

Swine Flu Update #6

National Surveillance Strategy – Centers for Disease Control and Prevention

Surveillance efforts by the Centers for Disease Control and Prevention (CDC) in the recent emergence of novel H1N1 (previously Swine Flu) have shifted from the initial priority of identifying new cases of novel H1N1 to monitoring the outbreak to detect mutations in the H1N1 virus that might increase its virulence. Currently, CDC is requesting states to report weekly aggregated confirmed and probable cases of novel H1N1 and related deaths.

In addition to this case reporting, CDC is accepting (optional) a weekly line listing of cases of novel H1N1 from the states. The line listing contains state and laboratory identifiers, gender, date of birth, type of laboratory the specimen was submitted to, county the case is residing, whether the case was hospitalized, and if the case died as a complication of novel H1N1.

The Case Definition for National Surveillance

A confirmed case of novel H1N1 is a person with an influenza-like illness with laboratory confirmed novel influenza A (H1N1) virus infection by one or more of the following tests: real-time RT-PCR, or viral culture.

A probable case is defined as a person with an influenza-like-illness who is positive for influenza A, but negative for human H1 and H3 by influenza RT-PCR. CDC is also requiring states to report the number of novel H1N1 related deaths.

Southern Nevada Health District Surveillance

The Southern Nevada Health District (SNHD) reports its influenza surveillance data to the State Health Division which reports the aggregated state data and the optional line listing to CDC. SNHD also provides weekly updated information on the number of confirmed and probable cases of novel H1N1 through media releases and our website:

www.southernnevadahealthdistrict.org. In accordance with CDC recommendations, the SNHD is monitoring hospitalized patients who have influenza

A (H1N1) in an effort to determine who is being most severely affected, monitor the severity of the outbreak, and obtain viral specimens that can be tested to see if the virus has mutated.

Testing

Most persons who become ill with influenza have mild illness and do not seek medical attention; therefore it is not possible to use results of routine diagnostic testing to identify the extent of disease transmission in the community. In addition, clinicians do not need to perform laboratory testing to confirm the diagnosis for all persons who seek medical care for influenza-like-illnesses.

There are several different types of laboratory tests that are used to diagnose influenza infection. Clinicians using rapid diagnostic tests as part of their evaluation of patients with signs and symptoms compatible with influenza should interpret the results of rapid tests with caution. Rapid tests provide quick results, but CDC reports that rapid tests have both false negative and false positive results. Specific diagnostic tests, such as real-time RT-PCR or viral culture, which are more sensitive, are available from commercial laboratories.

Specific testing for novel H1N1 influenza is performed for surveillance and epidemiological purposes at the Southern Nevada Public Health Laboratory (SNPHL) for cases approved by the SNHD Office of Epidemiology for testing. The criteria for testing at SNPHL are:

Patients hospitalized for severe influenza-like-illness with a documented fever >100.4°F and Respiratory Distress/Pneumonia with pneumonia on chest X ray, or pO₂ under 60 on room air or pO₂ under 70 on 40% O₂, or the patient requires mechanical ventilation. Specific laboratory testing can be performed by the SNPHL on these patients regardless of influenza A rapid test results.

Health care practitioners requesting novel H1N1 testing at SNPHL for hospitalized patients who meet the

criteria listed above should contact the SNHD Office of Epidemiology (OOE) at 759-1299 to receive testing approval and arrange for sample collection and pickup. Testing at SNPHL will be performed as batch testing and may take up to five days from receipt to complete.

If testing is not approved by the OOE, there are commercial laboratories such as Quest which can perform diagnostic novel H1N1 influenza molecular testing (Quest swine flu test code = 16807) if the healthcare practitioner requests testing.

Reporting

Hospitalized patients who test positive for influenza A or novel H1N1 and have severe disease should be reported to SNHD by telephone at 759-1299 and by fax at 759-1414.

Patients who test positive in the community setting should be reported by fax to the Office of Epidemiology at 759-1414 using standard communicable disease reporting forms (available on the physician information section of the SNHD website at http://www.southernnevadahealthdistrict.org/physician/physician_only.htm).

For More Information

Updates on the progress in the investigation and any additional recommendations will be posted on the SNHD website at <http://www.southernnevadahealthdistrict.org/outbreaks/swine-flu-index.htm> and the CDC website at <http://www.cdc.gov/h1n1flu/>.