



# Influenza Testing Recommendations for Philadelphia Health Care Providers

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The Philadelphia Department of Public Health provides the following recommendations for diagnostic testing and treatment of patients with suspected influenza. Additional information is available on the website for the Centers for Disease Control and Prevention ([www.cdc.gov/flu/professionals](http://www.cdc.gov/flu/professionals)) or the PDPH website for healthcare professionals (<https://hip.phila.gov/xv/DiseaseInformation/Influenza.aspx>).

## Recommendations for Influenza Diagnostic Testing

- Once influenza is confirmed to be circulating at high levels in Philadelphia, most patients with influenza-like illness (temperature > 100°F (37.8°C) AND cough and/or sore throat without other confirmed etiology) *do not require* diagnostic testing for clinical management. Antiviral treatment should not wait for laboratory confirmation of influenza since laboratory testing can delay treatment and its efficacy.
- Influenza diagnostic testing should be reserved for the following groups:
  - Hospitalized patients with suspected influenza or unexplained respiratory failure
  - Patients who died of suspected influenza or unexplained respiratory failure
  - Patients with symptoms that may indicate severe disease such as: respiratory distress, hypoxia, pneumonia, acute respiratory distress syndrome, neurologic symptoms, or atypical symptoms in a severely immunocompromised patient without known etiology
  - Cases of suspected antiviral resistance such as individuals on antiviral prophylaxis for 48 hours who develop influenza-like illness or individuals on appropriate antiviral therapy but with repeated positive rapid antigen tests
  - Patients with influenza-like illness who report travel to an area where avian influenza is circulating in the week preceding symptom onset
  - Patients with influenza-like illness who report direct or indirect exposure to swine or poultry in the week preceding symptom onset
- Several commercial and hospital laboratories offer influenza diagnostic testing. Recommended diagnostic tests include:
  - Viral culture
  - Direct and indirect immunofluorescence assays (DFA and IFA)
  - RT-PCR (including conventional and multiplex assays)
- Facilities without access to a commercial or clinical laboratory performing influenza diagnostic testing should contact PDPH to determine if the sample can be tested at the Pennsylvania Bureau of Laboratories (PABOL) or Philadelphia Public Health Laboratory. PABOL typically only accepts samples from cases admitted to the intensive care unit, fatal cases, or cases where antiviral resistance or novel influenza A is suspected.
- Specimens from patients with suspected novel influenza A infection (e.g. recent travel to an area where avian influenza is circulating, exposure to swine or poultry in the week before symptom onset, or unsubtypeable influenza A patient specimen) should be forwarded to PABOL.
- Specimens should be labeled appropriately and be refrigerated (4°C) or placed on ice or cold packs prior to and during transport. Specimens *should not be frozen* and should ideally be tested within 72 hours of collection and ideally within 24 hours of collection. Only if specimens cannot be tested within 72 hours, they should be frozen at -70°C. Preferred specimens for diagnostic testing include:
  - Nasopharyngeal (NP)/Oropharyngeal (OP) swabs collected with a synthetic tip (e.g., nylon, Dacron, plastic, aluminum) and placed immediately into a sterile vial with viral transport media
  - Nasal aspirate or wash specimens transferred into a sterile container
  - Endotracheal aspirate or bronchoalveolar lavage fluid transferred into a sterile vial
  - Tissue samples from post-mortem proximal and distal trachea, right and left bronchi and right and left central lung
- Rapid influenza diagnostic tests (RIDT) can be used to identify influenza but have sub-optimal sensitivity. A negative rapid test cannot rule out influenza. Negative tests may require further testing for influenza by PCR or viral culture. Regardless of RIDT test results, clinical judgment should be used to decide if antiviral treatment is appropriate. See [http://www.cdc.gov/flu/professionals/diagnosis/clinician\\_guidance\\_ridt.htm](http://www.cdc.gov/flu/professionals/diagnosis/clinician_guidance_ridt.htm) for more information.