#### 2009-10 Flu Monitoring

The New York State Department of Health (NYSDOH) monitors flu in New York State (NYS). Detailed information about flu monitoring in New York City (NYC) is available directly from the New York City Department of Health and Mental Hygiene (NYCDOHMH) website at: http://www.nyc.gov/html/doh/html/flu/flu-data.shtml.

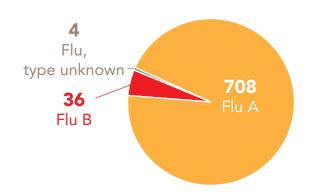
## Current key findings from flu monitoring systems in New York State (NYS) for the week ending December 12, 2009, include:

- The overall level of flu activity is currently high and appears to be decreasing when compared to last week.
- The number of people hospitalized with flu is currently high and appears to be decreasing when compared to last week.
- The number of people dying with flu in NYS (outside of NYC) is currently 9 reported this week.
- The total number of deaths associated with H1N1 flu reported in NYS (outside of NYC) since September 1, 2009, is 54.
- The total number of deaths associated with H1N1 flu reported in NYS (outside of NYC) since April 24, 2009, is 80.

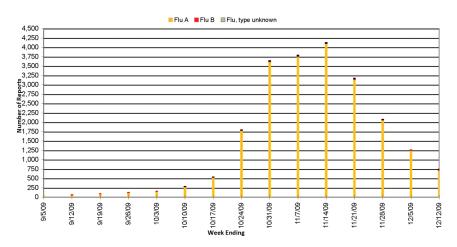
## Statewide Testing for Flu (NYS and NYC)

- All laboratories (public, private, hospital, commercial, etc.) that perform testing on residents of the state report all positive flu test results.
- Test results may identify Flu Type A, Flu Type B, or Flu without specifying Type A or B. Some tests only give a positive or negative result and cannot identify flu type (unknown).
- There are two main types of flu viruses-Type A and Type B. Type A flu viruses can be broken down further into 3 common subtypes. Each subtype has a slightly different genetic makeup from the other. H1N1 flu is one of the subtypes of Flu Type A.

#### All Positive Flu Reports for week ending 12/12/09



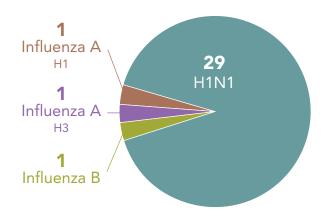
#### All Positive Flu Reports (season to date, by week)



#### **Public Health Testing for Flu**

- Wadsworth Center, the NYSDOH public health laboratory, tests a subset of NYS residents from two sources:
- A select group of doctors from around the state send samples from patients with complaints of illness consistent with flu that they see in their offices.
- o A select group of hospitals from around the state send samples from patients who are admitted to the hospital with complaints of illness consistent with flu.
- The New York City Public Health Laboratory tests a subset of NYC residents. Results of this testing are reported on the NYCDOHMH website at: http://www.nyc.gov/ html/doh/html/flu/flu-data-lab.shtml.

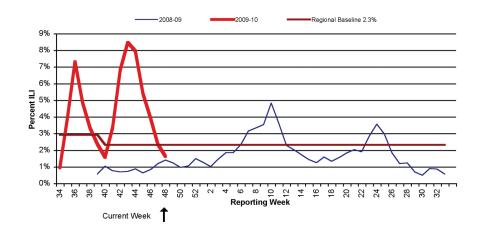
### Subtypes Tested at Wadsworth Center for week ending 12/12/09



# Doctors' Office Visits for Flu - Sentinel Providers in NYS (outside of NYC)

- The NYSDOH works with a select group of doctors ("sentinel providers") across the state who report the total number of patients they saw and the total number of those patients with complaints of illness consistent with flu every week.
- This graph represents the percent of visits to these sentinel providers that were for patients with complaints of illness consistent with flu.
- The Centers for Disease Control and Prevention (CDC) uses trends from past years to come up with a "regional baseline" rate of doctors' office visits for illness consistent with flu. For NYS, the "regional baseline" is currently 2.3%. Numbers above this "regional baseline" suggest high levels of illness consistent with flu in the state.
- The Reporting Week Number is the week of the year (from Sunday through Saturday), beginning with the first week in January, and allows comparison to past years.

