



## Information for Health Care Providers (10-26-09) Guidelines on testing patients for H1N1 Influenza

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### The Basics

- **In the outpatient setting, routine diagnostic testing for 2009 H1N1 influenza virus is not recommended at this time** In Erie County.
- As of October 10th, 2009, > **99%** of U.S. circulating influenza viruses identified were 2009 H1N1 influenza.
- Patients who should be considered for influenza diagnostic testing include:
  - Hospitalized patients with suspected influenza.
  - Patients for whom a diagnosis of influenza will inform decisions regarding clinical care, infection control, or management of close contacts.
  - Patients who died of an acute illness in which influenza was suspected.
- Testing should not delay treatment. When a decision is made to **use antiviral treatment for influenza, treatment should be empirically initiated as soon as possible** without waiting for influenza test results.
- The sensitivities of rapid influenza diagnostic tests (RIDTs; point-of-care tests) and direct immunofluorescence assays (DFAs) are lower than real-time reverse transcriptase polymerase chain reaction (rRT-PCR) tests and viral culture. Therefore, a negative test result **DOES NOT RULE OUT 2009 H1N1 OR SEASONAL FLU INFECTION**.

**Performance measures of H1N1 diagnostic testing**

Test	Sensitivity	Specificity	Notes
Rapid influenza diagnostic tests (RIDT's)	10-70%	>95%	<b>A negative RIDT does not rule out influenza virus infection.</b>
Real Time reverse transcriptase polymerase chain reaction (rRT-PCR)	86-100%		Most sensitive and specific but not always available. Results may take several days.
Direct Immunofluorescence assay (DFA's)	47-93%	≥96%	DFA's detect and distinguish between influenza A and B viruses but <b>do not distinguish between different A subtypes.</b>

- Once influenza activity has been documented in a community, **most patients** with influenza like illness (ILI) can be diagnosed clinically and **do not require diagnostic influenza testing** for clinical management, including antiviral treatment decisions.
- If identification of 2009 H1N1 influenza is required, testing with an rRT-PCR assay specific for 2009 H1N1 influenza or viral culture should be performed. This information may be important for **pregnant women or those with severe immunosuppression**. Routine testing in the outpatient setting is not recommended. Several commercial laboratories including Quest Diagnostics offer this test.
- **Hospitalized patients** with suspected influenza should receive **immediate empiric antiviral treatment** and be tested with an available influenza diagnostic test. Since a negative RIDT or DFA test result does not rule out influenza virus infection, **further testing using viral isolation (culture) or a nucleic acid amplification test such as rRT-PCR is recommended**.
- Testing and treatment for bacterial pathogens and other respiratory viruses should be conducted as appropriate.

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