



THE CITY OF NEW YORK

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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nyc.gov/health

2009 New York City Department of Health and Mental Hygiene Health Alert #15: H1N1 (Swine Origin) Update May 1, 2009

Please distribute to staff in the Departments of Critical Care, Emergency Medicine, Family Practice, Geriatrics, Internal Medicine, Infectious Disease, Infection Control, Pediatrics, Pharmacy, Neonatal Units, Pulmonary Medicine and Laboratory Medicine

PLEASE NOTE: This is a rapidly evolving situation. This alert provides interim guidance. Evidence of community transmission of H1N1 (Swine Origin) (SO) is emerging but has not yet been proven. This update provides:

- An epidemiologic update on the H1N1 (SO) outbreak in New York City
- Change in the New York City case definition for H1N1 (SO) infection
- Updated infection control guidance (attached)
- Updated recommendations for home isolation of patients with influenza-like illness (attached)

Refer to Health Alert # 13 for current reporting requirements, laboratory diagnostic testing guidance, antiviral treatment and prophylaxis recommendations. All guidance is likely to change as the situation evolves and will be forwarded when available. Please check the New York City Department of Health and Mental Hygiene website at www.nyc.gov/health for updated guidance (see Information for Providers).

New Developments since Health Alert # 14

Epidemiologic Updates

New York City H1N1 (SO) Outbreak Update

Diagnostic testing at the Centers for Disease Control and Prevention (CDC) has confirmed 49 cases of Swine-Origin Influenza A (H1N1) (H1N1 [SO]) in New York City. Thirty-three probable cases have also been identified. A cluster of influenza-like illness at Public School Q177 and St. Francis Preparatory School are epidemiologically related; the two schools are in close proximity to one another in Queens. Both schools have been closed. All confirmed cases can be epidemiologically linked either to exposure to an ill person associated with the two schools or to travel to Mexico.

However, DOHMH has now identified two probable cases without apparent epidemiologic links: a 14-year-old Queens resident, and a 20-year-old visitor to New York City. These findings, along with other suggestive surveillance data presented below, suggest that community transmission of H1N1 (SO) is now occurring in New York City. The guidance provided here reflects that new understanding.

To date, illness in New York City and the United States as a whole continues to be similar to seasonal influenza, with the overwhelming majority of diagnosed patients having had mild illness. No deaths attributable to H1N1 (SO) have occurred in New York City. DOHMH is actively conducting surveillance for cases of severe, febrile respiratory illness due to H1N1 (SO) in order to determine its frequency, risk factors for developing more severe

Categories of urgency levels for NYC DOHMH Broadcast Notification System:

Health Alert: conveys the highest level of importance; warrants immediate action or attention

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

illness, clinical features and spectrum of illness. Only one confirmed and 4 probable cases have been hospitalized; none have had critical illness (e.g., none have required ventilatory support) and all are recovering.

As part of its effort to understand the transmission and basic epidemiology of H1N1 (SO) at the St. Francis Preparatory School, the Health Department created an online questionnaire to survey students, parents and staff at the school. The agency reported the findings in an MMWR Dispatch (see <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0430a1.htm>). Of the 1,996 St. Francis Preparatory students who responded to the survey, 659 (33%) reported being sick with flu-like symptoms at some time since April 8. Most (82%) became ill between Wednesday and Saturday (April 22-25), and 254 became ill on April 23. Only 1% (27) reported being both sick and feeling worse than the day before. Six of the ill persons reported traveling to Mexico the week before, 1 traveled to California and none went to Texas. Approximately 29% reported that at least one other household member was sick, and a total of 462 household members were reported by students to have been sick at the time of the survey (see http://www.nyc.gov/html/doh/downloads/pdf/cd/h1n1_stfrancis_survey.pdf).

Several individual cases and at least one cluster of influenza in New York City, including both a case of influenza in a student from Pace University and a cluster of influenza at Manhattan's Ascension School that were announced publicly, have now been diagnosed as Influenza A (H3N2). These findings provide evidence that seasonal influenza activity is ongoing in New York City. It is not known what proportion of influenza-like illness in the community is due to H1N1 (SO) versus H3N2 or other respiratory pathogens. Because both H1N1 (SO) and influenza A (H3N2) are susceptible to oseltamivir and zanamavir, empiric antiviral treatment and prophylaxis recommendations have not been changed.

