



Tuberculosis Assessment and Testing of Long-term Care Residents

Assessment and Testing of Residents upon Admission

- 1. Each resident must have a health assessment upon admission**, including significant past or present infectious diseases and signs and symptoms of tuberculosis (TB). The medical record should include the assessment and a statement that the resident shows no evidence of TB in an infectious stage as verified upon admission. (See Tuberculosis Waiver Request in the *Related Resources/Links* section.)
- 2. Routine or baseline chest X-rays are not required or recommended prior to or at the time of admission.**
- 3. A tuberculin skin test must be completed within three months prior to admission or upon admission unless there is documentation of a previous positive TB test. Testing can be by tuberculin skin test (TST) method or an Interferon Gamma Release Assay (IGRA) blood test.**

Note on residents with previous positive TB test: Persons with a documented previous positive TST or IGRA should not undergo repeat testing unless a test result is in question. A positive test should have been followed by a clinical evaluation for TB that included a chest radiograph (X-ray). Results of that evaluation should be acquired by the facility and be in the patient's record. There is no time limit on this evaluation. For example, if there is documentation from 10 years ago indicating the resident had a positive test, a normal/negative chest x/ray, and a completed evaluation clearing them of TB disease, that is acceptable. If documentation of this evaluation cannot be obtained, a clinical evaluation with a chest radiograph should be performed. In the absence of symptoms, this can be delayed up to one week following admission.

Notes on testing by TST:

- The standard test method for the TST (sometimes called Mantoux test) is intradermal administration of 5 tuberculin units of purified protein derivative (PPD). The TST should be read at 48 to 72 hours.



- If an initial TST result is negative, a two-step TST procedure is required to “boost” a potential reaction that has waned over time to establish a reliable baseline. This second test should be performed within one to three weeks after the first test. If a recent (within the past year) negative TST result is documented, a single-step test is acceptable.
 - The TST must be administered and read by persons having documentation of training from a department-approved course of instruction in intradermal tuberculin skin testing, reading, and recording.
 - The medical record should include the result in millimeters (mm) of induration (actual swelling, not redness alone) with the date and time given, date and time read, and by whom it was administered and read. Absence of induration is recorded as 0 mm.
- 4. Evaluate residents with positive TB test results.** All residents with TST reactions of 10 mm or greater, using the two-step method where applicable, or a new positive IGRA, must have a chest X-ray and medical evaluation. (See *Medical Evaluation and Chest X-ray after Positive TB Test* section below.)

Medical Evaluation and Chest X-ray after Positive TB Test

- 1. Any asymptomatic resident with a new positive TST or IGRA must have a medical evaluation and chest X-ray within one week.**
- 2. For a resident with symptoms of pulmonary TB, and an abnormal chest X-ray consistent with TB disease, evaluation should be done as soon as possible with the patient in airborne transmission-based precautions.** This usually will require hospital admission. The medical evaluation should include three sputum specimens for acid fast smear and culture, collected at least eight hours apart, with at least one collected in early morning. At least one specimen should be sent for nucleic acid amplification (NAA) testing.
- 3. Screen residents with TB disease, or latent TB infection, for HIV infection.** Medical management of TB disease, or latent TB infection, may be altered in the presence of HIV infection.
- 4. Periodic chest X-rays of persons with a history of positive TST or IGRA are not advised and are *not necessary unless the individual develops signs and symptoms of TB disease.***



Notes on latent TB:

- Once TB disease is ruled out for a resident with a positive TB test, the resident should be considered and evaluated for treatment of latent TB infection according to current guidelines from the American Thoracic Society (ATS, <https://www.thoracic.org/>) and Centers for Disease Control and Prevention (CDC, <https://www.cdc.gov/tb/>).
- Document and prominently display the resident's latent TB infection status in the medical record.
- Latent TB infection is reportable to IDOH. Case reporting forms are available at the IDOH TB Control Program: <https://www.in.gov/health/tuberculosis/information-for-health-professionals/tb-reporting-forms/>

Repeat Assessment and Testing of Residents

Repeat TST or IGRA testing after an initial negative test only in the following circumstances.

1. An exposure to an infectious case of TB.
2. As a diagnostic aid when a resident is suspected of having TB disease.
3. When the long-term care facility has evidence of ongoing TB transmission within the facility.
4. Prior to a resident's initiating treatment with tumor necrosis factor-alpha (TNF- α) antagonists or other biologics that cause immunosuppression. In such cases, additional testing with multiple test platforms may be needed to help exclude latent TB infection.

Related Resources/Links

The following references provide education on the topic of assessment and testing for TB.

- [IDOH TB Control Program \(https://www.in.gov/health/tuberculosis/tb-control-program/\)](https://www.in.gov/health/tuberculosis/tb-control-program/)
- Health Facilities Rules, 410 IAC 16.2-3.1-18(d), requires each resident, prior to admission, has a statement that the resident shows no evidence of tuberculosis in an infectious stage. Facilities who meet the specific criteria detailed in the Guidelines for Preventing the Transmission of Tuberculosis in Health Care Settings, 2005 (see above), can request a waiver to admit residents with confirmed or suspected TB.



Information about the waiver and the Tuberculosis Waiver Request form are at <https://www.in.gov/health/files/patients-tb.pdf>.

- The CDC's article, [Testing for TB Infection](https://www.cdc.gov/tb/topic/testing/tbtesttypes.htm) (<https://www.cdc.gov/tb/topic/testing/tbtesttypes.htm>, March 2021), provides an overview of both the skin and blood (IGRA) tests and explains situations in which the IGRA test is preferred. At the bottom of the article are helpful links to fact sheets for residents and healthcare providers.
- Information about training in TB skin testing and validation can be found at <https://www.in.gov/health/tuberculosis/tb-skin-test-trainingvalidation/>
- For explanations of the difference between latent TB infection and TB disease (or TB disease and TB infection) , see the Indiana Department of Health's [Facts about Tuberculosis](https://www.in.gov/health/tuberculosis/facts-sheet/about-tb/) (<https://www.in.gov/health/tuberculosis/facts-sheet/about-tb/>) and/or the CDC article, [TB Disease and Latent TB Infection: Symptoms, Risk Factors and Treatment](https://www.cdc.gov/tb/features/riskfactors/RF_Feature.html) (https://www.cdc.gov/tb/features/riskfactors/RF_Feature.html, February 2021).
- Information on treatment of latent TB infection may be found at this this CDC February 2020 article, "Treatment Regimens for Latent TB Infection," <https://www.cdc.gov/tb/topic/treatment/ltbi.htm>
- Facilities should have a TB infection-control program designed to ensure prompt detection, airborne precautions, and treatment or prompt transfer of persons who have suspected or confirmed TB disease. The CDC article [Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm) (<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm>, 2005) is referenced in the Centers for Medicare and Medicare Services (CMS) State Operations Manual at F880.

