



Preventing Transmission of Influenza, Including Novel H1N1 Cases, in Congregate Facilities

Novel H1N1 Influenza is increasing in New York City. Most people infected with H1N1 flu have a mild flu-like illness and are not tested (and don't need to be). More serious illness from H1N1 infection has also occurred, especially among those with chronic health conditions. The H1N1 virus appears to be transmitted in the same way as seasonal flu – through droplets released when an infected person sneezes or coughs – although apparently more readily. These droplets can infect people in close (less than 3 feet) proximity. Thus the same measures that reduce transmission of seasonal flu will also reduce transmission of H1N1 flu.

This guidance applies to congregate facilities – e.g., homeless shelters, long-term care residences, adult care facilities, or other facilities where individuals live or regularly spend the night. It describes measures that managers can use to reduce the transmission of Novel H1N1 Influenza among residents, staff and visitors at their facilities. Different congregate facilities will need to tailor the guidelines to their own staff and client populations, their physical plants, and other factors.

Effective prevention and control of influenza in congregate settings requires:

- Measures to ensure that employees with influenza-like illness (ILI) stay home from work until 24 hours after symptoms resolve
- Measures to limit entry of visitors with ILI
- Surveillance and prompt recognition of ILI among residents
- Measures to limit contact between residents with ILI with other residents and staff
- Additional infection-control measures when close contact cannot be avoided
- Meticulous respiratory and hand hygiene (covering mouth and nose for coughs and sneezes, and washing hands frequently)
- Early antiviral treatment if ILI occurs in people with underlying health conditions that increase the risk of severe outcomes
- Prompt reporting of ILI clusters to the New York City Department of Health and Mental Hygiene (DOHMH)
- Immediate initiation of more aggressive infection-control measures if a cluster occurs

Providers should monitor the Health Department's health alerts and check www.nyc.gov/health and www.cdc.gov for updates. Please note that infection-control recommendations may change as the situation evolves and more is known about the transmission and clinical and epidemiologic features of this virus.

PREPARING AND EDUCATING STAFF AND RESIDENTS

Managers should ensure that all clinical and non-clinical staff members, including custodians and food handlers, are familiar with Novel H1N1 Influenza. Staff members should know the symptoms of influenza and understand transmission and preventive measures. The Health Department provides posters and educational materials that can be used in congregate facilities. To request materials, call 311 or see www.nyc.gov/html/doh/html/cd/cd-cough.shtml.

- Coughs and sneezes should always be covered with a tissue or sleeve.
- Hands should be washed with soap and warm water if visibly soiled.
- Alcohol-based hand sanitizers should be used if a sink is not easily available and hands are not visibly soiled.
- Alcohol-based hand sanitizers should not be drunk or used as a mouthwash or gargle.
- Cleaning staff should keep hand-washing facilities well stocked with soap and paper towels. Staff should be routinely trained in the safe use of cleaning and disinfectant products.

POINT-OF-ENTRY RECOMMENDATIONS

At all entrances to your facility:

- Prominently display the Health Department's 'Cover Your Cough,' 'Hand Hygiene' and 'STOP Triage' signs. These posters can be ordered, free of charge, through 311 or downloaded from the DOHMH website:
 - 'Cover Your Cough' www.nyc.gov/html/doh/html/cd/cd-cough.shtml.
 - 'STOP Triage' www.nyc.gov/html/doh/downloads/pdf/cd/res-poster-clinics.pdf
 - 'Hand Hygiene' www.nyc.gov/html/doh/downloads/pdf/cd/cd-adult-handwash-poster.pdf
- Display signs instructing residents to notify the appropriate staff if they have flu-like symptoms (fever with cough and/or sore throat).
- Provide signs and educational materials are available in the language(s) used by your community. Multi-lingual versions are available on the DOHMH website.
- Make sure that surgical masks, tissues and alcohol-based hand sanitizers are readily available for staff and residents to use.
- Have waste baskets available and visible. Make sure that wastebaskets are emptied regularly.
- Clean and disinfect frequently-touched surfaces. While much less important than hand hygiene and covering coughs, cleaning may help prevent transmission of influenza and other infections. Please see the section below on Environmental Care Issues for more information.

COMMON-AREA RECOMMENDATIONS

In addition to the recommendations above, ensure that waiting areas, TV rooms and reading rooms have adequate ventilation (e.g., fans and open windows). If a common area has a television, consider showing a streaming video that demonstrates proper methods for hand-washing and respiratory etiquette. One such video is available at www.cdc.gov/CDCTV/HandsTogether/.

SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS (ILI)

Influenza-like illness (ILI) is defined as fever of at least 100.4oF or 38oC with cough and/or sore throat. Residents and staff should be informed to notify medical or administrative personnel immediately if they develop ILI symptoms.

If one or more people develop ILI, consider more active surveillance to determine if there are additional cases in the facility (or a part of it). If 3 or more cases of ILI are identified in the facility, notify the Health Department's Provider Access Line (1-866-NYC-DOH1 or 1-866-692-3641).

MANAGING RESIDENTS WITH ILI

A resident identified as having ILI should immediately be offered a mask, directed to a hand-washing facility, and seated separately from other residents (at least three feet away) to await medical examination. If possible, the resident should be placed in a separate room.

In facilities *without* medical personnel on site, follow the protocols already established by the facility for managing potentially infectious people in their setting, including consultation, referral, or transportation for medical evaluation. Facilities should not send residents with mild symptoms to emergency departments for medical care. If a medical provider is affiliated with the site, contact that person for recommendations regarding antiviral treatment. Residents with more severe symptoms such as difficulty breathing should be sent immediately to the emergency department for evaluation.

Facilities *with* medical personnel should check the patient for severe illness. When examining patients, medical personnel should wear surgical masks and adhere to standard and droplet precautions. Individuals with severe symptoms (e.g., respiratory distress, pneumonia) or individuals with mild ILI who experience worsening symptoms (e.g., increased fever, shortness of breath, chest pain or pressure, cyanosis, vomiting, dizziness or confusion) should be transported to the nearest hospital for care.

- If respiratory status allows, the patient should wear a surgical mask during transfer to the hospital.
- Staff members who must have direct contact with the patient during transport should wear surgical masks and gloves. The gloves and masks should be discarded after one use, and hands should be washed with soap and warm water.
- Personnel at the sending facility should alert the receiving hospital by telephone that the patient is en route and is experiencing severe ILI.

Any resident with ILI, even if mild, and who has an underlying health condition (see table) should be treated with antiviral medication as soon as possible. DOHMH guidelines emphasize the importance of starting treatment early (ideally within 48 hours of onset of illness). Guidance on antiviral dosages and precautions is available at www.nyc.gov/html/doh/downloads/pdf/cd/cd-antiviral-guidance.pdf.

- Residents with ILI who do not have underlying health conditions do not typically need antiviral treatment for mild illness.
- Prophylaxis (preventive treatment) should be considered for residents with underlying conditions who have had close contact with residents with ILI during their infectious period (one day before onset to 7 days after onset).
- Post-exposure antiviral prophylaxis should also be considered for health care workers or other facility staff with underlying conditions if there is a recognized unprotected close contact or if a

breach in personal protective equipment occurs during provision of direct care to a person with ILI during the person's infectious period (one day before to 7 days after onset).

- Guidelines for treatment and prophylaxis are changing as we learn more about the clinical and epidemiologic characteristics of the Novel H1N1 virus. Health care providers and facilities should call the Provider Access Line at 1-866-NYC-DOH1 to get the latest updated recommendations on treatment and prophylaxis or to go to the DOHMH website for Health Alerts: www.nyc.gov/html/doh/html/cd/cd-h1n1flu-hcp.shtml.

ISOLATION RECOMMENDATIONS

An ill resident who remains at the facility should be asked to stay in his or her room until 24 hours after symptoms have resolved. The patient should be instructed to practice meticulous hand hygiene, covering the mouth and nose while coughing and sneezing, and to avoid contact with other people.

- Facility staff should reinforce this message frequently with sick residents, particularly those who may have difficulty practicing hygiene and following instructions under normal circumstances.
- If a resident with ILI has a physical disability that makes it more difficult to perform hand hygiene, a dedicated staff person, wearing appropriate personal protective equipment, should help.
- If a resident with ILI is combative or has behavioral issues that make him or her less cooperative in performing hand hygiene or maintaining isolation, manage in accordance with the facility's policy for handling difficult patients. However, dedicated staff should be assigned to help with this management to minimize the number of staff in contact with the ill patient.
- Limit the number of visitors who enter the room. Visitors should be asked not to visit until 24 hours after resolution of fever and symptoms. Visitors should be instructed on how to wear a mask and to perform hand hygiene.
- Have meals brought in to the ill person's room. If this is not possible, have the ill resident eat at a different time or in an area separated from others by at least three feet.
- Keep tissues, a waste basket and alcohol-based hand sanitizer at each ill resident's bedside, or in an area that is easily accessible to the patient, and at the entrance to the patient's room.
- If possible, cancel the ill person's appointments at other agencies, group sessions, transfers between shelters, etc. For those appointments that are medically necessary, such as dialysis or chemotherapy, the sending facility should call the receiving facility ahead of time to notify them of the patient's ILI status; the patient should wear a mask during his/her entire visit. Receiving facilities should implement their own infection control procedures.

