



November 6, 2015

Health Advisory

Legionnaires' Disease Cluster Being Investigated

Providers Asked to Report Cases

The North Dakota Department of Health (NDDoH) is investigating two possible travel-related cases of Legionnaires' disease. Two unrelated people developed Legionnaires' disease within ten days of staying at the same hotel in Ward County in September. Both cases required hospitalization.

The NDDoH is asking providers who are treating hospitalized cases of community acquired pneumonia to ask their patients about overnight travel to and hotel stays in Ward County. Legionnaires' disease with appropriate testing should be considered for patients presenting with community acquired pneumonia with a hotel exposure within 10 days of the onset of illness.

Several testing options are available for the detection of infections due to *Legionella pneumophila*. These include:

- Culture of lower respiratory specimens. While culture can detect all the different serogroups of *Legionella*, the organism is difficult to grow and yield on culture can be poor.
- Urine antigen testing is widely available but detects only serogroup 1, which is the serotype most commonly associated with disease.
- Acute and convalescent serology with a 4-fold rise in titer is diagnostic. Convalescent serum should be collected three to six weeks after the acute phase serum. Many serum antibody tests only detect antibodies to serogroup 1.

Providers should consult with their laboratories to determine what testing is available to them. The NDDoH's Division of Laboratory Services offers culture and DFA on appropriate specimens.

Patients with Legionnaires' disease generally present with a pneumonia and non-productive cough. The illness is generally severe enough to require hospitalization. Certain groups of people are at increased risk for Legionnaires' disease and more severe outcomes. These include:

- people ages > 50 years
- current or past smokers
- people with chronic lung disease, diabetes, renal disease or are immunocompromised.

Treatment with a respiratory quinolone such as levofloxacin or a macrolide (azithromycin) is indicated.

Providers should report cases to the NDDoH by calling 1.800.472.2180 or 701.328.2378. For questions regarding laboratory testing, providers can call 701.328.6272.