



# THE CITY OF NEW YORK

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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[nyc.gov/health](http://nyc.gov/health)

## Influenza Surveillance Summary New York City Summary 2007- 2008

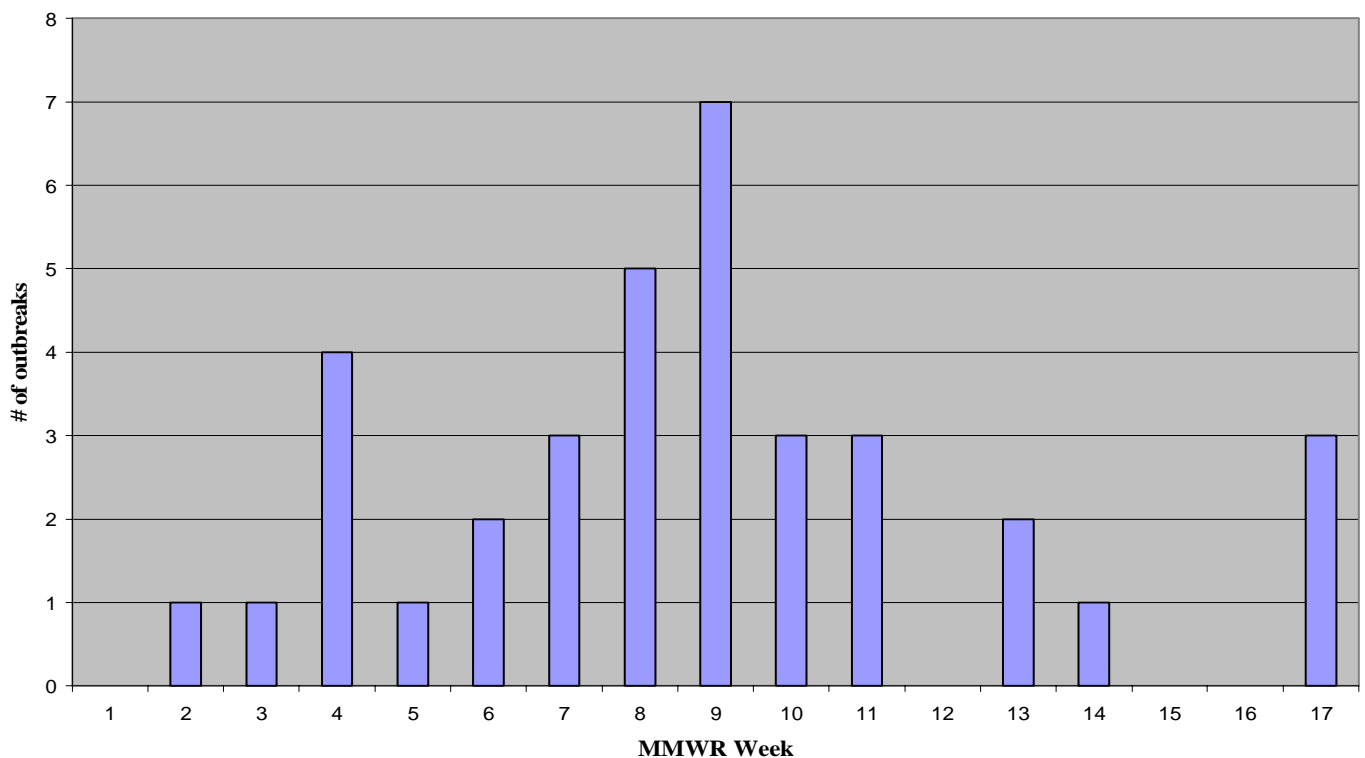
### New York City Highlights:

Influenza surveillance began on October 1, 2007 with the implementation of the Influenza Sentinel Provider Surveillance Network and active surveillance through weekly phone calls to New York City laboratories that perform influenza testing. Although influenza surveillance officially ended on May 17, 2008, sentinel providers are encouraged to continue reporting visits for influenza-like illness (ILI) throughout the summer.

