

Influenza Laboratory Confirmed Cases Reported to the NYSDOH: Beginning 2009-10 Season

Introduction

Under the Compilation of the Rules and Regulations of the State of New York (NYCRR), Title 10, Volume A, Part 2, Section 2.1, laboratory-confirmed influenza is required to be reported to the NYSDOH. Under the regulation, clinical laboratories are required to report positive influenza laboratory test results to the NYSDOH. Most laboratory tests that are currently in use are able to identify if the patient is positive for type A or type B influenza. Some laboratory tests are not able to differentiate between type A or type B, so those results are categorized as “influenza, type not specified.” From October through May each influenza season, the Statistical Unit in the NYSDOH Division of Epidemiology reports the statewide (including New York City) number of laboratory-confirmed influenza cases, by type, weekly, to the Bureau of Communicable Disease Control (BCDC) and Health Data NY.

Data Collection Methods

Clinical laboratories report positive influenza laboratory test results to NYSDOH electronically via the NYSDOH Electronic Clinical Laboratory Reporting System (ECLRS). During recent influenza seasons, approximately 190 clinical laboratories reported positive influenza laboratory tests to NYSDOH. The Division of Epidemiology’s Statistical Unit analyzes the ECLRS influenza reports and creates a confirmed influenza case on the NYSDOH Communicable Disease Electronic Surveillance System (CDESS) from a positive result on any of the following influenza laboratory tests:

- Rapid antigen detection test (RAT)
- Viral culture
- Reverse transcriptase polymerase chain reaction (RT-PCR)
- Direct immunofluorescence antibody staining (DFA)
- Indirect immunofluorescence antibody staining (IFA)

Single serology tests are not considered confirmatory for acute influenza infection, and cases are not created from such ECLRS reports. For serology testing to be considered confirmatory for influenza, both an acute and a convalescent serology specimen must be tested and demonstrate at least a four-fold rise in antibody titer. In regard to rapid antigen detection tests, if a specimen is initially positive on RAT but is subsequently negative on a confirmatory test (e.g., RT-PCR), the original RAT test is determined to have been a false positive result and the influenza case is revoked on CDESS.

Limitations

This data represents an underestimate of the number of influenza cases occurring each season, because many influenza patients do not visit a healthcare provider, are not tested, or are not tested by a full-service clinical laboratory. The data do not include reports of positive point-of-care influenza tests performed in healthcare providers’ offices unless performed under the auspices of a full-service clinical laboratory. The data include positive influenza rapid antigen detection tests, which tend to have limited validity, especially when influenza is not prevalent in the community.

Despite these limitations, the data are able to provide useful trend information to help track the influenza season statewide and to allow trend comparisons between seasons.

Supporting Documents/References

For additional New York State influenza surveillance information, please see our website:

<http://www.health.ny.gov/diseases/communicable/influenza/surveillance/>

CDC information about influenza disease (example, Type A and Type B)

<http://www.cdc.gov/flu/about/disease/index.htm>

CDC information about influenza surveillance:

<http://www.cdc.gov/flu/weekly/overview.htm>

CDC information about laboratory testing methods for influenza:

<http://www.cdc.gov/flu/professionals/diagnosis/index.htm>