent with Swine Flu that they will need to be seen immediately for confirmation and prophylactic treatment for direct contacts. However, at this time, this is not the current recommendation. Only refer patients to be seen if they meet the guideline's recommendation. **Exception:** if they have recently returned from Mexico or been in contact with someone who has recently returned from Mexico, have them seen within 24 hours or less for Influenza A testing.

It is not suggested that at anytime the triage nurses says that the child's signs and symptoms may be related to the Swine Flu unless you are directly asked (reason - no need to cause unnecessary alarm at this time).

My child is sick and parent is concerned it could be Swine Flu

Triage all illness calls as is your routine. If the Cough, Influenza or other guideline indicates that the child should be seen, then direct the caller to do so per your regular policy.

If the parent brings up the concern over Swine Flu, acknowledge that the child's symptoms may be related to the Swine Flu or multiple other viruses that can cause similar symptoms. If the family is anxious about the possibility of Swine Flu reassure them that patients recover from Swine Flu and treatment is mainly supportive. Provide appropriate home care advice and call back instructions, including to call back if the child has fever for more than 3 days, shows signs of dehydration, shows signs of respiratory distress, or gets worse. **Exception: same as above.**

If the caller asks about contagiousness instruct them that the child is likely contagious, as with any other virus, till the fever resolves for 24 hours. If swine flu is suspected, the child should be kept at home until 7 days since onset of symptoms. (CDC)

If the family asks about prophylactic treatment of siblings, instruct them to discuss this with the doctor during office hours. If the caller insists on prophylactic medications for siblings page the doctor on-call.



Swine Flu (Cont)

My child has been diagnosed with probable Swine Flu and I have further concerns.

These calls should be managed with an appropriate guideline, if possible, or information from the CDC website. Choices would include Influenza Guideline or the Pneumonia Follow-Up Guideline (if the child has been given this diagnosis).

Fevers from Influenza can last up to 5-7 days. If the main concern is the child still has a fever and the **patient has already been seen**, the nurse should follow these recommendations:

- *Patient seen less than 48 hours ago and is acting the same: Reassurance, does not need to be seen*
- *Patient seen less than 48 hours ago and the patient is worse: Be seen within 4 hours or Now (if warranted)*
- *Seen more than 48 hours ago AND fever present over 72 hours AND patient acting the same: Be seen during office hours*
- *Seen more than 48 hours ago AND fever present over 72 hours AND patient is worse: Be seen within 4 hours or Now (if warranted)*

My child is not sick but has been in contact with someone who is sick and may have Swine Flu.

All children with direct contact with someone who has suspected or confirmed Swine Flu should speak to their doctor to discuss antiviral prophylactic medication. It is not clear at this time if prophylactic antivirals will be recommended for all contacts of suspected or confirmed patients. The 2009 recommendations for Influenza indicated that antiviral prophylaxis should be given to high risk individuals in direct contact of an infected person (Table 1).

Table 1 Chemoprophylaxis Candidates from the 2009 Influenza Guidelines from the Infectious Disease Society of America

Table 3. Persons at high risk of complications from influenza who should be considered for antiviral therapy.

Unvaccinated infants aged 12–24 months
Persons with asthma or other chronic pulmonary diseases, such as cystic fibrosis in children or chronic obstructive pulmonary disease in adults
Persons with hemodynamically significant cardiac disease
Persons who have immunosuppressive disorders or who are receiving immunosuppressive therapy
HIV-infected persons
Persons with sickle cell anemia and other hemoglobinopathies
Persons with diseases that requiring long-term aspirin therapy, such as rheumatoid arthritis or Kawasaki disease
Persons with chronic renal dysfunction
Persons with cancer
Persons with chronic metabolic disease, such as diabetes mellitus
Persons with neuromuscular disorders, seizure disorders, or cognitive dysfunction that may compromise the handling of respiratory secretions
Adults aged >65 years
Residents of any age of nursing homes or other long-term care institutions

NOTE. Although sufficient data do not exist to precisely define the extent of increased risk of influenza in these different groups of patients, there are data to suggest that the highest risk of both mortality and serious morbidity (e.g., hospitalization) occurs for severely immunocompromised patients (e.g., hematopoietic stem cell transplant patients) and very elderly (age, >85 years) residents of nursing homes; infants aged <24 months also have high hospitalization rates but lower case-fatality rates than do the other 2 groups. Data are from [3, 5].

Swine Flu (cont)

Table 2 Chemoprophylaxis Dosing from the 2009 Influenza Guidelines from the Infectious Disease Society of America

Table 6. Influenza antiviral medication dosing recommendations.

