

Influenza Surveillance, Reporting and Testing Guidance for Laboratories
2018–2019 Influenza Season
Michigan Department of Health and Human Services (MDHHS)
October 2018

This guidance outlines MDHHS recommendations on influenza surveillance, reporting, and testing for laboratories. Future updates may be issued if influenza virus severity or activity changes. Additional guidance for influenza testing and reporting can be found at www.michigan.gov/cdinfo and www.michigan.gov/mdhhs/lab. Please call MDHHS Communicable Disease Division (517) 335-8165 or Bureau of Laboratories (517) 335-8063 with any questions.

Updates on Surveillance Activities

- MDHHS participates in the CDC 'Right-Size' virologic surveillance approach for a strategic and evidence-based foundation for influenza surveillance in Michigan. Statistical calculations define the desired number of specimens needed to ensure adequate confidence in virologic surveillance capacity throughout all areas of the state. Influenza Right-Size surveillance objectives and thresholds are centered on four aspects: Situational Awareness (monitoring the prevalence and spread of influenza viruses throughout the year), Vaccine Strain Selection (95% confidence to detect a drift variant at prevalence ≥ 0.03 per month), Anti-viral Resistance Monitoring (timely detection of resistant viruses among influenza positive surveillance specimens), and Novel Event Detection (early identification of a novel influenza virus among influenza positive surveillance specimens for effective intervention and control measures). **Year-round surveillance is necessary to maintain these detection goals.**
- MDHHS participation in the CDC Influenza Hospitalization Surveillance Project will continue during the 2018-2019 influenza season. This project provides population-based rates of hospitalization due to severe influenza illness through active surveillance and chart review of lab-confirmed cases from October 1- April 30 for Clinton, Eaton, Genesee, Ingham and Washtenaw Counties.
- Prompt reporting of pediatric influenza-associated deaths (<18 years) continues to be required http://www.michigan.gov/documents/mdch/ME_pediatric_influenza_guidance_v2_214270_7.pdf
- MDHHS highly encourages reporting of influenza hospitalizations (ICU admissions, severely ill pregnant or postpartum women, patients with unusual and /or severe presentations) of all ages, and adult deaths into the Michigan Disease Surveillance System (MDSS) by local health departments and healthcare providers.
- Vigilance for variant strain influenza viruses (such as H3N2v) should be maintained through all months of the year and all suspected cases should be tested for influenza (preferably by PCR testing at MDHHS) and reported to your local health department.
- Michigan influenza activity is summarized in the MI Flu Focus weekly report (www.michigan.gov/flu).

Testing

- Submission of periodic influenza-positive specimens to MDHHS Bureau of Laboratories (BOL) from a representative sample of outpatients, hospitalizations, and adult deaths is encouraged **throughout the year**. There are no clinical pre-requisites for submitting specimens to BOL for influenza testing.
- Specimen submission to BOL from all pediatric deaths, patients with severe or unusual presentations, and cases associated with congregate facility respiratory outbreaks, are especially important and should be prioritized.
- All suspect variant, novel, or zoonotic-transmission specimens should be immediately submitted to MDHHS BOL for confirmatory testing and characterization.
- During the 2018-19 season, MDHHS BOL will typically utilize RT-PCR as the first line testing for Influenza A and B. Specimens negative for influenza by PCR will then undergo viral culture to test for influenza and other respiratory viruses. Influenza A subtyping or influenza B lineage determination is performed on all influenza-positive specimens.
- Healthcare providers and labs should consider the low positive predictive value of rapid influenza diagnostic tests (i.e. false positives) during times of low influenza prevalence in the community. Confirmatory testing at MDHHS should be sought for rapid test-positive specimens or negative specimens from patients with a high clinical index of suspicion for influenza. Please include all clinical testing results on the MDHHS test requisition form

Reporting Requirements and Recommendations

- ***Weekly counts of influenza-positives***[†]: Please continue reporting of aggregate weekly counts of influenza-positive cases to your infection preventionist or local health department as per your previously established protocols. *Year-round reporting is requested.*
- ***Pediatric influenza-associated deaths (<18 years)***: Individual case reporting is required for all pediatric influenza mortalities. Please report as soon as possible (within 24 hours).
- ***Additional cases of public health interest include:***
 - Severe hospitalized (ICU) cases
 - Unusual or atypical presentations of influenza
 - Pregnancy-associated cases
 - Facility outbreak cases
 - Suspect avian, zoonotic, or novel strain influenza cases
 - International travel cases (within 2 weeks of symptom onset)

Please promptly report these individual cases to your local health department. Suspect avian or novel influenza cases should be reported immediately without delay.

[†] ***Do not include serologic positives***