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**Interim Guidance for EMS on Suspected or Confirmed  
Swine Influenza A (H1N1)**

**Chardon, Ohio. – April 29, 2009 – This is the current information that we have received for guidance for emergency workers who may come in contact with patients suspected or confirmed with Swine Influenza A (H1N1). If you need any additional information, please call me at (440) 279-1950.**



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## Swine Flu

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# Interim Guidance for Emergency Medical Services (EMS) Systems and 9-1-1 Public Safety Answering Points (PSAPs) for Management of Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection

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April 29, 2009 6:00 AM EDT

This document provides interim guidance for 9-1-1 Public Safety Answering Points (PSAPs), the Emergency Medical Services (EMS) system and medical first-responders and will be updated as needed at <http://www.cdc.gov/swineflu/guidance/>.

The information contained in this document is intended to complement existing guidance for healthcare personnel, "Interim Guidance for Infection Control for Care of Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection in a Healthcare Setting" at [http://www.cdc.gov/swineflu/guidelines\\_infection\\_control.htm](http://www.cdc.gov/swineflu/guidelines_infection_control.htm).

## BACKGROUND

As a component of the Nation's critical infrastructure, emergency medical services (along with other emergency services) play a vital role in responding to requests for assistance, triaging patients, and providing emergency treatment to influenza patients. However, unlike patient care in the controlled environment of a fixed medical facility, prehospital EMS patient care may be provided in an uncontrolled environment, often confined to a very small space, and frequently requires rapid medical decision-making, and interventions with limited information. EMS personnel are frequently unable to determine a patient's medical history before having to administer emergency care.

## INTERIM RECOMMENDATIONS

Coordination among PSAPs, the EMS system, healthcare facilities (e.g., emergency departments), and the public health system is important for a coordinated response to swine influenza A (H1N1). Each 9-1-1 and EMS system should seek the involvement of an EMS medical director to provide appropriate medical oversight. Given the uncertainty of the disease, its treatment, and its progression, the ongoing role of EMS medical directors is critically important. The guidance provided in this document is based on current knowledge of Swine Influenza A (H1N1) and will be updated as needed.

The U.S. Department of Transportation's EMS Pandemic Influenza Guidelines for Statewide Adoption and Preparing for Pandemic Influenza: Recommendations for Protocol Development and 9-1-1 Personnel and Public Safety Answering Points (PSAPs) are available online at [www.ems.gov](http://www.ems.gov) (Click on Pandemic News). State and local EMS agencies should review these documents for additional useful information. For instance, Guideline 6.1 addresses protection of the EMS and 9-1-1 workers and their families while Guideline 6.2 addresses vaccines and anti-viral medications for EMS personnel. Also, EMS Agencies should work with their occupational health programs and/or local public health/public safety agencies to make sure that long term personal protective equipment (PPE) needs and antiviral medication needs are addressed.

## Infectious Period

Persons with swine influenza A (H1N1) virus infection should be considered potentially contagious for up to 7 days following illness onset. Persons who continue to be ill longer than 7 days after illness onset should be considered potentially contagious until symptoms have resolved. Children, especially younger children, might potentially be contagious for longer periods. The duration of infectiousness might vary by swine influenza A (H1N1) virus strain.

Non-hospitalized ill persons who are a confirmed, probable, or suspected case of swine influenza A (H1N1) virus infection are recommended to stay at home (voluntary isolation) for at least the first 7 days after checking with their healthcare provider about any special care they might need if they

are pregnant or have a health condition such as diabetes, heart disease, asthma, or emphysema. Otherwise, they should only seek medical care for specific emergency warning signs. ([http://www.cdc.gov/swineflu/guidance\\_homecare.htm](http://www.cdc.gov/swineflu/guidance_homecare.htm))

## Case definitions

The current CDC case definitions are located at <http://www.cdc.gov/swineflu/recommendations.htm>. Please be advised that these definitions may change.

## Recommendations for 9-1-1 Public Safety Answering Points (PSAP)

It is important for the PSAPs to question callers to ascertain if there is anyone at the incident location who is possibly afflicted by the swine influenza A (H1N1) virus, to communicate the possible risk to EMS personnel prior to arrival, and to assign the appropriate EMS resources. PSAPs should review existing medical dispatch procedures and coordinate any modifications with their EMS medical director and in coordination with their local department of public health.

### Interim recommendations:

- PSAP call-takers should screen all callers for any symptoms of acute febrile respiratory illness. Callers should be asked if they, or someone at the incident location, has had nasal congestion, cough, fever or flu-like symptoms.
  - If the PSAP call-taker suspects a caller is noting symptoms of acute febrile respiratory illness, the call-taker should make sure any first responders and EMS personnel are aware of the potential for “acute febrile respiratory illness” before the responders arrive on scene.

## Recommendations for EMS and Medical First Responder Personnel Including Firefighter and Law Enforcement First Responders

For purposes of this section, “EMS providers” means prehospital EMS, Law Enforcement and Fire Service First Responders.” EMS providers' practice should be based on the most up-to-date swine influenza clinical recommendations and information from appropriate public health authorities and EMS medical direction.

