During the week ending December 24, 2016

- Influenza activity level was categorized as geographically widespread. This is the first week that widespread activity has been reported.
- There were 1,460 laboratory-confirmed influenza reports, a 143% increase over last week.
- Of the 1,011 specimens submitted to NYS WHO/NREVSS laboratories, 75 (7.42%) were positive for influenza.
- Of the 16 specimens tested at Wadsworth Center, 4 were positive for influenza and all 4 were influenza A (H3).
- Reports of percent of patient visits for influenza-like illness (ILI) from ILINet providers was 3.9%, which is above the regional baseline of 3.00%.
- The number of patients hospitalized with laboratory-confirmed influenza was 273 a 60% increase over last week.
- There have been no influenza-associated pediatric deaths reported this season.

Laboratory Reports of Influenza (including NYC)

All clinical laboratories that perform testing on residents of NYS report all positive influenza test results to NYSDOH.

- 44 counties reported cases this week.
- Incidence ranged from 0-20.72 cases/100,000 population.

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2 No Activity: No laboratory-confirmed cases of influenza reported to the NYSDOH.

3 Laboratory: Small numbers of lab-confirmed cases of influenza reported.

4 Regional: Increased or sustained numbers of lab-confirmed cases of influenza reported in at least two regions but in fewer than 31 of 62 counties.

5 Widespread: Increased or sustained numbers of lab-confirmed cases of influenza reported in greater than 31 of the 62 counties.

6 Increased or sustained is defined as 2 or more cases of laboratory-confirmed influenza per 100,000 population.

7 ILI = influenza-like illness, defined as temperature 100° F with cough and/or sore throat in the absence of a known cause other than influenza
Laboratory Reports of Influenza (including NYC)

Test results may identify influenza Type A, influenza Type B, or influenza without specifying Type A or B. Some tests only give a positive or negative result and cannot identify influenza type (not specified).
World Health Organization (WHO) and National Respiratory & Enteric Virus Surveillance System (NREVSS) Collaborating Laboratories

Seventeen clinical virology laboratories in NYS and NYC, including the Wadsworth Center, are WHO and/or NREVSS collaborating laboratories for influenza surveillance.

These labs report weekly the number of respiratory specimens tested and the number positive for influenza types A and B to CDC. Some labs also report the influenza A subtype (H1 or H3) and influenza B lineage (Victoria or Yamagata). Because denominator data is provided, the weekly percentage of specimens testing positive for influenza is calculated.

Influenza Virus Types and Subtypes Identified at Wadsworth Center (excluding NYC)

Wadsworth Center, the NYSDOH public health laboratory, tests specimens from sources including, outpatient healthcare providers (ILINet) and hospitals (FluSurv-NET).

There are 2 common subtypes of influenza A viruses – H1 and H3. Each subtype has a slightly different genetic makeup. Wadsworth also identifies the lineage of influenza B specimens – Yamagata or Victoria. Rarely, an influenza virus is unable to have it’s subtype or lineage identified by the laboratory.

Wadsworth sends a subset of positive influenza specimens to the CDC for further virus testing and characterization.
Influenza Antiviral Resistance Testing

The Wadsworth Center Virology Laboratory performs surveillance testing for antiviral drug resistance. The laboratory does not have any data yet this season. Information will be updated in subsequent weekly reports.

Outpatient Influenza-like Illness Surveillance Network (ILINet) (excluding NYC)

The NYSDOH works with ILINet healthcare providers who report the total number of patients seen and the total number of those with complaints of influenza-like illness (ILI) every week in an outpatient setting.

The CDC uses trends from past years to determine a regional baseline rate of doctors’ office visits for ILI. For NYS, the regional baseline is currently 3%. Numbers above this regional baseline suggest high levels of illness consistent with influenza in the state.

Note that surrounding holiday weeks, it is not uncommon to notice a fluctuation in the ILI rate. This is a result of the different pattern of patient visits for non-urgent needs.

Emergency Department Visits for ILI-Syndromic Surveillance (excluding NYC)

Hospitals around NYS report the number of patients seen in their emergency departments with complaints of ILI. This is called syndromic surveillance.

An increase in visits to hospital emergency departments for ILI can be one sign that influenza has arrived in that part of NYS.

Syndromic surveillance does not reveal the actual cause of illness, but is thought to correlate with emergency department visits for influenza.

*Additional information regarding national antiviral resistance testing, as well as recommendations for antiviral treatment and chemoprophylaxis of influenza virus infection, can be found at http://www.cdc.gov/flu/weekly/*
Patients Hospitalized with Laboratory-Confirmed Influenza
(including NYC)

Hospitals in NYS and NYC report the number of hospitalized patients with laboratory-confirmed influenza to NYSDOH. 161 (88%) of 184 hospitals

Influenza Hospitalization Surveillance Network (FluSurv-NET)

As part of the CDC’s FluSurv-Net, the NYS Emerging Infections Program (EIP) conducts enhanced surveillance for hospitalized cases of laboratory-confirmed influenza among residents of 15 counties.\textsuperscript{5} Medical chart reviews are completed, and underlying health conditions noted on all identified cases from October 1 through April 30 of the following year.

FluSurv-Net estimated hospitalization rates will be updated weekly starting later this season.

\textsuperscript{5} Counties include, in the Capital District: Albany, Columbia, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, and Schoharie; in the Western Region: Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, and Yates
Healthcare-associated Influenza Activity (including NYC)

Hospitals and nursing homes in NYS report outbreaks of influenza to the State. An outbreak in these settings is defined as one or more healthcare facility-associated case(s) of confirmed influenza in a patient or resident or two or more cases of influenza-like illness among healthcare workers and patients/residents of a facility on the same unit within 7 days. Outbreaks are considered confirmed only with positive laboratory testing.6

For information about the flu mask regulation and the current status of the Commissioner's declaration, please visit www.health.ny.gov/FluMaskReg

Pediatric influenza-associated deaths reported (including NYC)

Local health departments report pediatric influenza-associated deaths to NYSDOH.

Flu-associated deaths in children younger than 18 years old are nationally notifiable. Influenza-associated deaths in persons 18 years and older are not notifiable.