
NMCP Infection Control Guidance Regarding Care of Patients with Confirmed or Suspected Novel Influenza A (H1N1) Virus Infection

Background

To date, human cases of novel influenza A (H1N1) (formally called swine flu) virus infection have been confirmed worldwide. (for the most up-to-date list please see the [H1N1 Flu website](#)). Illness signs and symptoms have consisted of fever and respiratory tract illness (cough, sore throat, runny nose), headache, muscle aches. Some cases have had vomiting and diarrhea. Cases of severe respiratory disease, including fatal outcomes, have been reported.

The novel H1N1 virus is an influenza A virus that has not previously been identified in North America. This virus is resistant to the antiviral medications amantadine and rimantadine but is sensitive to oseltamivir and zanamivir.

Implementation of Respiratory Hygiene/Cough Etiquette

To prevent the transmission of **all** respiratory infections in healthcare settings, including novel H1N1, respiratory hygiene/cough etiquette infection control measures (refer to the Protocol for Respiratory Etiquette in Chapter 1 of the Infection Control manual) should be implemented at the first point of contact with a potentially infected person. They should be incorporated into infection control practices as one component of Standard Precautions.

Mechanisms to screen patients for signs and symptoms of febrile respiratory illness at any point of entry to the facility should be initiated. Provisions should be made to allow for prompt isolation and assessment of symptomatic patients.

Implementation of Facility Contingency Plans

The current situation with novel H1N1 flu in the United States is evolving quickly. Staff in healthcare settings should monitor the [H1N1 Flu website](#) and state and local health department websites for the latest information. Healthcare facilities should be reviewing and making plans to implement their facility contingency response and/or pandemic response plans. This should include making plans for managing increasing patient volume and potential staffing limitations.

Infection Control Recommendations

When ANY patient presents

- with a febrile respiratory illness (defined as fever [greater than 37.8° C] plus one or more of the following: rhinorrhea or nasal congestion; sore throat; cough) OR
- reports having close contact with a person who is a confirmed, probable, or suspected case of novel H1N1 virus infection, within the past 7 days OR

the healthcare staff should employ Standard Precautions and the Respiratory Etiquette guidelines to care for the patient.

Infection Control of Ill Persons in a Healthcare Setting

Screening of patients presenting to medical facilities should be done in a location with negative pressure air handling whenever feasible.

Patient placement and transport

Any patients who have a confirmed, probable, or suspected case of novel H1N1 and present for care at NMCP or at a Branch Health Clinic (BHC) should be placed directly into individual rooms and the door should be kept closed. Healthcare personnel who interact with the patients should follow the infection control guidance in this document. For the purposes of this guidance, healthcare personnel are defined as persons, including employees, students, contractors, attending clinicians, and volunteers, whose activities involve contact with patients in a healthcare or laboratory setting.

For procedures that are likely to generate aerosols (e.g., bronchoscopy, **elective intubation**, suctioning, administering nebulized medications), **an airborne infection isolation room (AIIR) with negative pressure air handling with 6 to 12 air changes per hour should be used when available.** Air can be exhausted directly outside or be recirculated after filtration by a high efficiency particulate air (HEPA) filter. Proper negative-pressure function of AIIRs, including those in operating rooms, intensive care units, emergency departments, and procedure rooms will be monitored and documented when the room is in use.

Procedures for transport of patients in isolation precautions should be followed. Facilities should also ensure that plans are in place to communicate information about suspected cases that are transferred to other departments in the facility (e.g., radiology, laboratory) and other facilities. **The ill person should wear a surgical mask to contain secretions when outside of the patient room and should be encouraged to perform hand hygiene frequently and follow respiratory etiquette practices.**

Limitation of healthcare personnel entering the isolation room

Healthcare personnel entering the room of a patient in isolation should be limited to those performing direct patient care.

Isolation precautions

All healthcare personnel who enter the patient's room should employ *droplet precautions*. *Eye protection should be used* for all patient care activities for patients being evaluated or in isolation for novel H1N1. Maintain adherence to *hand hygiene by washing with soap and water or using alcohol-based hand sanitizer* immediately after removing gloves and other equipment and after any contact with respiratory secretions. Nonsterile gloves and gowns along with eye protection should be donned before entering a patient's room.

Respiratory protection: All healthcare personnel who enter the rooms of patients in isolation with confirmed, suspected, or probable novel H1N1 influenza should wear a regular surgical mask. Respiratory protection should be donned before entering a patient's room. **If healthcare personnel are involved in any patient care activity likely to generate aerosols (e.g., bronchoscopy, elective intubation, suctioning, administering nebulized medications), the healthcare worker must wear a fit-tested, disposable N-95 respirator or better.**

Management of visitors

Limit visitors for patients in isolation for novel H1N1 infection to persons who are necessary for the patient's emotional well-being and care. Visitors who have been in contact with the patient before and during hospitalization are a possible source of novel H1N1. Therefore, schedule and control visits to allow for appropriate screening for acute respiratory illness before entering the hospital and appropriate instruction on use of personal protective equipment and other precautions (e.g., hand hygiene, limiting surfaces touched) while in the patient's room. Visitors should be instructed to limit their movement within the facility.

Visitors may be offered a gown, gloves, eye protection, and respiratory protection and should be instructed by healthcare personnel on their use before entering the patient's room.

Duration of precautions

Isolation precautions should be continued for 7 days from symptom onset or until the resolution of symptoms, whichever is longer.

Persons with novel H1N1 virus infection should be considered potentially contagious from one (1) day before to seven (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 be contagious for longer periods.

Surveillance of healthcare personnel

In communities where novel H1N1 virus transmission is occurring, healthcare personnel should be monitored daily for signs and symptoms of febrile respiratory illness. Healthcare personnel who develop these symptoms should be instructed not to report to work, or if at work, should cease patient care activities and notify their supervisor and infection control personnel.

In communities without novel H1N1 virus transmission, healthcare personnel working in areas of a facility where there are patients being assessed or isolated for novel H1N1 infection should be monitored daily for signs and symptoms of febrile respiratory infection. This would include healthcare personnel exposed to patients in an outpatient setting or the emergency department. Healthcare personnel who develop these symptoms should be instructed not to report to work, or if at work, should cease patient care activities and notify their supervisor and infection control personnel.

Healthcare personnel who do not have a febrile respiratory illness may continue to work. Asymptomatic healthcare personnel who have had an unprotected exposure to novel H1N1 also may continue to work if they are started on antiviral prophylaxis. (See Interim Guidance on Antiviral Recommendations for Patients with Novel Influenza A (H1N1) Virus Infection and Their Close Contacts).

Management of ill healthcare personnel

Healthcare personnel should report to Occupational Medicine if they have a febrile respiratory illness. They should be excluded from work until approved by Occupational Medicine.

Environmental infection control

Cleaning and disinfection strategies that are routinely used can be applied to the environmental management of patient care equipment for patients with known or suspected H1N1 influenza. Management of laundry, utensils and medical waste should also be performed as instructed in the isolation guidelines found in Isolation Precautions for Patients NAVMEDCENPTSVAINST 5050.3G in the Infection Control manual.

Administration of the current 2008-09 seasonal influenza vaccine

It is **not** anticipated that the seasonal influenza vaccine will provide protection against the novel H1N1 viruses. **Influenza vaccination is effective against seasonal viruses** and should continue to be given to unvaccinated patients in areas where seasonal influenza cases are still occurring.

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