## Patient assessment

### Interim recommendations:

If there HAS NOT been swine influenza reported in the geographic area (<http://www.cdc.gov/swineflu/>), EMS providers should assess all patients as follows:

- Step 1: EMS personnel should stay more than 6 feet away from patients and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions while assessing all patients for suspected cases of swine influenza.
- Step 2: Assess all patients for symptoms of acute febrile respiratory illness (fever plus one or more of the following: nasal congestion/rhinorrhea, sore throat, or cough).
  - If no acute febrile respiratory illness, proceed with normal EMS care.
  - If symptoms of acute febrile respiratory illness, then assess all patients for travel to a geographic area with confirmed cases of swine influenza within the last 7 days or close contact with someone with travel to these areas.
    - If travel exposure, don appropriate PPE for suspected case of swine influenza.
    - If no travel exposure, place a standard surgical mask on the patient (if tolerated) and use appropriate PPE for cases of acute febrile respiratory illness without suspicion of swine influenza (as described in PPE section).

## Personal protective equipment (PPE)

### Interim recommendations:

- When treating a patient with a suspected case of swine influenza as defined above, the following PPE should be worn:
  - Fit-tested disposable N95 respirator and eye protection (e.g., goggles; eye shield), disposable non-sterile gloves, and gown, when coming into close contact with the patient.
- When treating a patient who is not a suspected case of swine influenza but who has symptoms of acute febrile respiratory illness, the following precautions should be taken:
  - Place a standard surgical mask on the patient, if tolerated. If not tolerated, EMS personnel may wear a standard surgical mask.
  - Use good respiratory hygiene -- use non-sterile gloves for contact with patient, patient secretions, or surfaces that may have been contaminated. Follow hand hygiene including hand washing or cleansing with alcohol-based hand disinfectant after contact.
- Encourage good patient compartment vehicle airflow/ventilation to reduce the concentration of aerosol accumulation when possible

## Infection Control

EMS agencies should always practice basic infection control procedures including vehicle/equipment decontamination, hand hygiene, cough and respiratory hygiene, and proper use of FDA cleared or authorized medical personal protective equipment (PPE).

### Interim recommendations:

- Pending clarification of transmission patterns for this virus, EMS personnel who are in close contact with patients with suspected, probable, or confirmed swine influenza A (H1N1) cases should wear a fit-tested disposable N95 respirator, disposable non-sterile gloves, eye protection (e.g., goggles, eye shield), and gown, when coming into close contact with the patient.
- All EMS personnel engaged in aerosol generating activities (e.g., endotracheal intubation, nebulizer treatment, and resuscitation involving emergency intubation or cardiac pulmonary resuscitation) should wear a fit-tested disposable N95 respirator, disposable non-sterile gloves, eye protection (e.g., goggles, eye shield), and gown, unless EMS personnel are able to rule out acute febrile respiratory illness or travel to an endemic area in the patient being treated.
- All patients with acute febrile respiratory illness should wear a surgical mask, if tolerated by the patient.

## Interfacility Transport

EMS personnel involved in the interfacility transfer of patients with suspected, probable, or confirmed swine influenza should use standard, droplet, and contact precautions for all patient care activities. This should include wearing a fit-tested disposable N95 respirator, wearing disposable non-sterile gloves, eye protection (e.g., goggles, eye shield), and gown, to prevent conjunctival exposure. If the transported patient can tolerate a facemask (e.g., a surgical mask), its use can help to minimize the spread of infectious droplets in the patient care compartment. Encourage good patient compartment vehicle airflow/ventilation to reduce the concentration of aerosol accumulation when possible.

## Interim Guidance for Cleaning EMS Transport Vehicles After Transporting a Suspected, Probable, or Confirmed Swine Influenza Patient

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a suspected or confirmed swine influenza patient. This guidance may be modified or additional procedures may be recommended by the Centers for Disease Control and Prevention (CDC) as new information becomes available.

Routine cleaning with soap or detergent and water to remove soil and organic matter, followed by the proper use of disinfectants, are the basic components of effective environmental management of influenza. Reducing the number of influenza virus particles on a surface through these steps can reduce the chances of hand transfer of virus. Influenza viruses are susceptible to inactivation by a number of chemical disinfectants readily available from consumer and commercial sources.

After the patient has been removed and prior to cleaning, the air within the vehicle may be exhausted by opening the doors and windows of the vehicle while the ventilation system is running. This should be done outdoors and away from pedestrian traffic. Routine cleaning methods should be employed throughout the vehicle and on non-disposable equipment.

For additional detailed guidance on ambulance decontamination EMS personnel may refer to "Interim Guidance for Cleaning Emergency Medical Service Transport Vehicles during an Influenza Pandemic" available at: [http://www.pandemicflu.gov/plan/healthcare/cleaning\\_ems.html](http://www.pandemicflu.gov/plan/healthcare/cleaning_ems.html) .

## EMS Transfer of Patient Care to a Healthcare Facility

When transporting a patient with symptoms of acute febrile respiratory illness, EMS personnel should notify the receiving healthcare facility so that

appropriate infection control precautions may be taken upon patient arrival. Patients with acute febrile respiratory illness should wear a surgical mask, if tolerated. Small facemasks are available that can be worn by children, but it may be problematic for children to wear them correctly and consistently. Moreover, no facemasks (or respirators) have been cleared by the FDA specifically for use by children.

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Page last reviewed April 29, 2009 6:30AM ET

Page last updated April 29, 2009 6:30AM ET

Content source: [Centers for Disease Control and Prevention](#)

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