



## Tuberculosis Screening in Long-Term Care & Retirement Homes

### Frequently Asked Questions

#### 1. Why are TB skin tests (TSTs) no longer recommended for residents' age 65 years and over?

According to the Canadian Tuberculosis Standards (CTS), 7<sup>th</sup> edition (2013), the following people should undergo **baseline posterior-anterior and lateral chest x-rays** prior to being admitted to long term care/retirement homes:

- Those born in Canada before 1955;
- Aboriginal Canadians;
- Those who were born or previously resided in a country with high TB incidence.

In addition to chest x rays and a symptom review for active respiratory TB disease, a **2-step TST is required** for those residents who are less than 65 years of age, unless a previous TST is known to be positive.

Routine TSTs on admission are no longer recommended for clients 65 years of age and older. As people age, their immune systems become less robust making the skin test a less reliable indicator of past TB exposure.

#### 2. What is recommended for residents being transferred from another facility?

Prior to transfer, the resident should be carefully reassessed for signs and symptoms of active TB, including failure to thrive. The reassessment should include a review of the chest x-ray previously done upon admission to the facility or any more recent radiology. The active TB screening checklist for clinicians may be used to guide the symptom and chest x-ray review. If there are any indications of active TB, a repeat chest x-ray, sputum testing, and any other necessary investigations should be done to rule out disease before the resident is transferred. Suspect disease should also be reported to public health.

#### 3. What if a new employee/volunteer had a 2-step TST done, but the 1st and 2nd steps were done more than 4 weeks apart?

The two-step TST is used to detect people with past TB infection who now have diminished skin test reactivity. This procedure reduces the likelihood that a boosted reaction is later interpreted as a new infection. According to the CTS, 7<sup>th</sup> edition (2013), the 1st and 2nd step of a 2-step TST should be done 1-4 weeks apart. If they are done less than 1 week apart, the immune system does not have a chance to respond properly to the antigen; more than 4 weeks between steps increases the chances of the person being exposed to TB and experiencing a true TST conversion. However, the 2nd test can be accepted up to 1 year later as long as there is a high likelihood that no exposure to active TB occurred in the time frame between steps.

**4. What if an employee/volunteer has never had a 2-step TST done, but had a 1-step TST done within this past year?**

If the previous TST result was positive ( $\geq 10$  mm), no further skin testing should be done. The person should proceed with a physical exam and a chest x-ray to rule out active TB. If the previous TST was negative, another 1-step can be done and accepted as the 2<sup>nd</sup> step of a 2-step TST as long as the 1st step was completed less than a year ago. It is important to assess the likelihood of the employee being exposed to TB since the last TST was done. If a subsequent exposure is suspected, the 2nd TST should be done at least 8 weeks after the exposure date to provide a reliable baseline for future assessments.

**5. A resident had a CXR done 2 months ago but now has symptoms that could be due to active TB. Should a repeat CXR be done prior to admission to our facility?**

Yes. If the resident has symptoms suggestive of active TB (i.e. cough lasting longer than three weeks, unexplained weight loss, fever, chills, night sweats, fatigue), a current chest x-ray should be done to rule out the disease. In addition, 3 sputum samples should be collected at least one hour apart and submitted to the Public Health Laboratory for testing (Acid Fast Bacilli and Culture). All sputum results should be negative and active TB ruled out before the resident is admitted to the facility. If the resident has already been admitted, refer to the *Recommendations for TB Screening in Long Term Care and Retirement Homes*, specifically the section regarding "Management of Residents with Suspected Active TB Disease", for information about how to proceed.

**6. If a staff person has received the BCG vaccine in the past, does s/he still need a TST?**

Yes, TB skin testing is required for staff who received BCG vaccine(s) in the past. People vaccinated with BCG may have a positive TB skin test if the BCG was given after infancy. However it is also possible for their positive skin test to be caused by TB infection, especially if they were born in or travelled to countries with high rates of TB disease. It is worth remembering that countries with much higher rates of TB than Canada use BCG routinely and that BCG does not provide complete protection. Thus adults with a positive skin test who had a BCG vaccination should still be carefully evaluated for possible latent TB infection (LTBI), and be offered treatment their infection if appropriate. Note: Interferon-gamma release assays (IGRAs) may be useful in confirming a positive TST in low-risk health care providers who are found to be TST positive on baseline TST. IGRAs are more specific than the TST in populations vaccinated with BCG, especially if BCG is given after infancy or multiple times.

**The following resources may be helpful in interpreting a positive TST:**

- On-Line TST/IGRA interpreter may be found at <http://www.tstin3d.com/>
- BCG World Atlas – A Database of Global BCG Practices and Policies may be found at <http://www.bcgatlas.org>
- International TB rates by country at <http://www.phac-aspc.gc.ca/tbpc-latb/indexeng.php>

Reference: Public Health Agency of Canada & the Lung Association (2013). Canadian Tuberculosis Standards (7th Ed.). Adapted from Peel Public Health, 2013