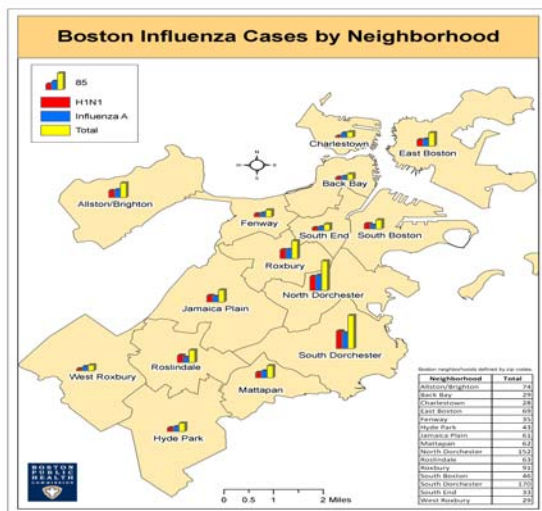




Health Alert: *Influenza – Guidelines for Boston Based Providers*

Summary: From mid April until July 31, 2009, 480 cases of novel H1N1 influenza were laboratory confirmed in Boston residents. Boston based health care providers and institutions should plan for surge activities, including a higher than usual demand from patients for visits and guidance from health care providers, and additional vaccination requests. Please note that all cases of influenza that are confirmed by any laboratory test and diagnosed in Boston must be reported to the Boston Public Health Commission at (617) 534-5611.

BACKGROUND & EPIDEMIOLOGY



From mid April to July 31, 480 cases of novel H1N1 influenza and another 508 cases of influenza A (not otherwise specified) were reported in Boston residents. In addition, Boston emergency department (ED) visits increased by over 10,000 compared to a similar time period in 2008; of note, the proportion of ED visits for influenza like illness (ILI) increased from 0.8% in 2008 to 4.1% in 2009. Influenza cases were reported in residents of all Boston neighborhoods, but case numbers were highest in North and South Dorchester. Although Boston accounts for only 10% of the Massachusetts population, 32% of confirmed novel H1N1 influenza cases were Boston residents. Racial and ethnic minorities were disproportionately impacted: Blacks account for only 24%

of the Boston population, but 37% of novel H1N1 cases. Latinos account for only 14% of the Boston population, but 34% of novel H1N1 influenza cases. The median age of cases in Boston was 13 years; 62% of cases were under 18 years of age. Four deaths due to novel H1N1 influenza were reported in City residents.

SYMPTOMS AND DIAGNOSIS

The symptoms of novel H1N1 and seasonal influenza are similar and include fever, cough, headache, sore throat, anorexia, myalgias, lethargy, and sometimes vomiting and diarrhea. However, 10% to 40% of persons with novel H1N1 influenza may not be febrile. Although influenza is a relatively mild illness in most, people with underlying health conditions are more likely to develop severe illness. Of Boston

residents hospitalized with confirmed novel H1N1 influenza, 49% had underlying asthma and 37% required ICU care.

Clinicians should consider influenza in the differential diagnosis of patients with acute febrile respiratory illness. Confirmatory laboratory testing is indicated for persons in whom test results may lead to a change in treatment. In addition, laboratory testing should be done in all persons who are hospitalized or who have severe illness. Rapid influenza tests have limited sensitivity and a negative test alone should not be used to rule out a diagnosis of influenza. Testing for hospitalized patients is available at the William A. Hinton State Laboratory Institute (WAHSLI). Instructions on submitting specimens to WAHSLI and a specimen submission form are available at:

http://www.mass.gov/Eeohhs2/docs/dph/laboratory_sciences/general_submission_form.pdf.

Testing is also available at commercial laboratories.

INTERIM RECOMMENDATIONS FOR TREATMENT AND PROPHYLAXIS

Information on predominant circulating influenza strains and their susceptibility to anti-viral medications is subject to change, and healthcare providers should routinely check for updates in guidance on the use of anti-viral medications. For most persons with influenza, illness is relatively mild, and the primary treatment is supportive. However, anti-viral treatment should be strongly considered for pregnant women, any person compromised due to underlying illness, and very ill persons. For outpatients, treatment should be initiated within 48 hours of symptoms onset and for hospitalized patients, anti-viral treatment is recommended regardless of the duration of symptoms. The most recent guidance on CDC recommendations on use of anti-viral agents is available at:

<http://www.cdc.gov/h1n1flu/recommendations.htm>

Chemoprophylaxis

Chemoprophylaxis should be *considered* for close contacts that have *conditions that place them at increased risk of the complications of influenza*. If used, chemoprophylaxis should be started as soon as possible and no later than 7 days after exposure.

