

H1N1 Influenza: Testing and Surveillance Update

BayCare Department of Laboratory Services

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What is the status of H1N1 influenza (or swine flu) in Florida?

Currently, almost all influenza-like illness (> 90%) is due to the novel 2009 influenza A (H1N1) virus it can be assumed that a person with influenza-like illness has the H1N1 strain, without conducting laboratory testing.

How can H1N1 be confirmed?

- Influenza A can be detected through rapid screening tests. A nasopharyngeal specimen would generally need to be collected within the first four to five days of illness (when an infected person is most likely to be shedding virus); some persons, especially children, may spread virus for 10 days or longer. Sensitivity and specificity vary and there have been cases locally where the rapid screening test is negative and subsequent PRC testing has confirmed H1N1.
- Treatment should be based on clinical diagnosis. Treatment should not be delayed because of a negative rapid test if the person has signs and symptoms of influenza-like-illness (fever greater than 100°, sore throat, cough, rhinorrhea; children have presented with fever and uncontrolled seizures).
- As of July 13, the FL Bureau of Laboratories will only test for the novel H1N1 virus on specimens from:
 - Patients admitted to the hospital with life-threatening illness, e.g., patients admitted to an ICU
 - Patients who appear to be part of outbreaks of influenza, especially in certain group settings (see further information below) – contact the county health department who will determine whether or not specific tests are needed and
 - A sample of patients presenting with ILI at specific practices participating in the Sentinel Practice Influenza Surveillance System.

What is the preferred specimen collection method?

To test for novel H1N1 influenza virus, upper respiratory specimens, such as a nasopharyngeal swab or aspirate, nasal swab plus a throat swab or nasal wash, or tracheal aspirate should be collected. Persons who perform nasal and tracheal aspirate collections on ill persons require appropriate personal protective equipment.

Can BayCare Outpatient Laboratories or Emergency Departments collect patient specimens?

BayCare Outpatient Laboratories are not equipped to collect nasopharyngeal swabs. Specimens should be collected at the physician's office or clinic and be sent to BayCare Laboratories for testing. Patients should only be referred to the Emergency Departments for medical treatment, not for collection of specimens. The Emergency Departments are available for **emergency conditions** which would include, but not limited to, the following: difficulty breathing or chest pain; purple or blue discoloration of the lips; vomiting and unable to keep liquids down; signs of dehydration such as dizziness when standing, absence of urination or in infants, a lack of tears when they cry; seizures (for example, uncontrolled convulsions); and is less responsive than normal or becomes confused.

Treatment

- Treatment should be based on clinical diagnosis. Treatment should not be delayed because of a negative rapid test if the person has signs and symptoms of influenza-like-illness (fever greater than 100°, sore throat, cough, rhinorrhea; children have presented with fever and uncontrolled seizures). CDC's recommendations for antiviral treatment, which Florida endorses, are two-pronged:
 - Early treatment with oseltamivir or zanamivir is recommended for those with confirmed, probable, or suspected infection with the novel 2009 influenza A (H1N1) virus who are ill enough to be hospitalized or are at high risk for complications. No antiviral treatment is recommended for those not meeting these criteria. CDC's detailed recommendations for treatment can be found at www.cdc.gov/h1n1flu.
 - People at high-risk for complications of novel influenza (H1N1) virus infection include: 1) Children younger than 5 years old, 2) Adults 65 years of age and older, 3) Persons with the following conditions: Chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological (including sickle cell disease), neurologic, neuromuscular, or metabolic disorders (including diabetes mellitus); Immunosuppression, including that caused by medications or by HIV; Pregnancy; Persons younger than 19 years of age who are receiving long-term aspirin therapy; Residents of nursing homes and other chronic-care facilities.