Residents or patients who must leave their rooms should wear a mask and receive repeat instruction on observing respiratory etiquette/hygiene. Ensure that the ill person who must leave his room has adequate tissues and a receptacle in which to dispose of them.

Designated caregivers. If possible, designate dedicated staff members to be caregivers to people in isolation and educate them on proper infection-control procedures.

- Staff providing direct patient care that involves close contact with residents/patients in isolation (e.g., including bathing, turning, feeding) should wear surgical masks and gloves. In addition, the person with ILI should be asked to wear a surgical mask while in close contact with a care giver. A covered waste receptacle should be available for disposal of used surgical masks.

- When resident/patient care is completed, staff should remove gloves first and then remove the mask in order to reduce the possibility of contamination of the mask and face by anything that the gloves have touched.
- After removing gloves and mask staff wash hands thoroughly with soap and water right away and before providing care or having contact with other residents or patients.
- Staff who will need to access residents/patients in isolation but have no direct close contact (e.g., food handlers, custodial staff) should continue to wear and dispose of gloves or other personal protective equipment per their routine.

Sleeping arrangements. If available, move ill resident to a single separate room with closed door. The room should ideally have a private bathroom, or at least be near the bathroom and shower areas.

- Ensure that soap and running water are available in these areas.
- Give residents clear guidance on hand -washing, and place hand-washing posters in bathroom and shower areas.
- If only shared rooms are available, consider housing the ill person in a room with the fewest possible number of other residents.
- Avoid housing the ill person in a room with individuals who have underlying health conditions that increase the risk of severe illness and complications from influenza (see table).
- If possible, increase spacing between beds so that the ill resident’s bed is at least 3 feet from the next bed.
- Arrange beds so that individuals lie head-to-toe (or toe-to-toe), whichever will provide the greatest distance between faces.
- Use sheets or curtains to create temporary barriers between beds.

Reporting clusters. If 3 or more cases of ILI are identified in the facility, notify the Health Department through the Provider Access Line (1-866-NYC-DOH1 or 1-866-692-3641) and consider the following additional precautions when feasible:

- House symptomatic patients on a separate unit or floor with the possibility of a separate common area and/or dining area. Management should also have meals brought into the unit where affected patients are staying so that ill patients do not take meals in public settings.
- Identify dedicated staff to provide care for this cohort of symptomatic patients.
- Limit the number of clients or visitors and requesting that visitors with fever respiratory symptoms refrain from visiting the facility until 24 hours after symptoms have resolved.
- Cancel or postpone all group activities, if possible.
- Cancel or postpone all counseling sessions, group therapy, etc.

Common areas. If the ill resident must be around others (e.g., transport, dining room), s/he should wear a surgical mask and be encouraged to wash hands frequently and cover all coughs and sneezes.

- Consider establishing staggered meal schedules, delivering meals to rooms, or designating separate dining areas for people with mild ILI.
- Clearly explain the reasons for segregating residents to avoid stigmatizing those who are affected.
- Increase the frequency of cleaning in the common areas.

- For additional guidance on home isolation for people with ILI, see www.nyc.gov/html/doh/downloads/pdf/cd/cd-h1n1flu-homeisolation-new.pdf

STAFF WITH ILI

Staff members with ILI should not come to work and should stay home until 24 hours after the resolution of symptoms. Please emphasize to all employees the importance of staying home from work while sick.

- Advise employees with ILI that underlying health conditions increase the risk of severe influenza. Anyone with an underlying health condition should call a doctor to get antiviral treatment.
- People with mild ILI and no underlying health conditions generally do not need to be treated with antiviral medications.
- People with mild ILI should *not* seek treatment at a hospital. If possible, they should consult a primary care physician.

Ask all staff members to notify management immediately if they develop acute fever, cough or other respiratory symptoms while working. Any employee with a fever of at least 100.4 degrees Fahrenheit should leave work immediately. The employee should wear a surgical mask while in the facility and should return home in a private car or taxi, not on public transportation.

If an employee with ILI is waiting to see a medical provider at the facility, the person should be given a surgical mask, directed to a hand-washing facility, and seated in a separate area if possible. If seated in a public area, the ill person should stay at least 3 feet away from other people.

