Influenza Testing Algorithm for 2014–2015 Influenza Season
Michigan Department of Community Health (MDCH)

Questions regarding case and outbreak influenza testing should be directed to the MDCH Division of Communicable Disease at (517) 335-8165 during normal business hours or (517) 335-9030 after hours.

Suspect avian or novel influenza cases (not including 2009 A/H1N1pdm) should be reported immediately to the MDCH Division of Communicable Disease at the numbers listed above; testing is arranged at that time.

MDCH encourages submission of respiratory specimens for influenza and respiratory virus testing for public health surveillance. Specimens can be from any patient setting. MDCH highly encourages confirmatory influenza testing for cases of public health interest (ICU hospitalizations, severely ill pregnant or postpartum women, patients with unusual and severe presentations, and deaths) and for congregate setting outbreaks. See the “Influenza Surveillance, Reporting and Testing Guidance” documents for more information on influenza testing and reporting, available on the MIHAN and www.michigan.gov/flu.

Respiratory Specimen Collection and Submission

- Collect acceptable specimen*
  
- Complete MDCH lab test request form (“Microbiology/Virology DCH-0583”)
  - Available at www.michigan.gov/mdchlab by clicking on “Test Request Forms” link
  - In the “Indicate Test Requested” section, fill in the circle for “INFLUENZA (PCR/CULTURE)”

- Ship specimen to MDCH Bureau of Labs on frozen cold packs, along with MDCH lab test request form. Avoid shipping over a weekend or holiday unless by special arrangement with MDCH.

Viral culture or PCR testing, depending on testing volumes (Influenza A & B, Respiratory Syncytial virus, Adenovirus, Parainfluenza)

Positive for Influenza A

via culture

Preliminary influenza A result reported

PCR testing to determine influenza A subtype (2009 A/H1N1pdm, A/H3N2, A/H1N1)

Final result reported

Positive for Influenza B

OR

Negative for Influenza

via PCR

Equivocal/Indeterminate

Sent to CDC for further characterization

Negotiate/Preliminary influenza A result reported

Final result reported

Negotiate/Preliminary influenza B result reported

Final result reported

* Acceptable specimens: NP swab in viral transport medium (VTM) or saline (PBS); Dual NP/OP swabs in VTM or PBS; Throat swab in VTM or PBS; Nasal aspirates; Nasal swab in VTM or PBS; Bronchelolar lavage, Bronchial wash, sputum (PCR only), lung tissue; viral isolates. DO NOT SUBMIT MULTIPLE SAMPLES ON THE SAME PATIENT unless by special arrangement.

# Swabs used in influenza rapid diagnostic tests cannot be reused for MDCH testing. Consider collecting two swabs so that one may be reserved for MDCH confirmatory testing if needed. Alternatively, an aliquot of the original specimen may be submitted.