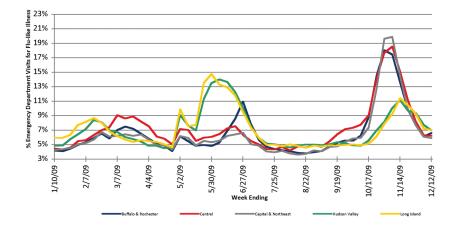
### Percent of Visits to Sentinel Providers in NYS (Outside of NYC) for Flu-like Illness (season to date, by week)



#### Emergency Department Visits for Flu—Syndromic Surveillance for NYS (outside of NYC)

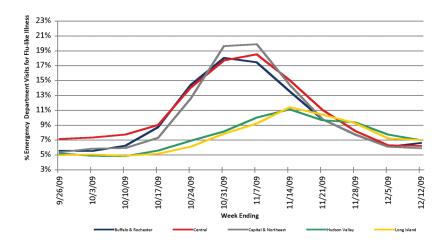
- Hospitals around NYS report the number of patients seen in their emergency departments with complaints of illness consistent with flu. This is called "syndromic surveillance."
- An increase in visits to hospital emergency departments can be one sign that flu has arrived in that part of NYS.
- "Syndromic surveillance" does not reveal the actual cause of illness.
- "Syndromic surveillance" information specific to hospitals in NYC can be found at: http://www. nyc.gov/html/doh/html/flu/flu-data. shtml.

Flu-like Illness in NYS Hospital Emergency Departments as Percentage of Total Emergency Department Visits, by Region (year to date)





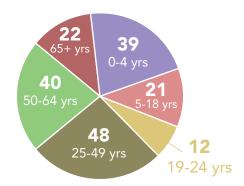
Flu-like Illness in NYS Hospital Emergency Departments as Percentage of Total Emergency Department Visits, by Region (3 month snapshot)



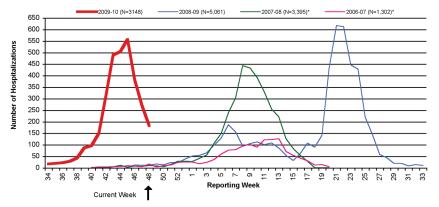
## Hospitalizations for Flu – Statewide (NYS and NYC)

- All hospitals in NYS and NYC report to NYSDOH the number of patients admitted to their hospital with a positive flu test (any type of test, for any type of flu).
- For the week ending 12/12/09, 73% of hospitals statewide completed the report.
- The Reporting Week Number is the week of the year (from Sunday through Saturday), beginning with the first week in January, and allows comparison to past years.

#### Age Groups for Hospitalized Flu Patients for week ending 12/12/09



#### Hospitalized Flu Patients, Current and Prior Flu Seasons

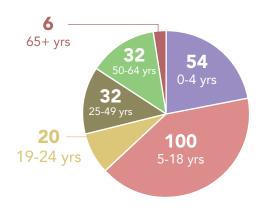


\*Note: Routine influenza surveillance during prior seasons started with week 40 and ended with week 20.

# Hospitalizations for Flu – Sentinel Hospitals

- Sentinel hospitals are a select group of hospitals from around the state, called "sentinel" hospitals, who have agreed to do extra monitoring to help NYSDOH keep track of flu in the hospital.
- The information learned from these "sentinel" hospitals gives a snapshot of what is going on with flu at hospitals around the state.

### Age Groups for Hospitalized Flu Patients at Sentinel Hospitals, 10/1/09 - 12/12/09



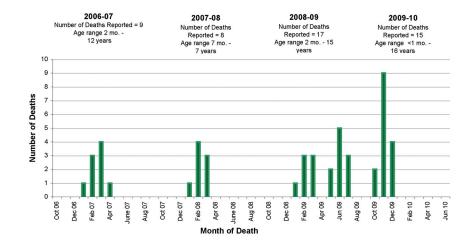
# Pediatric Deaths Associated with Flu – Statewide (NYS and NYC)

- Since December 2004, flu-associated deaths in children younger than 18 years old have been reportable in NYS.
- This includes deaths associated with both the seasonal flu and H1N1 flu.
- All pediatric flu-associated deaths included in this report are laboratory-confirmed.

### Pediatric Deaths Associated with Flu Statewide (NYS and NYC) for week ending 12/12/09

Age	Newly identified last week	Total season to date (since 9/1/09)	Total since 4/24/09
0-4 years	0	3	7
5-17 years	4	12	18

#### Pediatric Flu Deaths—Statewide (season to date, by month)



# Adult Deaths Associated with H1N1 Flu

#### - NYS (outside of NYC)

- With the emergence of H1N1 flu in Spring 2009, the NYSDOH began asking doctors in NYS (outside of NYC) to report all H1N1 fluassociated deaths in adults.
- Counts of H1N1 flu-associated deaths may underestimate the actual number of deaths because many people with flu are not tested and because flu testing misses some cases.
- NYCDOHMH uses a different system to track flu-associated deaths in adults. More information on flu-associated deaths in NYC adults can be found on the NYCDOHMH website at: http://www.nyc.gov/html/doh/flu/html/data/mortality.shtml.

### Adult Deaths Associated with H1N1 Flu in NYS (outside of NYC) for week ending 12/12/09

Age	Newly identified last week	Total season to date (since 9/1/09)	Total since 4/24/09
18-24 years	0	2	3
25-49 years	4	21*	34
50-64 years	1	9	13
65 years and over	0	8	11

<sup>\*</sup>One reported case has been removed as it was determined not to be influenza-associated.