**Outbreaks in Facilities:** There were 47 reported facility outbreaks (primarily nursing homes): 36 had confirmed influenza. Among these, 16 reported influenza A, 15 influenza B, 4 reported as both influenza A and B, and one had influenza unspecified. This is more than the 24 influenza outbreaks reported during the 2006-07 influenza season. In 2007-08, influenza outbreaks began in early January and continued through mid-May. Four of these outbreaks occurred in acute care facilities with the remainder in long-term care facilities. A total of 354 individuals were reported ill, with 23 hospitalizations and three deaths reported to be influenza-related.

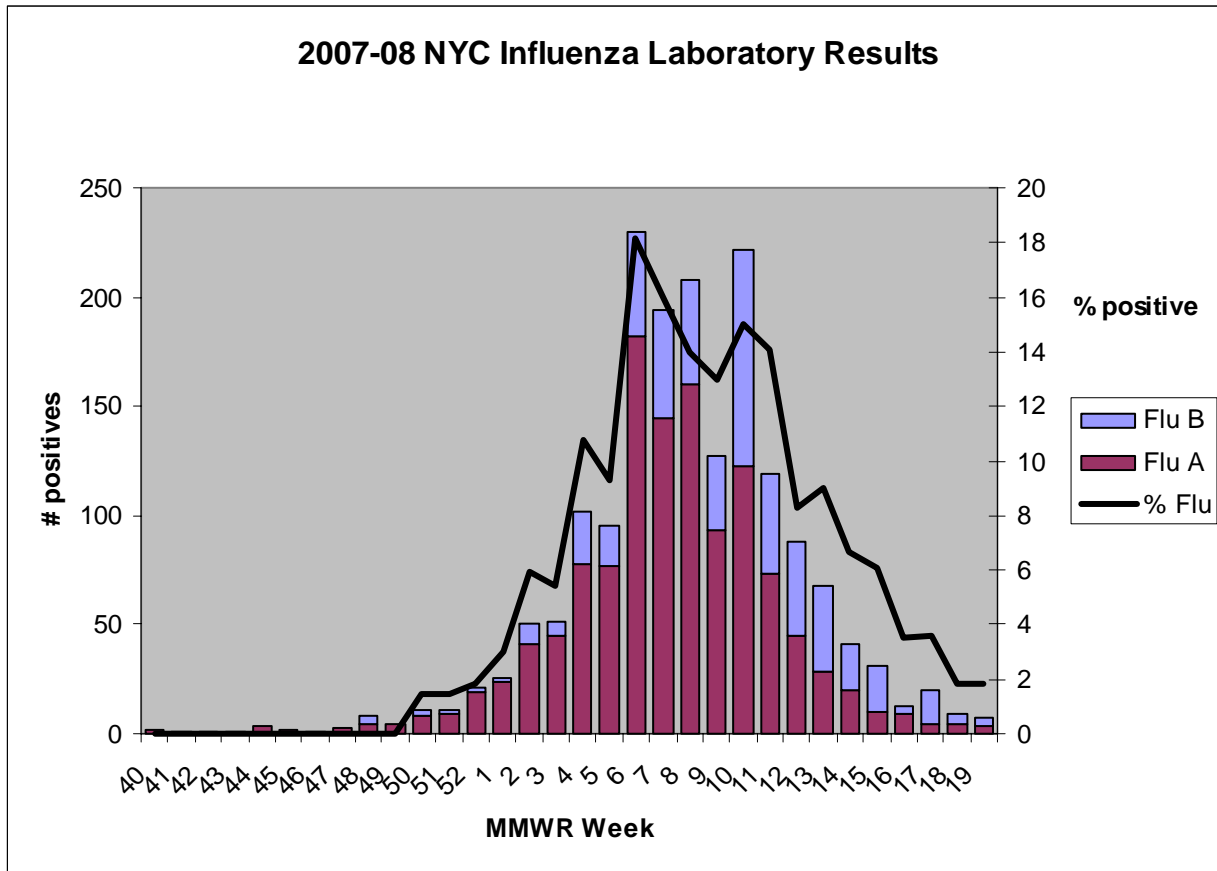
The graphs below use the convention of MMWR weeks. Flu surveillance begins in MMWR week 40 which is the first of October and ends at MMWR week 20 which is mid-May.

