

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 briefly 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, and follow-up tests in mid-March (with the exception of one adult who has not yet had a follow-up test). All tests were negative and no additional follow-up is indicated for these contacts.

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 in 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 should also be considered at risk, and should also be tested. As a result, testing was offered to the remainder of the student and employee populations. In total, over 450 children and adults at the school received a baseline test between late January and early February. A small number of adults and children had TST or Quantiferon (QFT) testing performed by their primary care providers. A total of 18 were positive (16 students and two adults).

Negative TSTs will be repeated at the school the week of March 30. If your patient(s) had only QFT testing at baseline, QFT is the recommended follow-up test. The Health Department is not collecting specimens for QFT at school-based clinics, so these tests need to be arranged through primary care providers.

Since these tests are being conducted 10 weeks after the last exposure to the case, no additional follow-up is indicated for those who test negative. A public health nurse will call the parents or guardians as any positive results are read at school-based clinics. Public health nurses will also contact the primary care provider for each adult or child with a positive result to discuss the necessary follow-up for latent TB infection (LTBI). All positive and negative results will be mailed to primary care providers.

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 ≥ 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).

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.