

Tuberculosis Contact Investigation at an Island Resort – Michigan, 2014

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Summary: At an island resort in Michigan, a foreign-born seasonal worker came down with tuberculosis -- but the case went undiagnosed for 3 months despite multiple doctor visits. 25 contacts required screening. Doctor education and increased testing may help.

Abstract:

Background: During August 2014, a foreign-born hotel employee on an island in Michigan, with smear-positive, drug-susceptible, tuberculosis (TB), was reported to public health authorities and offered treatment. The resort island has a predominantly seasonal workforce, often foreign-born persons visiting on temporary work visas without TB-screening requirements. We investigated contacts at risk for Mycobacterium tuberculosis infection to prevent further cases.

Methods: We interviewed the index patient and employer to find contacts. Contacts at highest risk for disease (defined as employees who worked the same shift as the index patient, visited the patient ³ 1 time/week in their dormitory, or had TB predisposing medical conditions) were screened by using an interferon-gamma release assay (IGRA). Persons with positive results were examined by chest radiograph.

Results: Among 102 contacts identified, 26 (25%) met ³ 1 criterion for IGRA screening. Of those persons screened, 17 (65%) were female; median age was 24 (range: 21–63) years. Twenty-three (88%) of screened contacts were foreign-born. Of 14/26 (54%) persons with positive results, 11 (79%) were from South Africa; 2 (14%) were U.S.-born; and 1 (7%) was from Jamaica. Five/14 (36%) contacts reported having received a prior TB test, all with negative results, and 3 (21%) reported prior TB exposure. Chest radiographs did not reveal signs of active disease, and all 14 IGRA-positive contacts started treatment for latent TB infection (LTBI).

Conclusions: We identified 14 contacts with LTBI; however, we cannot distinguish between recent transmission and prior infection because the majority of infected contacts were from the high-TB-incidence country of South Africa. We recommended that island employers implement preemployment TB screening to prevent importation of TB disease among foreign-born seasonal employees.