



21 October 2009

Interim Guidance for Clinicians on Laboratory Testing and Use of Antiviral Medication for Treating Pandemic H1N1 Influenza

Main updates in this Guidance:

- Provides updated information on testing guidance for pandemic H1N1 at Oregon State Public Health Laboratory (OSPHL). OSPHL will only perform H1N1 testing on hospitalized patients who have already tested positive for influenza at their local facility.
- Changes guidance on groups at high risk of complications needing antiviral therapy; to be consistent with CDC guidelines, we have lowered the age of children who would benefit from antiviral therapy to those aged 6 months to 2 years.
- We continue to emphasize that sensitivity of rapid tests for H1N1 is sub-optimal and specificity is unknown. Clinicians should use clinical judgment and local surveillance data to make decisions about empiric use of antivirals in patients with influenza-like symptoms.

Laboratory Testing:

The Oregon State Public Health Laboratory (OSPHL) performs pandemic H1N1 testing for surveillance only and does not perform these tests for clinical decision-making purposes. The turn-around time for H1N1 testing at OSPHL is 72 hours after receipt of the specimen and therefore does not meet the time frame necessary for making clinical decisions. At this time, we are continuing to limit testing for pandemic H1N1 to hospitalized patients and will not accept specimens from outpatients.

The Oregon Public Health Division asks that all hospitalized patients admitted for influenza-like illness (Fever $>37.8^{\circ}\text{C}$ (100°F) and respiratory symptoms (may include cough, sore throat, etc.) be tested for influenza by whatever method the facility has available: viral culture, direct fluorescent antigen (DFA), polymerase chain reaction (PCR), or any commercially available rapid test. If the specimen is positive, please submit a second specimen to OSPHL for pandemic H1N1 testing, and notify your local health department of the positive test result at your facility.

When collecting specimens on inpatients with a febrile respiratory illness, we recommend that two swabs be collected at the same time, one for the diagnostic test at the facility and another to be placed in transport media and refrigerated for submission to OSPHL if the first specimen is positive. If your facility does not perform viral culture/PCR in-house, it may be easiest to send both swabs to your regular laboratory and request that the second swab in transport media be sent to OSPHL if the first test is positive. Please store and transport specimens refrigerated.



Please send a completed Virology-Immunology test request form with the specimen), mark the Virus Isolation box in the bottom left hand corner, and write “Rule out pandemic H1N1 – Hospitalized” on the line marked “Other” beneath it. Samples from hospitalized patients will be processed by OSPHL at NO COST. To order request forms go to <http://www.oregon.gov/DHS/ph/phl/index.shtml> and under “Information You Need to Know” click on “How to Order Specimen Collection Supplies” for a stock room order form that can be faxed to OSPHL. If a form is needed for a specimen ready to be sent to OSPHL, please call Terry Crandall at (503) 693-4124. Information on acceptable specimen types, specimen collection procedures, ordering test kits, and test request forms can be found at: <http://www.oregon.gov/DHS/ph/phl/docs/swine-flu.pdf>

Preliminary test results for specimens will be available within 3 business days after receipt at OSPHL. Positive lab results will be reported to the submitting provider by OSPHL. Sensitivity of rapid tests for H1N1 is reported to be 10-70% depending on the test. A negative result does *not* rule out H1N1 as the cause of illness, so clinicians should use clinical judgment and local surveillance data on the prevalence of circulating influenza viruses when interpreting rapid test results. As of the date of this guidance, the following commercial laboratories are able to perform sub-typing by PCR for pandemic H1N1:

- Focus Diagnostics (CA)
- Specialty Laboratories (CA)
- Viracor (MO, KS)

Current Public Health Division guidance regarding infection control precautions when caring for patients with confirmed or suspected pandemic H1N1 can be found at: <http://www.oregon.gov/DHS/ph/acd/flu/h1n1flu-provider-information.shtml>

Treatment:

Although guidelines may be subject to change, the Oregon Public Health Division currently recommends antiviral treatment for patients with suspected or confirmed pandemic H1N1 influenza A who are at high risk of complications or who have symptoms severe enough to require hospitalization. (See the algorithm on the following page.)

