TB SCREENING OF HEALTH CARE PERSONNEL IN ARIZONA

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FREQUENTLY ASKED QUESTIONS:

TB Screening Requirements for Health Care Institutions Licensed by the State of Arizona

WHERE CAN I FIND TB SCREENING REQUIREMENTS FOR HEALTH CARE INSTITUTIONS?

- R9-10-113 covers **What** are the TB screening requirements for Health Care Institutions licensed by the State of Arizona.
  - *Note: Until the above link incorporates these updates, TB related text can be found here. As noted here, the new rules are effective as of May 4, 2022.*
- Refer to individual articles based on type of license to see **Who** is required to have TB screening. (For details, see Table 1 in Resource folder).

Note: The Arizona Administrative Code pertains to health care institutions licensed by the State of Arizona.

WHO NEEDS TO BE PART OF TB SCREENING WITHIN MY INSTITUTION?

Includes:

- Who Should be Screened
- By Type of Health Care Institution License
- Including Reference (within AAC)

For complete list, see Table 1 in Reference Packet

Type of License	Article	Reference (A.A.C.)	Who should be screened?
Hospitals	2	R9-10-206(6)(D) R9-10-207(B)(1) R9-10-230(4)(c-d)(5)(a-b) R9-10-233(1)	Documentation of evidence of freedom from infectious tuberculosis required in R9-10-230(5); A medical staff member provides evidence of freedom from infectious tuberculosis according to the requirements in R9-10-230(5); An individual providing environmental services who has the potential to transmit infectious tuberculosis to patients, as determined by the infection control risk assessment criteria in R9-10-230(4)(c), provides evidence of freedom from infectious tuberculosis:
Behavioral Health Inpatient Facilities	3	R9-10-306(E)	An administrator shall ensure that a personnel member, or an employee, a volunteer, or a student who has or is expected to have direct interaction with a participant for more than eight hours in a week, provides evidence of freedom from infectious tuberculosis:
Nursing Care Institutions	4	R9-10-406(E) R9-10-407(7 &8).	A personnel member, or an employee, a volunteer, or a student who has or is expected to have more than eight hours of direct interaction per week with residents Residents
Intermediate Care Facility for Individuals with Intellectual Disabilities	5	R9-10-506(F) R9-10-507(9&10)	A personnel member, or an employee, a volunteer, or a student who has or is expected to have more than eight hours of direct interaction per week with residents Residents(clients)

WHAT RESOURCES ARE AVAILABLE TO HELP IMPLEMENT TB SCREENING?

FAQ includes links to source documents.

1) 2019 MMWR
2) 2020 Companion Guide
3) 2005 Guideline (still useful)

- AAC updated to follow the latest recommendations stated in: Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019 https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a3.htm
- The 2020 Companion Document elaborates on **How** to implement CDC's 2019 recommendations (note that example documentation is available as hyperlinks throughout this document): https://acoem.org/acoem/media/PDF-Library/Publications/Tuberculosis_Screening,_Testing,_and_Treatment.pdf
- The 2005 Guideline remains a useful reference for preventing TB transmission in health care settings, as noted in the 2019 MMWR https://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf *Recommendations from the 2005 CDC guidelines that are outside the scope of health care personnel screening, testing, treatment, and education remain unchanged (Table); this includes continuing facility risk assessments for guiding infection control policies and procedures*.

WHAT ARE THE ESSENTIAL STEPS FOR TB CONTROL IN HEALTH CARE SETTINGS?

1. Baseline TB Screening
2. Baseline TB Testing
3. Annual Screening (if Untreated LTBI)
4. Annual TB Education for Health Care Personnel
5. Facility Risk Assessment
6. Contact Investigations

WHAT ARE SOME USEFUL DOCUMENTS AND REFERENCES FOR THE ESSENTIAL STEPS?

Note: These are not Arizona State Forms. These examples from the Companion Guide are available for reference and can be adapted to your institution's needs.