NYC Influenza Outbreaks 2007-08

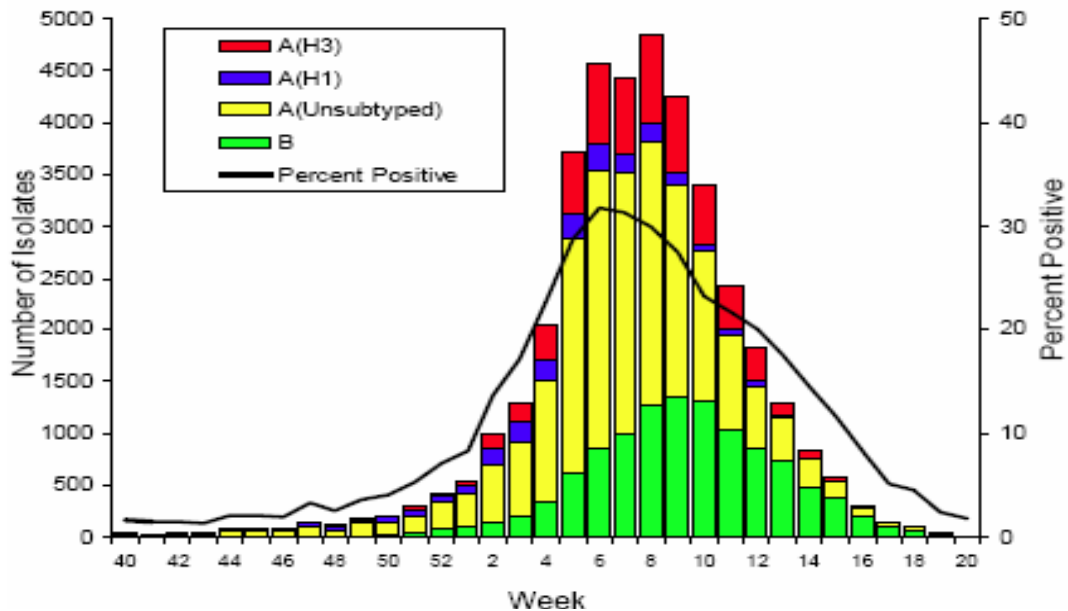


**Laboratory surveillance** identified a peak in activity in the first week of February 2008, with 18% of all submitted specimens testing positive for influenza (primarily influenza A). This is slightly later than last year's peak during the third week of February with almost 13% of all submitted specimens testing positive for influenza in that season. Overall, 69% of the positive influenza specimens this season were influenza A, and 31% influenza B.

Nationally, laboratory surveillance this year indicated a peak in early February with influenza detected in over 30% of submitted specimens. Most of these laboratory-confirmed diagnoses were influenza A, with influenza subtype A (H3N2) predominating.

