Lyme Disease Information for Providers
Advisory for Diagnosis of Lyme Disease

Additional Notes:

Only about 80% of Lyme disease patients have an erythema migrans rash. The rash may take a bull's-eye appearance.
http://www.cdc.gov/ncidod/dvbid/lyme/ld_LymeDiseaseRashPhotos.htm

Lyme disease is reportable by laboratories. Health care providers are also required to report cases to the Vermont Department of Health, even without laboratory confirmation (i.e., a patient with an erythema migrans rash).

The Clinical Assessment, Treatment and Prevention of Lyme Disease, Human Granulocytic Anaplasmosis, and Babesiosis: Clinical Practice Guidelines by the Infectious Diseases Society of America (http://www.journals.uchicago.edu/CID/journal/issues/v43n9/40897/40897.html) identifies four criteria for Lyme prophylaxis. They are:

(a) the attached tick can be reliably identified as an adult or nymphal *I. scapularis* tick that is estimated to have been attached for ≥36 hours on the basis of the degree of engorgement of the tick with blood or of certainty about the time of exposure to the tick;
(b) prophylaxis can be started within 72 hours of the time that the tick was removed;
(c) ecologic information indicates that the local rate of infection of these ticks with *B. burgdorferi* is ≥20%; *and*
(d) doxycycline treatment is not contraindicated.

Eleven of Vermont's 14 counties meet the CDC's 1996 definition of endemic (i.e., a county in which at least two confirmed cases have been previously acquired or in which established populations of a known tick vector are infected with *B. burgdorferi*.). Ten of the 11 counties meet that definition because of human cases, while we have sufficient tick data on the 11th county so that it meets the definition even without two documented human cases. In all 11 Vermont counties where Lyme is endemic, healthcare providers should assume that at least 20% of *I. scapularis* are infected. With this assumption, and if the other three criteria have been met, it would be reasonable to provide Lyme prophylaxis; this decision is left to the healthcare provider's discretion.