STEP ONE:
BASELINE TB SCREENING

Appendix 3 (or similar document) includes:

- TB risk assessment
- Symptom evaluation

Appendix 3. Integrated Tuberculosis (TB) Screening and Risk Assessment Form for Newly Hired HCP

Name: _____ **Date**:_____

Preferred Contact Information: _____

1. What position are you hired for? _____ What is your start date?_____

2. Have you EVER spent more than 30 days in a country with an elevated TB rate? This includes all countries except those in Western Europe, Northern Europe, Canada, Australia, and New Zealand.
   a. YES I have been in a foreign country for ≥30 days **(not including those listed above)**
   b. NO I have not been in any country for ≥30 days **except the ones listed above**

3. Have you had close contact with anyone who had active TB since your last TB test?
   YES / NO

4. Do you currently have any of the following symptoms:
   a. YES / NO unexplained fever for more than 3 weeks
   b. YES / NO cough for more than 3 weeks with sputum production
   c. YES / NO bloody sputum
   d. YES / NO unintended weight loss >10 pounds
   e. YES / NO drenching night sweats
   f. YES / NO unexplained fatigue for more than 3 weeks

5. Have you ever been diagnosed with active TB disease?
   YES / NO

6. Have you ever been diagnosed with latent TB infection *or* had a positive skin test *or* a positive blood test for TB?
   a. YES one or more of these is true for me
   b. NO none of these is true for me

7. Have you been treated with medication for TB *or* for a positive TB test (eg, taken "INH")?
   YES / NO
   If YES, what year, with which medication, for how long, and did you complete the treatment course?
   _____

8. Do you have a weakened immune system for any reason including organ transplant, recent chemotherapy, poorly controlled diabetes, HIV infection, cancer, or treatment with steroids for more than 1 month, immune-suppressing medications such as a TNF-alpha antagonist or another immune-modulator? (If you are not sure, ask your Occupational Health provider)
   a. YES, one or more of these is true for me
   b. NO, none of these is true for me

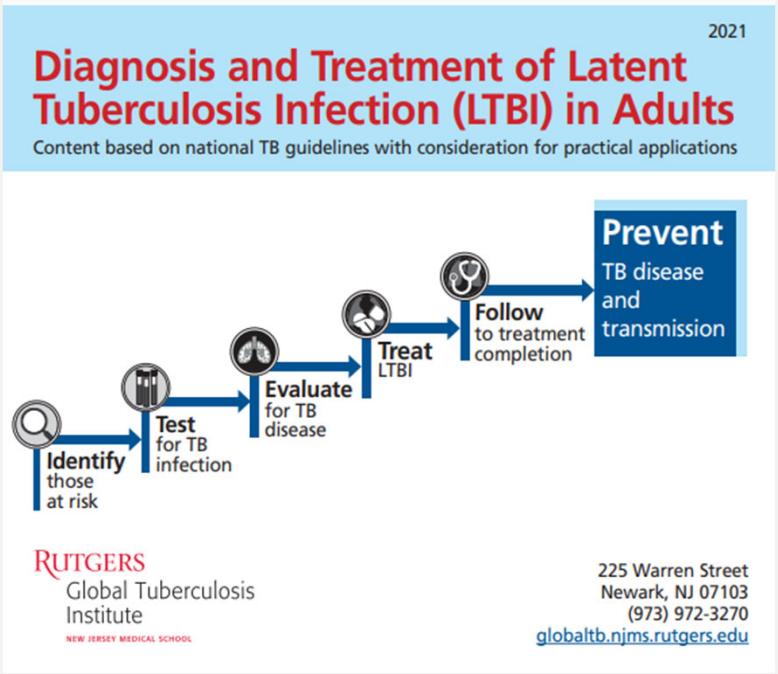
_____ _____
Occupational Health Reviewer Signature Date

