

## Tuberculosis among Toronto's Homeless and Underhoused Community in 2011

A total of 9 cases of tuberculosis (TB) were diagnosed in 2011 among Toronto's homeless/underhoused community. Of the 9 cases, all were male, six had pulmonary tuberculosis, and three had both pulmonary and extrapulmonary disease. Four of the cases were born outside of Canada, two were Canadian-born non-aboriginal, one was Aboriginal, and the place of birth was unknown for one case (Table 1).

Toronto cases were included in this summary if they were diagnosed with tuberculosis in 2011; and their risk setting was "shelter" or "homeless shelter day drop-in/day program use", or risk factor was "underhoused/homeless". This includes several cases with historical use of shelters currently living in rooming houses. Five of the cases had a strain found historically in both the homeless and general populations in Toronto, and three had another common strain that periodically circulates in the Toronto homeless population (neither of these were the strain involved in the 2000/2001 and 2004/5 outbreaks). The final case had a unique strain. The cases all had fully sensitive tuberculosis.

Method of Detection: Six of the cases self presented for medical attention, either due to symptoms of tuberculosis or other conditions. An additional two cases were found by contact tracing, relating to a case from 2010. The final case was diagnosed on post-mortem.

Outcomes: Three of the cases died, one prior to diagnosis and two just after diagnosis. Tuberculosis was the cause of death for all three, although they had other health conditions that may have contributed. One case remains on treatment, and the five other cases successfully completed treatment.

Variable	N (%)
<b>Gender</b>	
Male	9 (100)
Female	0
<b>Average age at diagnosis (range)</b>	48 (29-74)
<b>Site of infection</b>	
Pulmonary only	6 (67)
Pulmonary + extrapulmonary	3 (33)
<b>Origin</b>	
Canadian-born non Aboriginal	3 (33)
Aboriginal	1 (11)
Born Outside of Canada	4 (44)
Unknown	1 (11)

Contact Follow-up: The homeless/underhoused cases reported in 2011 had a total of 102 contacts reported. Of the 102 contacts, 80 were located, and 65 had some sort of testing (either a skin test, chest x-ray, or sputum sample). Two of the eligible contacts started prophylactic therapy.

In 2011 the Homeless Team conducted additional follow-up on identified contacts who in 2010, had been exposed to a homeless client diagnosed with highly infectious TB. The majority of these high risk contacts were not candidates for prophylactic therapy. The Homeless Team worked in collaboration with the staff of the TB Clinics at St Michael's Hospital and Toronto Western Hospital to reassess these contacts every 6 months for a period of two years after their exposure. 47 out of 48 of these additional contacts were provided with some sort of repeat testing during this time (skin tests, chest x-rays, and/or sputum samples).

As well as case management and contact follow-up, the homeless and corrections TB team provided active case finding clinics and education sessions.

Sixty-three active case finding screening clinics were held at specific homeless shelters and drop-ins. At these clinics clients were screened for symptoms of TB; clients who were potentially symptomatic or who were known contacts of cases within the last 2 years had sputum samples taken. At the active case finding clinics held in 2011, staff screened a total of 1293 people, and took 257 sputum samples, all of which were negative. 130 contacts of active TB cases were also located at the active case finding clinics.

A total of seven education sessions were held in a variety of settings, including homeless shelters, drop-in centres, and agencies that provide services to homeless and underhoused clients.