Syndromic surveillance data from hospital emergency room chief complaints suggest that an increasing number of individuals are being seen in emergency departments for influenza-like illness (ILI). The largest increase has been seen in patients complaining of fever in the 18-44 year old age group. It is not known whether this increase reflects changes in care-seeking behavior or a true increase in community ILI. No increase in mortality due to pneumonia or influenza has been observed.

Three adverse events due to oseltamivir use have been reported to the NYC Poison Control Center. Two were dosage errors in children resulting in vomiting. The third was a rash attributed to an allergic reaction. As a reminder, dosage recommendations for antiviral medications are available at <http://www.cdc.gov/flu/professionals/antivirals/dosagetable.htm#table>.

Given the evolving epidemiology of H1N1 (SO) influenza in NYC and elsewhere, the number of NYC cases is expected to continue to increase in the coming days. We will continue to update case numbers and guidance in subsequent alerts.

US and Global H1N1 (SO) Epidemiologic Update

As of 05/1/09, 141 cases have been confirmed in 19 states across the US. There has been one death in a 23-month-old child in Texas with an underlying high risk medical condition. 331 confirmed cases of H1N1 (SO) have been reported from 11 countries, as of today. The World Health Organization (WHO) pandemic influenza alert level is 5, indicating that widespread human infection is occurring and a pandemic is imminent. (The WHO uses a 6 point scale to assess the pandemic threat level.)

New Guidance and Recommendations

Revised New York City Case Definition for H1N1 (SO)

The New York City case definition for H1N1 (SO) has been revised. The new definition follows:

A ***confirmed case*** of H1N1 (SO) infection is defined as a person with an acute febrile respiratory illness with laboratory confirmed H1N1 (SO) infection at CDC by one or more of the following tests:

- real-time RT-PCR, or
- viral culture

A ***probable case*** of H1N1 (SO) infection is defined as a person with an acute febrile respiratory illness who is positive for influenza A, but negative for H1 and H3 by influenza RT-PCR

A ***suspected case*** of H1N1 (SO) infection is defined as a person with unexplained acute febrile respiratory illness.

(Patients with an acute febrile respiratory illness who have a negative PCR test for influenza A can be considered non-cases of H1N1 [SO]).

New Infection Control Recommendations

See “*Infection Control Guidelines for Medical Facilities*”, attached.

Epidemiologic risk factors should no longer be used in triage and screening or in determining infection control measures and precautions to be taken.

- Hospitals and outpatient clinics should institute screening and isolation protocols for patients presenting with acute febrile respiratory illness.
 - Signage should be placed at all entryways to the facility advising patients to identify themselves if they have acute febrile respiratory illness, use masks or tissues if coughing/sneezing, and perform hand hygiene. Sample posters developed by DOHMH are attached and may be reproduced for use.
 - While awaiting medical examination, symptomatic patients should be quickly separated from other patients in the waiting areas either by placement in a single separate room or at least 3-6 feet away from others.
- **For ALL patients being treated for acute febrile respiratory illness**, medical facilities should implement standard and contact precautions with eye protection. Healthcare personnel who will perform direct patient care or collect specimens from the ill patient should wear gowns, gloves, disposable fit-tested N95 respirator, and eye protection.
- While in the hospital, isolation precautions should be continued for seven (7) days from symptom onset or until the resolution of symptoms, whichever is longer.
- Disposal of personal protective equipment should be based on the hospital’s infection control policies.
- Aerosol generating procedures (nebulizer treatments, suctioning, intubation, nasopharyngeal swab or sputum collection, and bronchoscopy) should be performed in an airborne infection isolation room (AIIR). If an AIIR is not available, use clinical judgment to decide whether the procedure can be performed in a private room with the door closed. Medical providers should wear an N95 respirator and eye protection. Higher respiratory protection is not needed.

Pneumococcal Vaccination

DOHMH reminds providers to provide pneumococcal vaccination to their patients as indicated, particularly since superinfection with *Streptococcus pneumoniae* has been shown to cause additional morbidity and mortality in patients with influenza.

Updated Home Management of Patients Being Discharged with Suspected, Probable or Confirmed H1N1 (SO)

DOHMH has posted guidance on home isolation at <http://www.nyc.gov/html/doh/downloads/pdf/cd/cd-swineflu-homeisolation-new.pdf> (See *Home Isolation Guidance*, attached). This document may be reproduced and offered to patients being discharged from medical facilities. Translated materials should be available shortly on our website.

Persons with fever and cough should be advised to stay home until 24 hours after complete resolution of symptoms. Please note that this is a change from previous guidance.