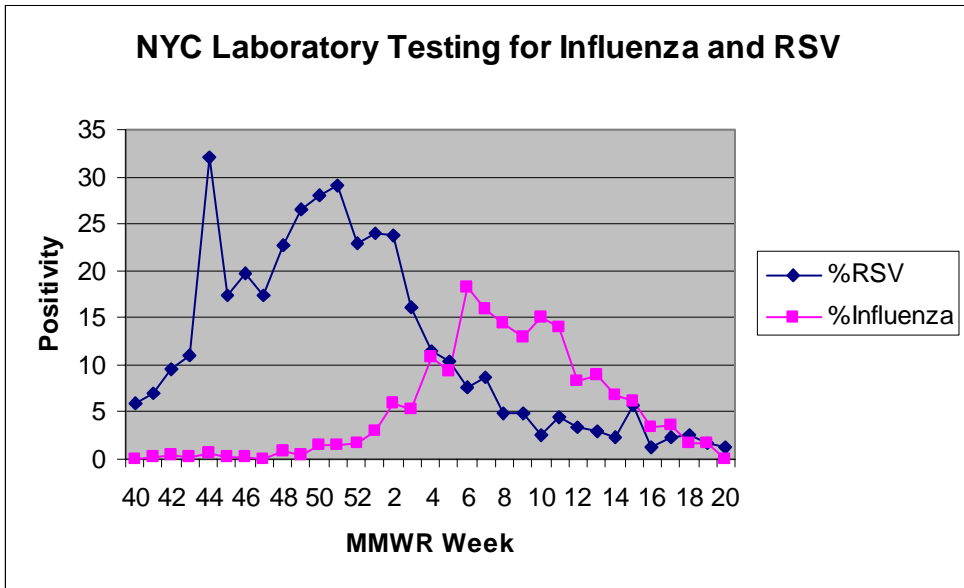


## U.S. WHO/NREVSS Collaborating Laboratories National Summary, 2007-08

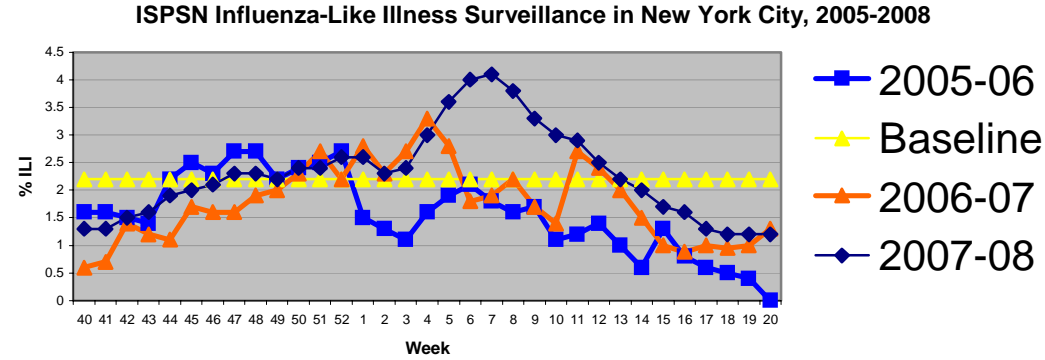


**Syndromic Surveillance:** The DOHMH has established several different surrogate morbidity surveillance systems for monitoring illness trends in NYC. These systems use existing electronic data that can be coded into disease syndromes and transmitted to DOHMH on a daily basis. The data are used to monitor citywide trends and geographic clustering of non-specific clinical syndromes (e.g., diarrhea and ILI) that may represent disease in the community.

The DOHMH emergency department (ED) surveillance system reported that ILI visit rates to NYC EDs were elevated, most notably among children under 5 years of age, from mid-November 2007 through early January 2008 (weeks 45-02), prior to the period of predominant influenza viral isolate reporting and coincident with respiratory syncytial virus reporting. The ED surveillance system reported that ILI visit rates were elevated across age groups from mid-January to late March (weeks 04-12), coincident with influenza isolate reporting. For the eight weeks ending May 17 (weeks 13-20) citywide ILI visits were at or below the expected seasonal baseline level.