PEOPLE WITH COMPROMISED IMMUNE SYSTEMS

The likelihood of transmission and illness is higher in settings that house vulnerable people. Besides following general guidelines for congregate settings, these facilities should consider maintaining self-isolation and other infection-control precautions for at least 7 days after the onset of illness or for 24 hours after resolution of symptoms, whichever is greater.

- Immunocompromised people who develop acute fever or respiratory symptoms should be evaluated immediately by a medical provider who can make a decision to initiate early antiviral treatment (ideally within the first 48 hours of onset of fever or respiratory symptoms) according to guidelines published on the DOHMH website (www.nyc.gov/html/doh/html/cd/cd-h1n1flu.shtml). The Health Department recommends early initiation of antiviral treatment for anyone at risk of complications from influenza, regardless of severity of illness.
- Prophylaxis should be considered for immunocompromised residents who have had close contact with someone with ILI during their infectious period (one day before onset to 7 days after onset)
- Facility managers and on-site case managers should watch for signs of ILI among residents. Anyone who develops ILI should be promptly evaluated by a medical provider, and the provider should be informed of the resident's risk factors for severe illness.
- In congregate facilities where support services exist (e.g., supportive housing facilities), on-site case managers should arrange for one person to care for the ill resident, provide food, and assist in daily needs. The caregiver should wear a surgical mask when providing care to the ill resident, and should discard it properly and wash his or her hands when leaving the room. The ill resident should be asked to wear a surgical mask when in close contact with a caregiver.

- In settings where peers provide services, immunocompromised peers should avoid assisting residents with ILI until at least 7 days after illness onset or 24 hours after fever and symptoms have resolved, whichever is longer.
- In congregate facilities where no support services are provided on site, assigned social service organizations should adhere to all of the above guidelines while providing care and services.

HOUSEKEEPING AND ENVIRONMENTAL MEASURES

Cleaning and disinfection, while much less important than hand hygiene and covering coughs, may help to prevent transmission of influenza and other infections.

- Make sure that bathrooms in all areas are in good condition and cleaned on a regular schedule with cleaners and/or disinfectant products in accordance with workplace safety and health protocols.
- Ensure that soap and paper towels are always available in bathrooms, and that plumbing is operational, i.e., that running water is available in bathrooms and that toilets are in good working order.
- Clean surfaces that people touch often, such as doorknobs, door handles, handrails and telephones, as well as surfaces in bathrooms, sleeping areas, cafeterias and offices.
- Use general cleaners or soap and water. As an added precaution, disinfectants can be used on frequently contacted surfaces. Refer to EPA list of antimicrobial disinfectants at: www.epa.gov/oppad001/influenza-disinfectants.html.
- If hard surfaces are visibly dirty, clean first using general cleaner or soap and water. After surface has been cleaned, apply disinfectant following product instructions. Disinfectant wipes can also be used to clean small surfaces. Discard wipe after use.
- If disinfectants are not available, use a chlorine bleach solution made by adding 1 tablespoon of bleach to a quart (4 cups) of water. Discard bleach solution after use.
- Never mix bleach with cleaning products because hazardous vapors can be created.
- Dispose of any leftover bleach or other cleaning solution after use.
- Do not store cleaning products in unlabeled containers.
- Cleaning staff should wash hands, preferably with soap and water or, alternatively, with alcohol-based hand cleaner after all cleaning activities. Staff may need training in proper hand-washing technique. Posters reminding staff and residents of proper hand-washing technique should be posted in wash areas.

Adequate ventilation may help reduce transmission. Open windows and use fans when practical, and keep building ventilation systems in good working order.

Laundry can be washed in a standard washing machine with water and detergent. It is not necessary to separate soiled linen and laundry from ill individuals from that of other residents.

Consider using disposable cups, plates and eating utensils for ill individuals. If your facility uses non-disposable cups, plates and eating utensils, they should be washed with soap and water or in a dishwasher.

For additional information and guidance on preventing the spread of influenza in the workplace, please see http://www.nyc.gov/html/doh/downloads/pdf/cd/h1n1_workplace_faq.pdf.

TABLE: PEOPLE AT INCREASED RISK OF SEVERE ILLNESS OR COMPLICATIONS FROM INFLUENZA

- People over 65 or under 2 years of age
- Pregnant women
- People with chronic lung disorders, such as emphysema or asthma
- People with chronic heart, kidney, liver or blood disorders
- People with diabetes
- People whose immune systems are compromised by illness or medication
- People on long-term aspirin therapy
- People with neurological problems that can interfere with breathing

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