- Patients should be encouraged to CALL prior to coming in for medical care. Those with mild illness should be encouraged to stay home. They should not attend work or school until 24 hours after complete resolution of symptoms.
- Patients should be advised that the great majority of cases of H1N1 (SO) have been mild and do not require antiviral treatment or laboratory diagnosis. They should be advised NOT to take antiviral medication unless prescribed by a physician.
- Patients should be educated regarding signs of worsening illness and advised to call if these occur, or seek care at an emergency room.
- Patients should cover their mouth and nose with a tissue or handkerchief when coughing or sneezing, and should wash their hands with soap and water frequently.
- Outpatient providers are asked not to refer patients to the hospital emergency room unless the patient is severely ill. Emergency rooms have experienced increased volume, with many visits by persons with mild ILI or “worried well.”
- We continue to recommend that home care for persons with mild ILI be given by one primary caregiver if possible, and that the patient should be separated to the extent possible from other members of the household, preferably in a separate bedroom. The caregiver should wear a mask, either surgical or N95, when close contact with the ill person is unavoidable. The ill person should also wear a surgical mask when close contact with other individuals in the home is unavoidable.
- Asymptomatic household or other close contacts of persons with respiratory illness are not being advised to stay home or to take any special precautions when outside the home. However, if they become ill with acute respiratory illness, they should also stay in home isolation until 24 hours after symptoms resolve.

At this time we are not recommending that well persons in NYC restrict their public activities or movements regardless of underlying conditions that may put them at risk for complications due to influenza.

Surveillance and Reporting

- We continue to ask NYC providers to report **hospitalized patients with severe, unexplained febrile, respiratory illness** to the Provider Access Line at 1-866-NYC-DOH1 (1-866-692-3641). Providers should continue to test *only* patients with severe febrile respiratory illness for influenza A, using a commercially available rapid test, PCR or immunofluorescence test (e.g., DFA or IFA).
- Providers are also asked to continue to report clusters of 5 or more cases of acute febrile respiratory illness in schools, and 3 or more cases in day cares, congregate living facilities such as prisons or homeless shelters, and medical or long term care facilities.
- In order to ensure that sufficient laboratory resources are available, testing at the Public Health Laboratory will only be approved for severe cases or clusters of acute febrile respiratory illness that are first reported to DOHMH via the Provider Access Line. DOHMH staff will evaluate the case and advise whether testing for H1N1 (SO) at the Public Health Laboratory is indicated. DOHMH will

facilitate specimen transport and testing for cases when testing is indicated. If approved, please send only one specimen per patient.

- At this time, adverse events or poisonings due to antiviral medication should be reported to the NYC Poison Control Center at 1-212-POISONS (212-764-7667) or 1-800-222-1222.

Diagnostic Testing and antiviral treatment recommendations are unchanged. See Health Alert # 13 for guidance.

Antiviral prophylaxis recommendations are currently under review.

Antiviral prophylaxis should ONLY be considered for exposures to persons with probable or confirmed H1N1 (SO) or acute febrile respiratory illness AND one of the following epidemiologic risk factors in the 7 days prior to illness onset:

- Travel to Mexico
- Close contact with an ill person associated with St. Francis Preparatory High School or Public School Q177
- Close contact with a probable or confirmed case

The DOHMH interim recommendation is to consider offering prophylaxis to persons with underlying conditions that increase the risk of complications due to influenza when exposed to a person who meets one of the above criteria. For the present time, given limitations on antiviral supplies, the limited availability of laboratory testing to distinguish H1N1 (SO) from other respiratory pathogens (including seasonal influenza, which is still circulating) clinical judgment should be used to decide whether healthcare workers should take prophylactic antiviral medications after unprotected direct exposures to patients with acute febrile respiratory illness.

The CDC is updating guidance on various issues relating to the H1N1 (SO) outbreak on its website daily. Please see www.cdc.gov/swineflu for updated national recommendations.

To contact the Health Department, including to report suspected cases of H1N1 (SO) in hospitalized patients and arrange for specimen testing, please call the Provider Access Line at 866-NYC-DOH1. This number is also available for questions or consultations by providers.

As always, we appreciate the cooperation of the medical community in New York City and will update you with further information when it becomes available.

Sincerely,

The Swine Influenza Investigation Team
New York City Department of Health and Mental Hygiene

Attachments:

Infection control guidance
Stop, Cover your Cough Posters in English and Spanish
Home isolation Discharge document