Health Advisory
February 13, 2015

To: Vermont Healthcare Providers

From: Patsy Kelso PhD, State Epidemiologist for Infectious Disease

Tuberculosis Guidance

Background
An employee at Charlotte Central School has been diagnosed with active pulmonary tuberculosis (TB). The employee was likely infectious since the beginning of the school year. The same individual also worked at the Freedom Rains Children’s Center in Colchester. The Health Department is conducting an investigation to identify children or employees at both locations who may have been infected as a result of exposure to this individual. In addition to the contacts at these two sites, the Health Department has investigated a small number of family and community contacts. To date no additional cases of active TB have been diagnosed.

Freedom Rains Children’s Center Investigation
Children and staff at the child care facility who had contact with the case had baseline tuberculin skin tests (TSTs) at the end of January. All tests were negative. Based on the dates of possible exposure, these tests serve as a baseline. Because these children are under 5 years of age, and therefore more susceptible to TB disease, they also received medical evaluation, chest radiographs, and prophylaxis with isoniazid while awaiting a follow-up test. A second testing clinic will be offered eight to 10 weeks after the last exposure. Prophylactic treatment will be discontinued for healthy children who have a negative second test.

Charlotte Central School Investigation
Initial test results for 150 students and adults believed to be the highest risk contacts at the school indicated that transmission had occurred to eight individuals (seven students and one adult). In consultation with experts at the Global Tuberculosis Institute at Rutgers and the University of Vermont Medical Center, the Health Department determined that the rest of the student population could also be at risk and should also be tested. As of February 13, 451 children and adults at the school have been tested and 18 have been positive. A public health nurse called the parents or guardians as positive results were read at school-based clinics. Public health nurses also contacted the primary care providers for each child with a positive result to discuss the necessary follow-up for latent TB infection (LTBI). All positive and negative results were faxed to primary care providers. Negative TSTs will be repeated eight to 10 weeks after the last exposure.

Health Department Guidance
- The employee at Charlotte Central School was believed to be highly infectious. In this high-risk situation, all students at Charlotte Central School are considered contacts to the index case. Therefore, a TST induration of \( \geq 5 \) mm is considered positive.
• TST results are adequate for determining whether individuals have been infected. The Health Department does not recommend routine Interferon Gamma Release Assay (IGRA) testing in individuals who have already had a TST. With a known infectious index case and a group of children unlikely to have been previously exposed, a TST >5 mm requires medical follow-up regardless of the IGRA result if that test was done.

• Adults and children found to have a positive TST should promptly get a chest radiograph, regardless of symptoms.

• Current guidelines from the Centers for Disease Control & Prevention recommend treatment with nine months of isoniazid (INH) for people with LTBI. LTBI treatment information is available at: http://www.cdc.gov/tb/publications/LTBI/default.htm.

• Children and adults with a positive TST and an abnormal chest radiograph should be evaluated in the context of their symptoms (if any), general health, skin test result, and specific chest radiograph findings. Options may include beginning therapy for active TB or close follow-up with repeat chest radiograph.

Symptoms of active TB in adults may include cough of more than three weeks duration, fatigue, hemoptysis, weight loss, night sweats, and/or unexplained fever and chills. Symptoms in young children can be less specific, but can include cough of more than three weeks duration, and weight loss (failure to thrive).

Please notify the Health Department’s TB Program of any clinical findings of concern by calling 802-863-7240.

For questions regarding your patient(s) who are affected by this TB exposure, the Health Department’s TB consultant, Dr. Kemper Alston, is available by email at Wallace.Alston@uvmhealth.org. Alternatively, you can reach an infectious disease consultant through the UVM Medical Center Provider Access Service (802-847-2700).

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.