

Arizona Department of Health Services (ADHS) continues to identify confirmed cases of novel H1N1 influenza. These guidelines may change through the course of the pandemic.

Key Points:

- Treat patient based on clinical presentation since H1N1 testing is limited and other tests may not be reliable.
- Symptoms alone cannot distinguish the novel H1N1 influenza strain from seasonal influenza.
- Negative results of seasonal influenza tests should not be used to rule out H1N1 influenza.

Clinician Testing for Novel H1N1 Influenza

To ensure sufficient laboratory resources are available, please focus testing on the most severely ill and those most likely to have complications. **We request that only specimens from hospitalized patients or unexplained deaths in febrile patients be sent to the State Public Health Laboratory for influenza testing, except for facilities with other arrangements with the state laboratory.** Other reference laboratories will be able to test for influenza A and B and some may be able to differentiate the novel strain from seasonal influenza.

Recommendations

- Test patients for influenza who are **hospitalized, including those with severe, unexplained, febrile respiratory illness** (e.g., pneumonia, acute respiratory distress syndrome, respiratory distress).
- **Send specimens to the state laboratory for patients hospitalized for at least 24 hours with an influenza-like illness (defined as fever [$>100^{\circ}\text{F}$ (37.8°C)] and cough and/or sore throat in the absence of a known cause) OR for unexplained deaths with febrile illness.**
- Consider routine influenza testing for patients with influenza-like illness (defined as fever [$>100^{\circ}\text{F}$ (37.8°C)] and cough and/or sore throat in the absence of a known cause) who meet one or more of the following criteria:
 - Patients with underlying chronic conditions
 - Pregnant patients
 - Patients ≥ 65 years and < 5 years of age
 - Patients for whom test results would affect clinical decision-making
- We DO NOT recommend influenza testing for persons with mild illness
- Clinical laboratories may conduct rapid test screening for influenza A, although a negative test results do not necessarily rule out influenza. It is NOT necessary to use BSL-2 safety precautions to perform screening tests.

Directions for Sending Specimens to the State Public Health Laboratory

- The hospital's laboratory should forward the specimens to Arizona State Public Health Laboratory (ASPHL) in a universal viral transport medium (e.g., Hank's medium). Acceptable specimens for influenza testing are nasopharyngeal (NP) or oropharyngeal (OP) swabs, or NP or OP aspirates. Swab specimens should be collected only on swabs with a synthetic tip (such as polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate will be rejected.

- **Specimens must be accompanied by an ASPHL specimen submission form** completed by the clinician in a separate (but attached) bag from the specimen. **The word “hospitalized” or “death” MUST be written on the submission form to avoid being rejected.** The specimen submission form can be found at the following link:
<http://www.azdhs.gov/lab/micro/submissionform3.pdf>
- A positive rapid test is not required for specimen submission to the state laboratory.

Treatment & Prophylaxis

- Severely ill patients and patients at high risk for influenza complications should receive priority for antiviral treatment as early as possible.
- The U.S. novel H1N1 influenza isolates are sensitive to oseltamivir and zanamivir, and resistant to amantadine and rimantadine.
- The adult treatment dose for oseltamivir is 75 mg twice a day for 5 days.
- Zanamivir treatment dosage is two puffs twice a day for 5 days.
- For further information on treatment and chemoprophylaxis, please refer to <http://www.cdc.gov/h1n1flu/recommendations.htm>
- For further information on treatment of pregnant patients and children, please refer to “Children and Pregnant Women: Considerations for Clinicians” at <http://www.azdhs.gov/flu/h1n1/providers.htm>.
- For further information on treatment of children, please refer to <http://www.cdc.gov/h1n1flu/childrentreatment.htm>

Interim Infection Control Recommendations for Health Care Workers (HCWs)

For all patients with a febrile respiratory illness (i.e., not only suspect/confirmed H1N1 cases):

- Practice good hand hygiene (patient and staff)
- Practice good respiratory hygiene (patient and staff)
- Practice standard precautions (i.e., treat all body-fluids as potentially infectious, including stool; wear gown, gloves, mask and eye-protection if risk of contact or splash)
- Wear surgical mask within 6 feet of a patient with a febrile respiratory illness.
- **If conducting aerosol-generating procedures (e.g. endotracheal intubation, cardiopulmonary resuscitation, open endotracheal suctioning), wear:**
 - **N-95 respirator** (fit-tested) or PAPR;
 - Eye-protection (face-shield or goggles); AND
 - Gown and gloves (all persons in the room).
- Isolation precautions (as outlined above) should be continued for seven (7) days from symptom onset or until the resolution of symptoms, whichever is longer.
- Patients with influenza-like illness should be instructed to stay out of school or work until fever free for 24 hours without taking fever reducing medication.
- Hospitalized patients who have been treated for confirmed H1N1 no longer require special infection control precautions if they still require mechanical ventilation 10 days after onset of symptoms AND have one negative PCR (endotracheal aspirate). Please write “**isolation clearance**” on specimens submitted for this purpose.
NOTE: Persons with suppressed immune systems could shed virus for prolonged periods and should remain in isolation precautions throughout their hospitalization.
- See detailed ADHS interim infection control recommendations at <http://www.azdhs.gov/flu/h1n1/pdfs/providers/ADHSInfection%20Control%20Guidance7-7-09.pdf>

Resources: **CDC H1N1 Influenza Site:** <http://www.cdc.gov/h1n1flu/>
ADHS H1N1 Influenza Site: <http://www.azdhs.gov/flu/h1n1/index.htm>