Agent, group	Treatment	Chemoprophylaxis
Neuraminidase inhibitors		
Osetamivir		
Adults	75-mg capsule twice per day for 5 days	75-mg capsule once per day ^a
Children (age, ≥12 months), weight		
≤15 kg	60 mg per day divided into 2 doses	30 mg once per day
15–23 kg	90 mg per day divided into 2 doses	45 mg once per day
24–40 kg	120 mg per day divided into 2 doses	60 mg once per day
>40 kg	150 mg per day divided into 2 doses	75 mg once per day
Zanamivir		
Adults	Two 5-mg inhalations (10 mg total) twice per day	Two 5-mg inhalations (10 mg total) once per day
Children	Two 5-mg inhalations (10 mg total) twice per day (age, ≥7 years)	Two 5-mg inhalations (10 mg total) once per day (age, ≥5 years)
Adamantanes^b		
Rimantadine^c		
Adults	200 mg per day, either as a single daily dose or divided into 2 doses	200 mg per day, either as a single daily dose or divided into 2 doses
Children, age		
1–9 years	6.6 mg/kg per day (maximum, 150 mg per day) divided into 2 doses	5 mg/kg per day once daily, not to exceed 150 mg
≥10 years	200 mg per day, either as a single daily dose or divided into 2 doses	200 mg per day, either as a single daily dose or divided into 2 doses
Amantadine		
Adults	200 mg per day, either as a single daily dose or divided into 2 doses	200 mg per day, either as a single daily dose or divided into 2 doses
Children, age		
1–9 years	5–8 mg/kg per day divided into 2 doses or as a single daily dose (maximum, 150 mg per day)	5–8 mg/kg per day divided into 2 doses or as a single daily dose (maximum, 150 mg per day)
9–12 years	200 mg per day divided into 2 doses	200 mg per day divided into 2 doses

^a For treatment duration, see the sections Antivirals for Chemoprophylaxis and Outbreak Management in Institutional Settings.

^b On the basis of influenza surveillance data current as of March 2009, the adamantanes should be used only in situations in which influenza A (H1N1) infection or exposure is suspected. The adamantanes should not be used for infection or exposure to influenza A (H3N2) or influenza B. See the sections Antivirals for Treatment and Antivirals for Chemoprophylaxis.

^c Rimantadine has not been approved by the US Food and Drug Administration for treatment of children, but published data exist on safety and efficacy in the pediatric population [9].



London's Times Cartoons © S. Bennett, illustrator

Swine Flu (cont)

Swine Flu Questions and Answers from the CDC Website (Update April 26, 2009)

What is swine flu?

Swine Influenza (swine flu) is a respiratory disease of pigs caused by type A influenza viruses. Outbreaks of swine flu happen regularly in pigs. People do not normally get swine flu, but human infections can and do happen. Most commonly, human cases of swine flu happen in people who are around pigs but it's possible for swine flu viruses to spread from person to person also.

Are there human infections with swine flu in the U.S.?

In late March and early April 2009, cases of human infection with swine influenza A (H1N1) viruses were first reported in Southern California and near San Antonio, Texas. CDC and local and state health agencies are working together to investigate this situation.

Is this swine flu virus contagious?

CDC has determined that this virus is contagious and is spreading from human to human. However, at this time, it not known how easily the virus spreads between people.

What are the signs and symptoms of swine flu in people?

The symptoms of swine flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, chills and fatigue. Some people have reported diarrhea and vomiting associated with swine flu. In the past, severe illness (pneumonia and respiratory failure) and deaths have been reported with swine flu infection in people. Like seasonal flu, swine flu may cause a worsening of underlying chronic medical conditions.

How serious is swine flu infection?

Like seasonal flu, swine flu in humans can vary in severity from mild to severe. Between 2005 and January 2009, 12 human cases of swine flu were detected in the U.S. with no deaths occurring. However, swine flu infection can be serious. In September 1988, a previously healthy 32-year-old pregnant woman in Wisconsin was hospitalized for pneumonia after being infected with swine flu and died 8 days later. A swine flu outbreak in Fort Dix, New Jersey occurred in 1976 that caused more than 200 cases with serious illness in several people and one death.

How do you catch swine flu?

Spread of swine flu can occur in two ways:

- Through contact with infected pigs or environments contaminated with swine flu viruses.
- Through contact with a person with swine flu. Human-to-human spread of swine flu has been documented also and is thought to occur in the same way as seasonal flu. Influenza is thought to spread mainly person-to-person through coughing or sneezing of infected people, as well as from hands contaminated with secretions.

Are there medicines to treat swine flu?

Yes. CDC recommends the use of oseltamivir or zanamivir for the treatment and/or prevention of infection with these swine influenza viruses. Antiviral drugs are prescription medicines (pills, liquid or an inhaler) that fight against the flu by keeping flu viruses from reproducing in your body. If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications. For treatment, antiviral drugs work best if started soon after getting sick (within 2 days of symptoms).

How long can an infected person spread swine flu to others?

People with swine influenza virus infection should be considered potentially contagious as long as they are symptomatic and possible for up to 7 days following illness onset. Children, especially younger children, might potentially be contagious for longer periods.

What can I do to protect myself from getting sick?

Swine Flu (cont)

There is no vaccine available right now to protect against swine flu. 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:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Try to avoid close contact with sick people.
- If you get sick with influenza, CDC recommends that you stay home from work or school and limit contact with others to keep from infecting them. Avoid touching your eyes, nose or mouth. Germs spread this way.

What should I do if I get sick?

If become ill with influenza-like symptoms, including fever, body aches, runny nose, sore throat, nausea, or vomiting or diarrhea, you may want to contact their health care provider, particularly if you are worried about your symptoms. Your health care provider will determine whether influenza testing or treatment is needed.

If you are sick, you should stay home and avoid contact with other people as much as possible to keep from spreading your illness to others.

If you become ill and experience any of the following warning signs, seek emergency medical care.

In children emergency warning signs that need urgent medical attention include:

- Fast breathing or trouble breathing
- Bluish skin color
- Not drinking enough fluids
- 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
- Fever with a rash

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

Can I get swine influenza from eating or preparing pork?

No. Swine influenza viruses are not spread by food. You cannot get swine influenza from eating pork or pork products. Eating properly handled and cooked pork products is safe.