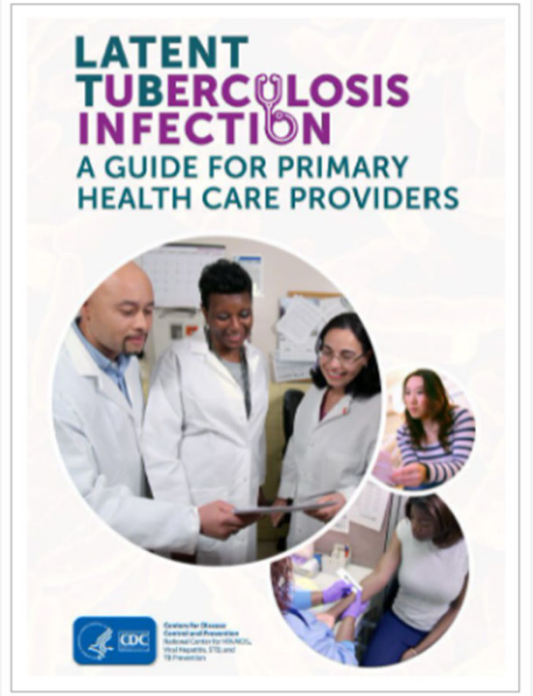
STEP TWO:
BASELINE TB TESTING

IGRA (blood test) or TST for those who do not have a prior history of TB infection or disease. https://www.cdc.gov/tb/topic/testing/healthcareworkers.htm For more FAQs: https://www.cdc.gov/tb/topic/infectioncontrol/healthcarepersonnel-faq.htm

CLINICAL RESOURCES AVAILABLE

www.azhealth.gov/tb





(NOT SO) BREAKING NEWS

COVID Vaccine & TB tests **DO NOT** need to be spaced out in time.

- NEW CDC TB and COVID-19 vaccination guidance: COVID-19 vaccination should not be delayed because of testing for TB infection. Testing for TB infection with one of the immune-based methods, either the tuberculin skin test (TST) or an interferon release assay (IGRA), can be done before, after, or during the same encounter as COVID-19 vaccination. Click here for more details.

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html#laboratory-testing

WHEN ARE TWO-STEP TST'S REQUIRED?

BOX 1. Indications for two-step tuberculin skin tests (TSTs)

Situation	Recommended testing
No previous TST result	Two-step baseline TSTs
Previous negative TST result (documented or not) >12 months before new employment	Two-step baseline TSTs
Previous documented negative TST result ≤12 months before new employment	Single TST needed for baseline testing; this test will be the second-step
≥2 previous documented negative TSTs but most recent TST >12 months before new employment	Single TST; two-step testing is not necessary (result would have already boosted)
Previous documented positive TST result	No TST
Previous undocumented positive TST result*	Two-step baseline TST(s)
Previous BCG† vaccination	Two-step baseline TST(s)
Programs that use serial BAMT,§ including QFT¶ (or the previous version QFT)	See Supplement, Use of QFT-G** for Diagnosing *M. tuberculosis* Infections in Health-Care Workers (HCWs)

* For newly hired health-care workers and other persons who will be tested on a routine basis (e.g., residents or staff of correctional or long-term–care facilities), a previous TST is not a contraindication to a subsequent TST, unless the test was associated with severe ulceration or anaphylactic shock, which are substantially rare adverse events. If the previous positive TST result is not documented, administer two-step TSTs or offer BAMT. **SOURCES:** Aventis Pasteur. Tuberculin purified protein derivative (Mantoux) Tubersol® diagnostic antigen. Toronto, Ontario, Canada: Aventis Pasteur; 2001. Parkdale Pharmaceuticals. APLISOL (Tuberculin purified protein derivative, diluted [stabilized solution]). Diagnostic antigen for intradermal injection only. Rochester, MI: Parkdale Pharmaceuticals; 2002. Froeschle JE, Ruben FL, Bloh AM. Immediate hypersensitivity reactions after use of tuberculin skin testing. Clin Infect Dis 2002;34:E12–3.
† Bacille Calmette-Guérin.
§ Blood assay for *Mycobacterium tuberculosis.*
¶ QuantiFERON®-TB test.
** QuantiFERON®-TB Gold test.

