Information on Chapter 89-Designated Facilities

Continuing Quality Improvement (CQI) Group

Tuberculosis and Hansen's Disease Unit

Objectives

 $\hfill \mathsf{\square}$ Provide the definition of a Chapter 89-designated facility in Texas

Review the screening requirements and guidelines from the:

- Texas Health and Safety Code (HSC)
- Texas Administrative Code (TAC)

Provide common terminology

 $\hfill \mathsf{D}\mathsf{i}\mathsf{scuss}$ the screening algorithm

Discuss the reporting requirements of:

- TB infection
- TB disease (known/suspected)

Discuss the correctional TB monthly report submission process

Discuss conversion scenarios regarding:

- Tuberculin Skin Test (TST)
- Interferon Gamma Release Assay (IGRA)

Link useful resources for correctional TB monthly reports

The objectives for this presentation are to:

- Define the qualification criteria for a Chapter 89-designated facility in Texas
- Review the screening requirements and guidelines outlined in the Texas Health and Safety Code as well as the Texas Administrative Code
- Provide common TB terminology
- Discuss the screening algorithm developed by the Tuberculosis and Hansen's Disease Unit
- Discuss the reporting requirements of TB infection and TB disease as they are two of Texas's notifiable conditions
- Discuss the monthly reports submission process
- Define tuberculin skin test(or TST) and Interferon Gamma Release Assay (IGRA) conversions and provide mock scenarios
- Link Useful Resources for Monthly Reports



- To meet the definition of a Chapter 89-designated facility, a jail must meet certain requirements. A jail has to have a capacity of at least 100 beds, or house inmates that are transferred from a county jail that has a capacity of 100 beds, or house inmates from another state
- The Texas Health & Safety Code has defined jail as a county jail or a correctional facility that is operated by or contracted with a municipality or operated by a contracted community supervision and corrections department



- Chapter 89 of the health & safety code mandates that all inmates in a chapter 89 facility be tested for TB infection on or before the seventh day of incarceration if they are likely to remain at the facility for longer than seven days
- Inmates are exempt from a screening test if they are a prior positive defined as having written documented history of a previous positive skin test of IGRA, or written documentation of a screening test within the past twelve months or if they have written documented history of a severe reaction to a TST, or have a documented history of completing treatment for TB disease



- We will now review common terminology used on the monthly correctional TB reports and the positive reactors/suspects/cases form.
- **Prior positive** is defined as an individual who has a written documented history of a previous positive TST (in mm) or an IGRA
- **TB Infection** is determined by a positive result from an FDA-approved Interferon Gamma Release Assay (IGRA) test such as T-Spot TB or QuantiFERON - TB GOLD In-Tube Test or a tuberculin skin test, and a normal chest radiograph with no presenting symptoms of TB disease. A clinician's diagnosis must always be obtained to determine TB infection.
- **TB Disease**: Active TB disease is diagnosed by medical history, physical evaluation, chest x-ray, and other laboratory tests (i.e., isolation of M. tuberculosis complex from a clinical specimen).
- **Suspected TB**: Clinical suspicion of active TB is based on signs and symptoms and/or abnormalities on chest x-ray AND the clinician intends for the client to be placed in isolation OR placed on 4-drug therapy. If TB is suspected, a complete evaluation must be performed while waiting for final laboratory results.
- **Positive reactor:** An individual with a positive IGRA or TST with induration of 10 mm or more is considered positive for all people in a correctional facility except the following: HIV-infected people, recent contacts to TB disease, people with fibrotic changes on CXR consistent with prior tuberculosis, organ transplant recipients, and other

immunosuppressed people (those on TNF alpha inhibitors, or people taking a prolonged course of oral or intravenous corticosteroids such as prednisone). For these inmates, an induration of 5 mm or more is considered positive.

• A conversion for a Chapter 89-Designated facility is defined as a change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility



We will discuss a screening algorithm that we developed that can be used to guide screening practices for initial screenings.

The Texas Department of State Health Services recommends that all inmates be screening for TB symptoms during book in. If symptoms are present, the inmate should be isolated in an airborne infection isolation room or AIIR. The inmate should have a CXR performed, and sputum collected within 72 hours. Consider also ordering a rapid PCR. A TST should be placed, and the inmate should receive a thorough medical evaluation. Per rule 97.176 of the Texas Administrative Code, when symptoms and/or results of skin test, chest x-ray, and sputum smear suggest that the inmate may have Tuberculosis, the suspect shall initiate treatment until TB has been ruled out. Please report to your local or regional health department the suspected TB case.