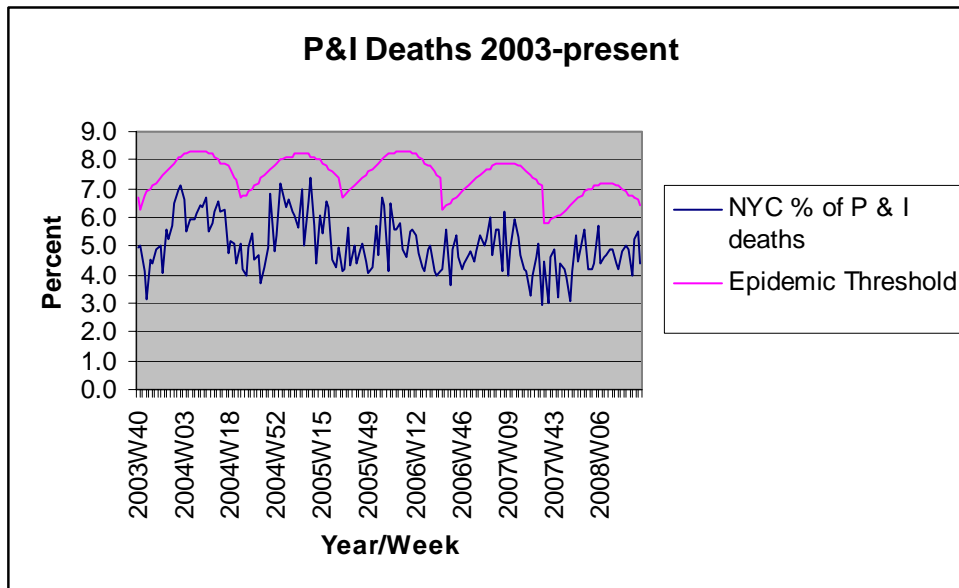


**Influenza Sentinel provider Network:** Because some of the influenza sentinel provider sites submit batched reports for several weeks, it is often difficult to estimate ILI incidence during the season since this changes as the reports are received. Now that all the reports have been received, it appears that ILI activity peaked in late February 2008. Starting in week 5, this data reflects the inclusion of data derived from the syndromic surveillance system emergency department visits. The peak in late February exceeded last year's initial peak, which occurred in late January, as well a second slightly smaller peak around mid-March 2007. Nationally, the peak for the 2007-8 season appeared from late February to mid-March.



**Influenza-Associated Mortality:** Influenza-associated pediatric deaths are reportable to the NYC DOHMH. Since October 2007 there have been five reported influenza-associated pediatric deaths in New York City.

The Bureau of Vital Statistics prepares a weekly report to monitor causes of deaths in NYC. Deaths categorized as either influenza- or pneumonia-related are tabulated weekly and compared to recent years as part of the CDC's 122 Cities Mortality Reporting System. The majority of P&I deaths were due to pneumonia, not influenza, as noted on the death certificate. During the 2007-08 influenza season deaths attributed to P&I in New York City were below the epidemic threshold during all weeks of influenza season. Nationally, the percent of deaths due to pneumonia and influenza were above the epidemic threshold from January to mid-May 2008.



**National Highlights:** The 2007-08 influenza season peaked in February-March. There was a mix of circulating viral types with A (H3N2) predominating. Oseltamivir resistance emerged with an estimated 11% of tested A (H1N1) viruses found to be resistant nationwide (compared to less than 1% in the previous season). Vaccine effectiveness was likely moderate despite the antigenic differences between the circulating A (H3N2) and B strains and those in the vaccine.

Vaccination recommendations have been expanded to include all school-age children and adolescents. Evidence exists that influenza has substantial adverse impacts among school age children and their contacts. These include increased school absenteeism, antibiotic use, medical care visits and parental work loss. Influenza vaccine has been found to be effective and safe for school age children. All children aged six months through eighteen years should receive annual influenza vaccination

**Composition of the 2008-09 Influenza Vaccine:** WHO and FDA have recommended that the 2008-09 trivalent influenza vaccine for the Northern Hemisphere contain A/Brisbane/59/2007-like (H1N1), A/Brisbane/10/2007-like (H3N2), and B/Florida/4/2006-like viruses. All three components have been changed from the 2007-08 Northern Hemisphere vaccine formulation. A/Brisbane/10/2007-like (H3N2) and B/Florida/4/2006-like viruses are currently included in the 2008 Southern Hemisphere vaccines. This recommendation was based on surveillance data related to epidemiology and antigenic characteristics, serological responses to 2007-08 vaccines, and the availability of candidate strains and reagents

\* Please go to <http://www.cdc.gov/flu/weekly> for further information about the 2007-2008 influenza season.