

**TO:** Health Care Providers  
**FROM:** Mark Levine, MD, Commissioner of Health

## **Lyme Carditis and Sudden Cardiac Death**

### **– Please Distribute as Appropriate –**

Laboratory results from the Centers for Disease Control and Prevention (CDC) have confirmed that the recent death of a Franklin County resident was a result of Lyme carditis, a rare complication of Lyme disease. This is the first reported death due to Lyme carditis in Vermont. Between 1985 and 2014 there were nine deaths related to Lyme carditis reported worldwide.

The Health Department issued a [Health Advisory](#) on December 13, 2013 following a CDC report about sudden cardiac death associated with Lyme carditis. Symptomatic infection of the heart is rare in recognized Lyme disease cases. Approximately 1 percent of reported cases have Lyme carditis, which is usually present with other features of Lyme disease but can be observed independently. It is more common among males than would be expected based on the gender distribution of patients with clinical manifestations of Lyme disease.

- Vermont Health Advisory:  
[http://www.healthvermont.gov/dec2013\\_healthadvisory](http://www.healthvermont.gov/dec2013_healthadvisory)
- CDC report:  
[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6249a1.htm?s\\_cid=mm6249a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6249a1.htm?s_cid=mm6249a1_w)

The most common cardiac manifestation is atrioventricular block (first, second, or third degree). Symptoms of atrioventricular block include lightheadedness, palpitations, shortness of breath, chest pain and syncope. Some cases might require temporary pacing, although prognosis is excellent with appropriate antibiotic therapy.

Lyme disease is endemic in Vermont. Place carditis symptoms in context during the spring, summer and fall seasons.

### **Actions Requested:**

- If you suspect Lyme disease, treat with antibiotics according to current treatment guidelines: <https://www.cdc.gov/lyme/treatment/index.html>
- Ask all patients with suspected Lyme disease about cardiac symptoms.
- Consider Lyme disease as a possible cause of unexplained, sudden cardiac events, and ask patients with acute, unexplained cardiac symptoms about possible tick exposure and symptoms of Lyme disease.
- Talk to patients about preventing tick bites.
- Report cases of Lyme disease to the Health Department at (802) 863-7240.

**For more information:** [http://www.cdc.gov/lyme/signs\\_symptoms/lymeCarditis.html](http://www.cdc.gov/lyme/signs_symptoms/lymeCarditis.html)

**HAN Message Type Definitions**

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service Message: Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.