Box 1 of the 2005 MMWR. https://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf

WHAT IF SOMEONE WHO IS LOW RISK FOR TB INFECTION TESTS POSITIVE ON HIRE?

- *The risk assessment and symptom evaluation help guide decisions when interpreting test results. For example, health care personnel with a positive test who are asymptomatic, unlikely to be infected with M. tuberculosis, and at low risk for progression on the basis of their risk assessment should have a second test (either an IGRA or a TST) as recommended in the 2017 TB diagnostic guidelines of the American Thoracic Society, Infectious Diseases Society of America, and CDC.* **In this example, the health care personnel should be considered infected with M. tuberculosis only if both the first and second tests are positive.**
- *Health care personnel with a newly positive test result (with confirmation for those persons at low risk as described previously) should undergo a symptom evaluation and chest radiograph to assess for TB disease. Additional workup might be indicated on the basis of those results,* (2019 MMWR)

WHAT ABOUT PRIOR POSITIVES?

- Documentation that they are free from infectious TB
- Encourage LTBI treatment, if no history of prior treatment
- Educate on signs & symptoms of TB disease to "prompt an immediate evaluation between screenings"
- Annual symptom evaluation if LTBI treatment is not completed

- *Health care personnel with a prior positive TB test and documented normal chest radiograph do not require a repeat radiograph unless they are symptomatic or starting LTBI treatment. The local public health department should be notified immediately if TB disease is suspected. Health care personnel with LTBI and no prior treatment should be offered, and strongly encouraged to complete, treatment with a recommended regimen, including short-course treatments, unless a contraindication exists. Health care personnel who do not complete LTBI treatment should be monitored with annual symptom evaluation to detect early evidence of TB disease and to reevaluate the risks and benefits of LTBI treatment. These health care personnel also should be educated about the signs and symptoms of TB disease that should prompt an immediate evaluation between screenings. (2019 MMWR)*

FOR THOSE THAT DECLINE LTBI TREATMENT

- Optional example documentation: Appendix 4. *Depending on occupational health and facility policies, this may not be part of employee health records*
- Educate on signs & symptoms of TB disease to "prompt an immediate evaluation between screenings"
- Annual symptom evaluation if LTBI treatment is not completed
- Continue to encourage LTBI treatment

Appendix 4. Latent Tuberculosis Infection Treatment Declination or Postponement of Treatment

I understand that:

- I have a confirmed positive tuberculosis (TB) test skin test or blood test (such as QuantiFERON® or TSpot®.*TB*), and a chest X ray that is negative for active TB disease. These show evidence that I was exposed to TB and that I have latent TB infection (LTBI).
- This LTBI is not currently communicable to others.
- LTBI can turn into active TB disease in the future, where it may become communicable to family members, patients, colleagues and the general public. The treatment of active TB disease requires multiple medications and, if untreated, can be fatal.
- Treatment of my LTBI with anti-TB medications will greatly reduce the risk of my LTBI ever becoming active TB.
- If I develop symptoms that may be active TB disease, I must immediately refrain from work and report these symptoms to a physician knowledgeable in TB diagnosis and treatment.
  - These symptoms include prolonged (>3 weeks) cough or bloody cough, drenching night sweats, unexplained weight loss and/or unexplained fevers.
- I have been encouraged to get treated for LTBI and have been given treatment information.
- I understand that by declining or postponing this treatment I continue to be at risk of developing active TB disease.

If I want to be treated for LTBI in the future, I can receive that treatment.

Employee Signature	Date
Employee Printed Name	Department and Location
Occupational Health Staff Signature	Date
Occupational Health Printed Name	Title

STEP THREE:
ANNUAL SCREENING
(SYMPTOM SCREEN) **FOR THOSE WITH UNTREATED LTBI**

Example documentation:
Appendix 7.

