

Protocol for Influenza Virus Testing, 2009-2010 and Guidance for Treatment

The following recommendations were developed by representatives of Nationwide Children's Hospital Clinical Laboratory, Section of Infectious Diseases, Emergency Medicine, and Epidemiology. The hospital anticipates a high demand for influenza testing. These recommendations will enable us to maximize the number of patients tested.

Usually the laboratory offers rapid influenza and RSV testing in early October. This year rapid influenza testing will be available as soon as the lab can distribute testing kits to the appropriate clinical areas. Rapid RSV testing will be available October 5, 2009.

1. Outpatients (Urgent Cares, Private offices, and clinics): Order rapid tests for influenza. Under ideal testing circumstances the sensitivity for influenza is approximately 75%. It may be slightly lower for pandemic 2009 H1N1 virus. Obtain the sample by swabbing the anterior nares.
If you have patient with significant underlying medical problems (cancer, transplant, or an immunosuppressive condition) consider ordering a RVAP (respiratory virus antigen panel; lab test code RVD) for better sensitivity and detection of other respiratory viruses.
2. Emergency Department - Outpatients: Order a rapid influenza antigen test. If the test is negative, you may collect a posterior nasopharyngeal swab and place it in viral transport media (pink M-4 transport media) for confirmatory testing. The lab will perform a RVAP (RVD) on rapid test negative specimens if a 2nd specimen is sent. **Do not order rapid flu tests for patients < 3 months of age. Because the risk of occult bacteremia is high in this group, the test sensitivity is not sufficient to make clinical decisions in this age group.**
3. Emergency Department – Patients to be admitted: Order a RVAP (RVD). If the RVAP is negative, the lab will automatically perform a PCR which will detect RSV, influenza A, and influenza B. The pandemic 2009 H1N1 strain is detected by this PCR, but the test does not distinguish between seasonal A and 2009 H1N1 A virus.
4. The Ohio Department of Health offers H1N1 testing for hospitalized patients with influenza A. The lab will offer H1N1 by PCR in early November, 2009. It will be available for outpatients and inpatients on those patients who test positive for influenza A by another test. There is a very limited amount of reagents to perform this test. **The Section of Infectious Diseases does not recommend H1N1 testing for outpatients.** If the supply of testing reagents is low, H1N1 PCR testing will be limited to inpatients. In this situation, the lab will send outpatient specimens to a reference laboratory for testing.