TORONTO
Public Health

Tuberculosis among Toronto's Homeless and Underhoused Community in 2012

A total of six cases of tuberculosis (TB) were diagnosed in 2012 among Toronto's homeless/underhoused community. Of the six cases, one was female and the others were male, 5 had pulmonary tuberculosis, and one had pulmonary and extrapulmonary disease. Four cases were Canadian-born non-Aboriginal, and the other two cases were born outside of Canada- one in Eritrea and the other in Mexico (Table 1). Four cases had fully sensitive tuberculosis, one had an INH-resistant strain, and one case did not have strain sensitivity data available.

Toronto cases were included in this summary if they were diagnosed with tuberculosis in 2012; and their risk setting was "shelter" or "homeless shelter day drop-in/day program use", or risk factor was "underhoused/homeless". This includes cases with historical use of shelters currently living in rooming houses.

Method of Detection: All six cases self-presented for medical attention due to symptoms.

Outcomes: As of July 19 2013, one case had died of a reason other than tuberculosis. A second case died with tuberculosis as a contributing factor but not the cause of death; this client was HIV positive and was immunocompromised due to AIDS. One case has successfully completed treatment, and the remaining three cases are still completing their TB treatment.

Table 1. Tuberculosis Cases in Toronto's Homeless and Underhoused Community, 2012. (n=6)

Variable	N (%)
Gender	
Male	5 (83)
Female	1 (17)
Average age at diagnosis (range)	50 (28-67)
Site of infection	
Pulmonary only	5 (83)
Pulmonary + extrapulmonary	1 (17)
Origin	
Canadian-born non Aboriginal	4 (67)
Born Outside of Canada	2 (33)

Contact Follow-up: The homeless/underhoused cases reported in 2012 had a total of 54 contacts reported (median 6 contacts /case). Of the 54 contacts, 47 were located, and 40 had some sort of testing (either a skin test and/or a chest x-ray and/or a sputum sample). Two eligible contacts started prophylactic therapy.

In addition to case management and contact follow-up, the TB Homeless/Corrections team also provided 11 TB education sessions and 16 active case finding screening clinics at specific homeless shelters and drop-ins. At these clinics, clients are screened for symptoms of TB and sputum samples taken for clients who were potentially symptomatic or who were known contacts of TB cases within the last 2 years. At the active case finding clinics held in 2012, a total of 354 people participated in screening, and public health staff collected sputum samples from 41 individuals; all these were negative.

In mid-2012 routine active case finding clinics (ACF) were put on hold pending a review of their outcomes and recommendations re next steps. The review concluded that:

- ACF clinics are a useful tool for early case detection when the prevalence of pulmonary TB cases is sufficiently high, such as during an outbreak.
- Although ACF clinics have been held at homeless service sites where active TB cases are being identified, no cases of active TB have been found using this method since 2005 Over the last 6 years the two main methods of detection of homeless active TB cases have been through public health contact follow-up; and through the individual seeking medical care for active TB symptoms (Note; Shelter staff played a key role in initiating diagnosis/medical care for several TB cases).
- Discontinuing routine ACF clinics in Toronto at this point – 8 years after the last shelter outbreak - is likely to have minimal impact on case detection in the homeless community.

Therefore in January 2013, it was decided to discontinue routine active case finding clinics. Active case finding clinics will nevertheless continue to be a TB program tool for use in specific situations such as if there is a cluster of active TB cases identified which are linked to a particular site. Meanwhile, the TB Homeless/ Corrections team has increased the frequency and number of shelter and drop-in sites receiving TB education sessions annually in order to continue to maintain the linkages developed with the shelter users and staff over the past decade.