Appendix 7. Annual Tuberculosis Symptom Screen

If you have been told that you have latent tuberculosis (LTBI) based on a confirmed positive skin test (PPD) or positive blood test (QuantiFERON® [QFT] or TSPOT®.TB), it is not necessary to receive additional TB skin or blood testing, but ***you must complete yearly symptom screening by filling out the questionnaire below.***

Please read the following before completing your yearly questionnaire:
A positive PPD/TST or positive QFT/TSPOT®.TB test means that you have been exposed to the mycobacteria that causes TB and most likely have the inactive (latent) form of the infection, known as LTBI. People with LTBI do not have symptoms, do not feel sick, generally have a negative chest x-ray and cannot spread TB mycobacteria to others. Most people with LTBI will never develop active infection.

In some cases, however, LTBI will become active. This occurs most often in people who were recently infected or whose immune system becomes weakened (eg, in the elderly and in persons with diabetes, cancer, or organ transplant). The active form of TB is very dangerous and can be fatal. People with active TB disease are also capable of transmitting TB to others. While it is unlikely that your LTBI will ever become active TB disease, it is important for you to be aware of the symptoms you might experience if that occurred.

Please mark if you have experienced any of the following symptoms during the past year:

☐ Yes	☐ No	Cough for more than three weeks with sputum production
☐ Yes	☐ No	Unexplained fever or fatigue for more than 3 weeks
☐ Yes	☐ No	Bloody sputum
☐ Yes	☐ No	Drenching night sweats
☐ Yes	☐ No	Unexplained weight loss of more than 10 pounds

VERY IMPORTANT: If you have any of the symptoms listed above, call Occupational Health immediately for evaluation to determine if you may have active TB disease.

Checking the box below constitutes your yearly symptom screening for TB disease. Because your skin test or blood test is positive for LTBI, you do not need to undergo additional skin or blood testing. You also do not require an additional chest x-ray if you had one after the TB test became positive and you have no symptoms of active TB disease (listed above).

☐ I certify that I have read and understand the information above about LTBI. I certify that if I ever experience symptoms of a productive cough for more than 3 weeks, unexplained fever or fatigue for more than 3 weeks, bloody sputum, drenching night sweats, or unexplained weight loss of more than 10 pounds, I will immediately call Occupational Health for evaluation.

Please note: LTBI is treatable with oral antibiotics that significantly reduce your future risk of developing active TB disease. If you would like to discuss treatment, contact Occupational Health or your primary care provider.

_____	_____
Employee Signature	Date
_____	_____
Occupational Health Signature	Date

STEP FOUR:
ANNUAL TB EDUCATION FOR HCP

Example online resources for education:

- https://www.cdc.gov/tb/webcourses/tb101/default.htm
- http://globaltb.njms.rutgers.edu/educationalmaterials/ltbimultimedia.php
- www.azhealth.gov/tb

Appendix 6. Educational Supplement on Tuberculosis (TB) Infection

The 2019 MMWR CDC/NTCA Recommendations include annual *education* be provided to all health care personnel (HCP). HCP TB education should include the following topics:

- Definitions of tuberculosis including active TB disease, latent TB infection and progression/reactivation TB
- Active TB signs and symptoms
- TB transmission and methods to prevent transmission
- Non-occupational risks for TB transmission, and the option (if available) for voluntary testing
- Medical conditions that increase the risk of untreated latent TB progressing to active TB (ie, immuno-compromise)
- Latent TB infection treatment regimen options and effectiveness

An example of annual TB risk education language is offered below. (Note that the *collection* of such information by Occupational Health Services is not consistent with or included in the 2019 MMWR CDC/NTCA Recommendations.)

When you were hired, you were screened for tuberculosis (TB) infection.

If you have never had TB infection, you should know the risk factors for getting TB. They include:

1. Spending more than 30 days in a country with an elevated TB rate since your last TB test. This includes all countries ***except*** those in Western Europe, Northern Europe, Canada, Australia, and New Zealand.