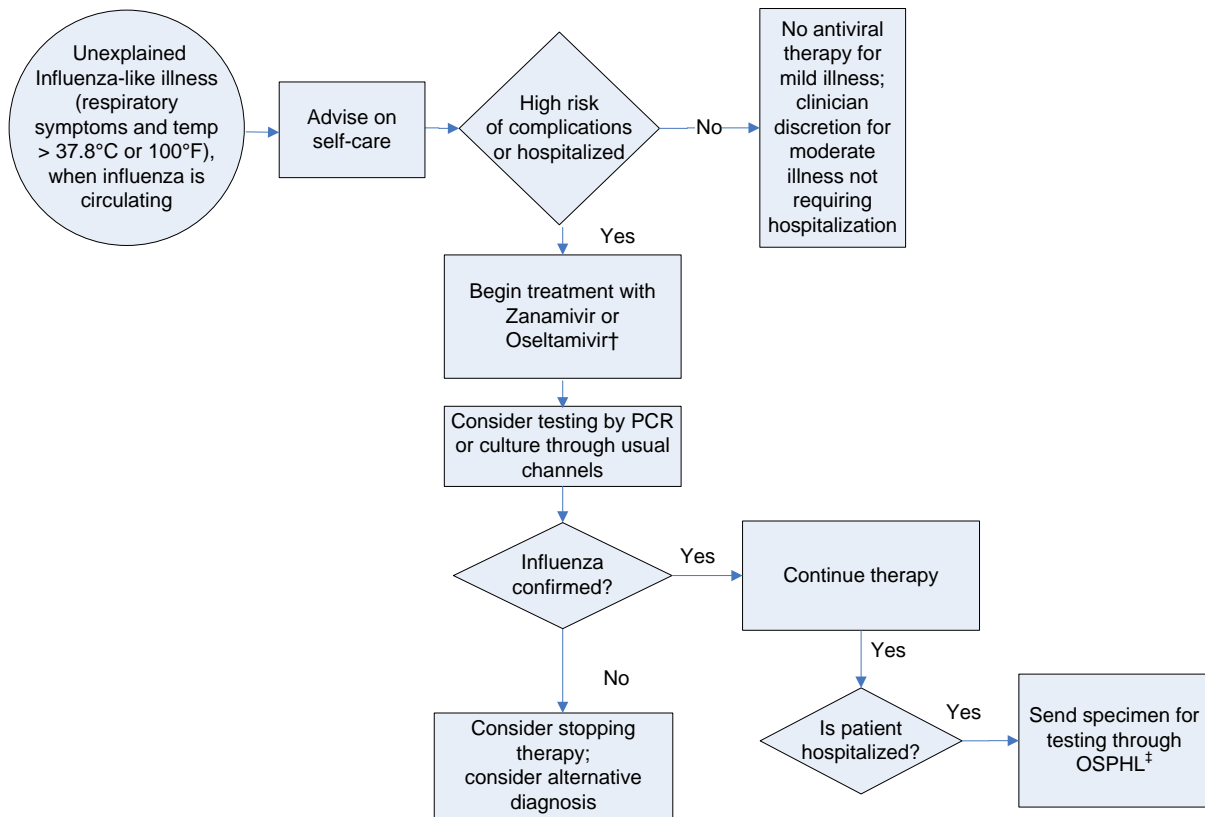
Patients who do not require hospitalization should be advised to use hand, respiratory and cough hygiene; and to call if symptoms worsen. Guidance on exclusion of persons ill with pandemic H1N1 from school, worksite, and other settings is available at: <http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>

Prophylaxis:

Chemoprophylaxis with antivirals is recommended for persons at high risk of complications from influenza who have been in close contact with a person with confirmed or suspected pandemic H1N1 infection during the ill person’s infectious period. Given current evidence suggesting that pandemic H1N1 is similar in severity to seasonal influenza, prophylaxis of health care workers is recommended only if they have a condition putting them at high risk of complications. This differs somewhat from CDC’s May 6th guidance, which recommends prophylaxis for all health care personnel, public health workers, or first responders who have had a recognized, unprotected close contact exposure to a person with confirmed, probable or suspected pandemic H1N1 influenza infection during that person’s infectious period.

Interim Guidelines for Influenza Testing and Treatment

Oregon Public Health Division
October 21, 2009*



“High Risk”: Persons at risk for severe complications from influenza

- all children aged 6 months–2 years (23 months);
- all persons aged ≥65 years;
- children and adolescents (aged 6 months–18 years) who are receiving long-term aspirin therapy and who might be at risk for experiencing Reye syndrome after influenza virus infection;
- women who are pregnant;
- adults and children who have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological, or metabolic disorders (including diabetes mellitus);
- adults and children who have immunosuppression (including immunosuppression caused by medications or by HIV);
- adults and children who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration; and
- residents of nursing homes and other chronic-care facilities.

* This updated guidance was developed in response to the following conditions prevailing on the date it was posted:

- Pandemic H1N1 influenza A is circulating
- Seasonal influenza is not circulating
- Pandemic H1N1 shows minimal evidence of resistance to neuraminidase inhibitors
- Antiviral medications are not in short supply

† Oseltamivir is preferred for treatment during pregnancy due to higher systemic absorption.

‡ Oregon State Public Health Laboratory