INFECTION CONTROL

Instruct patients to call ahead if they are experiencing symptoms suggestive of influenza so that the proper precautions can be taken. If possible have them come in at the beginning or end of the day and escort them to an exam room.

Surgical masks should be placed on patients with respiratory symptoms presenting at health care facilities, and other appropriate respiratory precautions and hand hygiene should be used.

Standard, droplet and contact precautions should be used for all patient care activities, and maintained for 7 days after illness onset or until symptoms have resolved. Airborne precautions are also recommended in certain circumstances.

COMMUNITY CONTROL MEASURES

Parents of children diagnosed with influenza should be advised that their child needs to refrain from all public activities including school and extracurricular activities for **four days after onset of symptoms OR for 24 hours after resolution of fever without the use of antipyretics – whichever is longer. Other persons diagnosed with influenza should refrain from all public activities for 24 hours after resolution of fever without the use of antipyretics. In most people, this is a minimum of four days.** Most people with influenza can shed virus for a week (longer in persons who are immunocompromised or in children); however, household studies suggest that the majority of transmission to contacts occurs in the first 3 to 5 days. Healthcare providers should give patients diagnosed with influenza information on isolation and infection control, either by using the fact sheet available at <http://www.bphc.org/programs/infectiousdisease/infectiousdiseasesatoz/influenza/swineflu/Pages/Home.aspx> or through an alternative format.

REPORTING OF CASES TO BPHC

Any laboratory confirmed cases of influenza diagnosed in Boston must be reported to the Boston Public Health Commission immediately at (617) 534-5611. In addition, any clusters of febrile respiratory illness in Boston should be reported immediately. Reporting forms and additional information for health care providers and for laboratories are available at: www.bphc.org/cdc.

PREVENTION

Although novel H1N1 influenza is expected to circulate in the fall, other influenza viruses may co-circulate. BPHC encourages all Boston based providers to vaccinate all candidates for a seasonal influenza immunization as early as possible. Seasonal immunization is particularly encouraged for pregnant women, all children >6 months of age, those age 65 or older, household contacts of those at high risk from influenza (such as infants under 6 months of age), those with underlying health conditions, and healthcare workers. The CDC also recommends seasonal influenza vaccination for anyone who wishes to reduce their risk of illness. The supply of seasonal influenza vaccine is expected to be plentiful, and healthcare providers should begin to vaccinate as soon as they have vaccine.

Vaccine against novel H1N1 influenza is currently in clinical trials but may be available as early as mid-October. Information on dose and schedules is not yet available. Vaccine will be provided by the federal government and will be distributed for initial use in the following priority groups:

- Pregnant women
- Household or other close contacts of infants < 6 months of age
- All those ages >6 months and <25 years

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- Anyone ages 25 – 64 years who has an underlying health condition
- Healthcare and emergency medical workers

As additional supplies of novel H1N1 vaccine become available, these priority groups are expected to be expanded. Note that persons over age 65 years are not considered to be a priority group for novel H1N1 vaccine, based on the epidemiology to date of the infection.

In addition to immunization, people are encouraged to take additional steps to help prevent getting or spreading any type of influenza:

- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Practice good "cough etiquette" by coughing or sneezing into a tissue, or into your elbow instead of into your hands.
- Try to avoid close contact with sick people.
- If you get sick, stay home from work or school and limit contact with others to avoid infecting them.

ADDITIONAL RESOURCES AND GUIDELINES

Boston Public Health Commission: www.bphc.org

Massachusetts Department of Public Health: www.mass.gov/dph

Centers for Disease Control and Prevention : <http://www.cdc.gov/h1n1flu/>

CDC Guidance for Healthcare Professionals: <http://www.cdc.gov/h1n1flu/guidance/>