

**TO:** Vermont Health Care Providers, Hospitals and Clinics

**FROM:** Laura Ann Nicolai, MPH, Deputy State Epidemiologist

## **New Hampshire Legionnaires' Disease Outbreak**

Outbreak in Hampton, NH - Vermont Residents Exposed

### **Summary**

The New Hampshire Department of Health and Human Services (DHHS) is investigating cases of Legionnaires' disease (including one confirmed Vermont case) associated with travel to Hampton, NH from June to August 2018. There have been 15 confirmed cases reported including 13 hospitalizations and 1 death; additional potential cases are under investigation. The cases report overnight stays at several different locations in a small area of Hampton Beach. However, more than half report staying at the Sands Resort in Hampton, NH. The New Hampshire DHHS has sent notification letters to guests who are known to have stayed at this property since August 3, based on hotel records. Guests reside in 17 states (including Vermont) and Canada. More than 100 Vermonters are receiving this letter.

### **Diagnosis and Transmission**

Legionnaires' disease is caused by *Legionella* bacteria. Clinical features of Legionnaires' disease include cough, fever, and radiographic pneumonia. Signs and symptoms are similar to pneumonia caused by other pathogens; the only way to confirm the etiology is through specific diagnostic testing. *Legionella* can also cause a milder illness, called Pontiac fever. Symptoms of Pontiac fever are primarily fever and muscle aches.

While *Legionella* is found in natural, freshwater environments, it can become a health concern in human-made water systems (e.g., plumbing systems of large buildings, cooling towers, decorative fountains, hot tubs) where conditions allow it to multiply and come in contact with vulnerable persons. People contract *Legionella* by inhaling aerosolized water droplets containing the bacteria, or, less commonly, by aspiration of contaminated drinking water.

### **Requested Actions:**

- 1. Consider and test for *Legionella*** when evaluating clinically compatible illnesses in patients with history of travel to Hampton Beach. The preferred diagnostic tests for Legionnaires' disease are culture of lower respiratory secretions (e.g., sputum, bronchoalveolar lavage) on selective media and the *Legionella* urinary antigen test. Best practice is to obtain both sputum culture and a urinary antigen test concurrently. Sputum should be obtained prior to antibiotic administration, but **treatment should not be delayed**. The urinary antigen test can detect *Legionella* infections for days to weeks after treatment. Clinical *Legionella* isolates are valuable for comparison with environmental isolates when conducting outbreak investigations. Specimens for both urinary antigen and sputum culture may be submitted to the Vermont Department of Health Laboratory.
- 2. Report all suspected and confirmed cases** of Legionnaires' disease or Pontiac fever to the Vermont Department of Health Infectious Disease Epidemiology program at 802-863-7240 (24/7). Health Department staff are available to provide guidance and answer questions.