

## **Tuberculosis among Toronto's Homeless and Under-housed Community in 2015**

The following report provides a summary of tuberculosis cases among Toronto's homeless and under-housed community in 2015. Cases were included in the analysis if the client was diagnosed in Toronto in 2015 and the reported risk setting at diagnosis was "shelter", or "homeless shelter day drop-in/day program use", or risk factor was "under-housed/homeless". Cases with a historical use of shelters and living in rooming houses were included.

## Case Summary

A total of six cases of tuberculosis (TB) were diagnosed in 2015 among Toronto's homeless and under-housed community. Figure 1 shows the number of cases in this community from 2005 to 2015.

Number of cases Year of diagnosis

Figure 1: Number of Homeless, Underhoused and Shelter-Associated Tuberculosis Cases by Year of Diagnosis, Toronto Public Health, 2005 - 2015

Table 1 shows a summary of the method of detection, diagnosis, demographic characteristics and treatment status of the six TB cases identified among this population. Five cases were identified through symptom identification. One case was identified as a result of active case finding (ACF) at a shelter. Five cases had pulmonary TB; one case had extrapulmonary TB. Five cases were male. The average age of cases was 50 years. All clients were born in Canada except one client (from Romania). All six cases completed treatment as recommended and were on directly observed therapy (DOT) for the entire length of treatment.



Table 1: Tuberculosis Cases in Toronto's Homeless and Under-housed Community, 2015 (N=6)

| Method of detection           | n (%)            |
|-------------------------------|------------------|
| Symptoms                      | 5 (83)           |
| Targeted screening (i.e. ACF) | 1 (17)           |
| Site of infection             | n (%)            |
| Pulmonary                     | 5 (83)           |
| Extrapulmonary                | 1 (17)           |
| Gender                        | n (%)            |
| Male                          | 5 (83)           |
| Female                        | 1 (17)           |
| Age at diagnosis              |                  |
| Average (range)               | 50 (38-63) years |
| Origin                        | n (%)            |
| Canadian-born non Aboriginal  | 4 (66)           |
| Registered Status Indian      | 1 (17)           |
| Born Outside of Canada        | 1 (17)           |
| Treatment status              | n (%)            |
| Completed as recommended      | 6 (100)          |

## Contact Follow-up

Contact tracing for the 5 individuals with infectious TB identified 54 contacts (average of 9 contacts per case, range of 0-19 contacts). Fifty-one contacts (94%) were located; of these, 43 contacts completed one or more tests (i.e. skin test, chest x-ray, sputum sample). Only one contact was eligible for latent TB infection treatment; this contact started treatment. In addition to case management and contact follow-up, the Homeless and Corrections TB team also provided nine TB education sessions at specific homeless shelters and drop-ins.

## **Active Case Finding**

In addition to the six cases described in this report, there were a number of additional cases that did not meet the definition for this summary but had a past history of homelessness / being marginally housed, and also spent time in shelters, drop-ins and in the community (e.g. couch surfing, rooming houses) while infectious. This prompted Toronto Public Health (TPH) to re-initiate active case finding (ACF) at one shelter and three drop-in centres, as well as increase education and outreach within a specific community. Through these efforts, one active TB case (included in this report) was identified through ACF at the shelter; based on epidemiological and genotyping data, TPH determined that this individual did not acquire TB from residing in the shelter. However, the early detection of this case likely prevented further transmission in this population.