If TB symptoms are not present or if your facility does not perform symptom screening upon intake and if the inmate will likely not be at the facility for seven or more days, then there is no additional follow-up needed. If the inmate will likely be at the facility for seven or more days and has a documented negative TST or IGRA in the past 12 months, then there is no additional follow-up needed at that time. However, upon annual screening, the inmate should have a symptom screening conducted and a TB skin test administered from the date of their last test.

If the inmate has written documentation of a previous positive skin test, then a chest x-ray must be performed within 72 hours of book in.

If the inmate does not have written documentation or is self-reporting that they have had a previous positive TST or IGRA, a TST should be administered. If the TST is negative, then there is no additional follow-up needed at that time. However, upon annual screening, the inmate should have a symptom screening conducted and a TB skin test administered.

If the TST or IGRA is positive, then a chest x-ray should be performed within 72 hours of the date read. If the chest x-ray is normal, then a symptom screening should be performed annually, and a chest x-ray should only be performed if symptoms consistent with TB develop. Provide education to the patient on TB infection diagnosis and offer treatment for TB infection if available. Persons with a documented history of a positive TST or IGRA should not be re-tested or receive routine annual chest x-rays unless symptoms consistent with TB develop.

If the chest x-ray result is indicative of TB, then the inmate should be isolated in an airborne infection isolation room or AIIR. The suspected TB case should be reported the local or regional health department within 1 working day. The inmate should have sputum collected within 72 hours and a thorough medical evaluation. Treatment must be provided if indicated. Per rule 97.176 of the Texas Administrative Code, when symptoms and/or results of skin test, chest x-ray, and sputum smear suggest that the inmate may have Tuberculosis, the suspect shall initiate treatment until TB has been ruled out.



- TB infection and TB disease are notifiable conditions in Texas and are required to be reported within a certain timeframe
- TB infection must be reported to your local or regional health department within one week of diagnosis. Diagnosis should be made by an advanced health care provider or a physician. The diagnostic criteria for TB infection includes a positive TST or IGRA and a normal chest x-ray and no signs and symptoms consistent with TB disease. Please keep in mind that the individual must meet all three criteria to be diagnosed with TB infection.
- TB disease including known and suspected must be reported within one day of diagnosis. Suspected TB disease is defined as anyone who has signs or symptoms consistent with TB disease or an abnormal CXR indicative of TB pending final laboratory results. Known suspected TB disease include a positive nucleic acid amplification test (NAAT) or clinically or laboratory confirmed tuberculosis disease.
- As a reminder, when reporting a case or suspected case to your local or regional health department, please complete and submit form TB-400 A and TB-400B which are available on our DSHS website.



- The monthly correctional TB report and Report of TB Conditions form should be submitted to your local or regional health department by the 5th day of each month.
- Your local or regional correctional liaison will review the data for accuracy and completion and may request clarification and/or amended reports before submitting to the State Office via a secure portal called GlobalScape, by the 15th day of the following report month.
- The CQI team will review the reports and enter the data into an internal database.
- Please note that monthly reports not received from the Chapter 89-designated facility and/or health department by their responsible due date will be sent formal reminders and delinquency notices from the TB Unit

Conversions





We will discuss the importance of identifying and monitoring converters.

A converter is likely to have been infected with TB at the facility. A converter is at an increased risk for developing TB disease as the risk is highest within the first two years of infection.

A cluster of converters is concerning as it may be an indication of ongoing transmission at the facility



Please note that there may be a multitude of different factors that contribute to an inmate converting from a negative to a positive test. Please keep in mind that conversions can occur due to the risk level of the patient, facility transmission, and the burden of disease in your locality.

The inmate may have been exposed to TB prior to incarceration or the inmate may have certain risk factors that make them more susceptible to infection upon exposure.

There may be opportunities to develop an infection control plan if your facility does not already have one or to strengthen screening and isolation practices.



It is important to not only adhere to the screening requirements outlined in the Texas Administrative Code but also vital to ensure a thorough evaluation when indicated.

We will walk through a potential scenario that depicts an annual screening.

A 45-year-old male inmate has been incarcerated at facility A for the past 12 months. The individual had a negative baseline TST and has lost about 25 pounds within the last four months. The inmate complains of malaise and reports having night sweats. He denies having a cough or fever. The annual screening test is negative for this inmate.

Does this inmate have TB? While it is possible that the inmate may have TB, it is important to suspect TB regardless of skin test reactions when the patient is experiencing signs and symptoms consistent with TB. The inmate should have a thorough medical evaluation and be provided treatment if indicated.

