

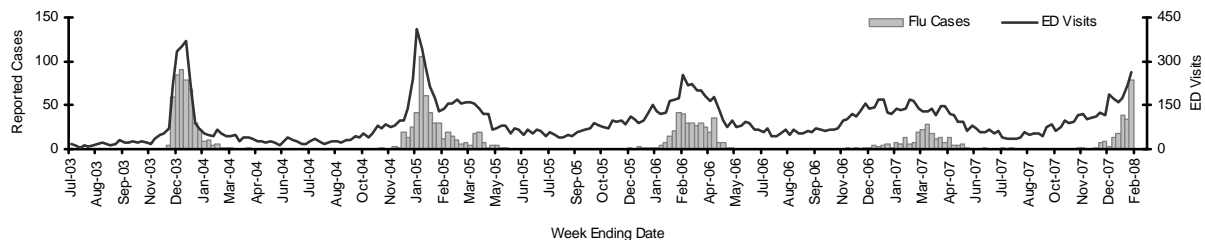


## Update: Influenza Activity in Boston, 2007-08

**SUMMARY:** Over the past several weeks, influenza activity in Boston has continued to increase. Since November 4, 2007, 207 cases of laboratory confirmed influenza in Boston residents have been reported to the Boston Public Health Commission's (BPHC) Communicable Disease Control Division, which represents the highest number of reported cases for the same time period since the 2004-05 influenza season. **Healthcare providers in Boston are reminded that ALL laboratory confirmed influenza cases must be reported to BPHC by phone (617) 534-5611 or by confidential fax (617) 534-5905.** Reporting cards are available at [www.bphc.org/cdc](http://www.bphc.org/cdc).

### EPIDEMIOLOGY

Between November 4, 2007 and February 2, 2008, 207 cases of laboratory-confirmed influenza were reported to BPHC compared with 39 during the same period in 2006-07, and 35 in 2005-06. Of Boston cases with isolate data available, 49% were identified as type A and 51% as type B, however it is still too early in the influenza season to determine which influenza viruses will predominate overall or how well the vaccine and circulating strains will match. Overall, 34% of cases were under the age of 18, 57% were between 18 and 64, and 9% were age 65 or older. Visits to Boston emergency departments (EDs) for influenza-like illness (ILI – defined as “flu” OR “fever” and at least one URI symptom in the chief complaint) have increased across all age groups; current prevalence of ILI among patients of Boston's EDs is 2.8%, compared with 1.6% of sentinel provider site visits statewide and 1.9% of sentinel site visits in New England (above the regional baseline of 1.4%).



**Figure 1. Boston Influenza Seasons, 2003-2008** Laboratory-confirmed cases of Influenza reported to BPHC vs. Boston ED visits for ILI. Early influenza activity for the current season is higher than for either of the two preceding influenza seasons.

### *Oseltamivir (Tamiflu) resistance in seasonal H1N1 influenza*

Various surveillance networks in Europe are reporting that about 13% of the H1N1 isolates have shown resistance to oseltamivir. In the United States, the Centers for Disease Control and Prevention (CDC) reports that 6.5% of their H1N1 isolates show resistance. To date this season the oseltamivir-resistant A (H1N1) isolates have been fully susceptible to the other available antiviral drugs (zanamivir, rimantadine, and amantadine). It is important to note that these results come from limited data, and it is too early to predict whether this strain will become the prevalent circulating strain in the months to come. Illness is not more severe in those with resistant strains.

CDC is not currently recommending any changes to the current guidance on the use of antivirals but will continue to monitor the situation.

## Diagnosis

Health care providers should consider the diagnosis of influenza in persons who present with symptoms including fever, myalgias, headache, malaise, dry cough, and sore throat, not attributable to another etiology.

## Prevention

The influenza A/H1N1 oseltamivir resistant viruses are well matched with the current seasonal influenza vaccine and therefore patients who received vaccination are already at lower risk of contracting the disease or developing severe complications than people who have not been immunized. Vaccination should be encouraged, especially for persons who are at high risk for influenza or persons who wish to reduce their chances of becoming ill. Good respiratory etiquette and hand hygiene are also known to reduce the risk of transmission of many respiratory infections and should be promoted. As always, healthcare workers are strongly encouraged to be vaccinated against influenza to prevent transmission to patients. Educational fact sheets in multiple languages, locations of influenza vaccination clinics, guidance for influenza vaccine among healthcare workers and more general information are available on the BPHC website: [www.bphc.org/cdc](http://www.bphc.org/cdc).

In addition to influenza vaccine, healthcare providers should assess patients' needs for pneumococcal polysaccharide vaccine (PPV 23), currently recommended for use in all adults older than 65 years of age and age appropriate pneumococcal vaccine (PPV 23 or pneumococcal conjugate vaccine (PPV 7)) for persons who are 2 years and older at high risk for disease.

## Reporting

City and state regulations require that laboratory confirmed cases of influenza be reported to BPHC. Outbreaks of disease regardless of etiology must also be reported to BPHC. In addition, laboratories in Boston are required to report positive influenza test results to BPHC. Reporting forms for health care providers and laboratories can be found at [www.bphc.org/cdc](http://www.bphc.org/cdc). Further information is available by contacting the BPHC Communicable Disease Control Division at 617-534-5611.

## Additional Resources

National Influenza Surveillance: <http://www.cdc.gov/flu/weekly/fluactivity.htm>

Massachusetts Department of Public Health: <http://www.mass.gov/dph/cdc/epii/flu/seasonal.htm>

*Links concerning oseltamivir (tamiflu) resistance in **seasonal H1N1 influenza**:*

WHO: [http://www.who.int/csr/disease/influenza/oseltamivir\\_faqs/en/index.html](http://www.who.int/csr/disease/influenza/oseltamivir_faqs/en/index.html)

CDC: <http://www.cdc.gov/flu/about/qa/antiviralresistance.htm>