2. Having close contact with anyone who had active TB since your last TB test; or

3. Spending time in a facility where TB is common. This might include jail, a homeless shelter, or time working in a health care setting in a country with an elevated TB rate.

If you have any of these risk factors for TB infection, you may wish to obtain a TB test. Contact* _____ to discuss voluntary testing for TB.

If you were diagnosed with TB infection and you have not completed treatment, your infection could progress to active TB disease, particularly if you have:

a. Planned or current immunosuppression, including human immunodeficiency virus infection, receipt of organ transplant, treatment with TNF alpha antagonist (infliximab, etanercept or other), chronic steroids (equivalent of prednisone >15 mg/day for >1 months).

If you have any of these risk factors for your latent infection progressing to active TB disease, contact _____ to discuss treatment options.

**Facilities should provide contact information for occupational health, the public health department, or the HCP's personal primary care provider.*

STEP FIVE:
FACILITY RISK ASSESSMENT

Appendix B of 2005 MMWR: https://www.cdc.gov/tb/publications/guidelines/pdf/appendixb_092706.pdf (See Appendix 1 and Appendix 5 for suggested amendments to wording.)

Portions from the 2005 MMWR CDC Guidelines Appendix B: Tuberculosis (TB) Risk Assessment Worksheet
Suggested updates to Reflect the 2019 MMWR CDC/NTCA Recommendations are in bold underlined text[1,2]

The 2019 MMWR CDC/NTCA Recommendation states: "Recommendations from the 2005 CDC Guidance that are outside the scope of health care personnel screening, testing, treatment, and education remain unchanged; this includes continuing annual facility risk assessments for guiding infection control policies and procedures."

Outpatient settings

Does evidence exist of person-to-person transmission of *M. tuberculosis* in the health-care setting? (Use information from case reports for both contact investigation and from serial testing **(if any is being done).** Determine if any tuberculin skin test [TST] or blood assay for *M. tuberculosis* [BAMT/IGRA] for *M. tuberculosis* conversions have occurred among HCP in the past year.)	Yes No

Nontraditional facility-based settings

Have any TST or BAMT/IGRA conversions occurred among staff or clients in the past year? (Use information from case reports for both contact investigation and serial testing program **if done)**	Yes No

Screening of HCP for *M. tuberculosis* Infection

How frequently are HCP tested for M. *tuberculosis* infection?	o On hire o Post-exposure **o Other** ____

Recommended Frequency of Screening for Mycobacterium Tuberculosis Infection among Health Care Personnel (HCP)

Setting	Low risk	Medium risk	Potential ongoing transmission[#]
Baseline two-step TST or one BAMT/IGRA[P]	Yes, for all HCP* on hire	Yes, for all HCP on hire	Yes, for all HCP on hire
Serial TST or BAMT/IGRA	No**	**No****	As needed in the investigation of potential ongoing transmission[$$]
TST or BAMT/IGRA for HCP upon unprotected exposure to *M. tuberculosis*[++]	Perform a contact investigation (ie, administer one TST or BAMT/IGRA as soon as possible at the time of exposure and, if the result is negative, give a 2nd test [TST or BAMT/IGRA, whichever was used for the 1st test] 8-10 weeks after the end of exposure to *M. tuberculosis*[PP]		

STEP SIX:
CONTACT INVESTIGATION

- Contact your local health department for **Contact Investigation** recommendations.
- For TB exposures in the facility, coordination and sharing of contact investigation data should be done directly with the local health department.
- Example CI forms and spreadsheets are available upon request.

Questions?

Website:
www.azhealth.gov/tb

Ideas or feedback:

Email: tb@azdhs.gov

- Go to www.azhealth.gov/tb for additional resources, including:
  - Refence Packet including Table on Who to Screen
  - Documentation Guide
  - Companion Guide Attachments
- For Licensing contacts: https://www.azdhs.gov/licensing/index.php#contact-us