	TST Conversion (Scenario 1)							
	Definition: A change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility. Scenario 1: Inmate remained at the facility between the baseline negative and the recent positive test result. You have been given the following information:							
			Baseline Negative Test Information	Annual Positive Test Information				
		Book-in date	8/23/2020	8/23/2020				
		Date TST placed	8/28/2020	8/27/2021				
		Date TST read	8/30/2020	8/29/2021				
TEXAS Health and Human Services		Reading (mm)	0mm	10mm				
Texas Department of State Health Services	Interpretation: changed from n	This is a conversion fo egative at baseline to	or the facility as the ir positive during annu	nmate's test result al screening.				

TST conversion is defined as a change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility. The following scenario depicts an inmate who was incarcerated at the facility between the baseline negative test and the most recent positive test. The inmate was booked on August 23, 2020 and had a TST administered on August 28, 2020 and had a 0 mm reading on August 30, 2020. The annual TST was placed on August 27, 2021 and the inmate had a 10 mm reading on August 29, 2021.

The inmate is a converter as there was a change from a negative test result to a positive test result and the inmate remained at the facility between both tests.

	TST Conversion (Scenario 2)							
	Definition: A change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility.							
	Scenario 2: HIV-infected inmate remained at the facility between the baseline negative and the recent positive test results. You have been given the following information:							
			Baseline Negative Test Information	Annual Positive Test Information				
		Book-in date	3/7/2019	3/7/2019				
		Date TST placed	3/9/2019	3/10/2020				
		Date TST read	3/12/2019	3/13/2020				
TEYAS		Reading (mm)	0mm	5mm				
Health and Human Services Texas Department of State Health Services	Interpretation: This is a conversion for the facility as the immunocompromised inmate's test result changed from negative at baseline to positive during annual screening.							

TST conversion is defined as a change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility. The following scenario depicts an HIV infected inmate who was incarcerated at the facility between the baseline negative test and the most recent positive test. The inmate was booked on March 7, 2019 and had a TST administered on March 9, 2019 and had a 0 mm reading on March 12, 2019. The annual TST was placed on March 10, 2020 and the inmate had a 5 mm reading on March 13, 2020.

The inmate is a converter as there was a change from a negative test result to a positive test result and the immunocompromised inmate remained at the facility between both tests.

	IGRA	Conversi	on Scena	rio				
	Definition: A change from a documented negative TST or IGRA to a positive TST or IGRA during the time of residence in the facility. Scenario 1: Inmate is booked and has a negative IGRA. Upon annual testing, the IGRA is positive.							
			Baseline Test Information	Annual Test Information				
		Book-in date	9/20/2019	9/20/2019				
		Date of IGRA	9/25/2019	9/26/2020				
		Test Result	Negative	Positive				
TEXAS Health and Human Services Texas Department of State Health Services	Interpretation: This is a conversion for the facility as the inmate's test result changed from negative at baseline to positive during annual screening.							

IGRA conversion is defined as a change from a documented negative result to a documented positive result.

The following scenario depicts an inmate who was incarcerated at a facility on September 20, 2019 and had an IGRA drawn on September 25, 2019. The test result for the baseline test was negative. The inmate had an annual IGRA drawn on September 26, 2020 and it was positive.

This scenario depicts an IGRA conversion as there was a change from negative to positive between the baseline and annual test and the inmate was incarcerated at the facility between both tests.





TEXAS Health and Human Services Texas Department of State Health Services



Here are the useful resources to use when filling out the monthly correctional TB reports. There is a link to the Epi case criteria for TB with useful definitions. As well, linked is where you can find the following TB forms:

One-Pager Fact Sheets Correctional TB Reporting FAQ Monthly Correctional TB Form (PDF) and Instructions Report of TB Conditions Form (PDF and Excel) and Instructions Screening Algorithm for Inmates and Employees/Volunteer

High-Level Summary

- 1. TB infection and TB disease (known/suspected) are notifiable conditions and are required to be reported in a timely manner.
- 2. The monthly correctional TB report and the Report of TB Conditions form must be submitted to the local or regional health department by the 5th day of the following report month.
- 3. Screening should be a holistic process.
- 4. Reports should be accurate and complete.
- 5. Reach out to your correctional liaison for questions regarding reporting and completion.
- 6. Your correctional liaison may reach out for clarification and/or revisions prior to submission to TB Unit for final review.

I will now provide a high-level summary of the presentation:

- 1. TB infection and TB disease (known/suspected) are notifiable conditions and are required to be reported in a timely manner.
- The monthly correctional TB report and the Report of TB Conditions form must be submitted to the local or regional health department by the 5th day of the following report month.
- 3. Screening should be a holistic process.
- 4. Reports should be accurate and complete.
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