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**Texas Department of State
Health Services**

DSHS Tuberculosis Standards for Texas Correctional and Detention Facilities



Tuberculosis and Hansen's Disease Branch

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DSHS Tuberculosis Standards for Texas Correctional and Detention Facilities

This chapter describes the requirements and standards for tuberculosis (TB) prevention and care in correctional and detention facilities operating in Texas. These requirements and guidelines are based on Texas laws and regulations, Occupational Safety and Health Administration (OSHA) regulations, and recommendations from the Texas Department of State Health Services (DSHS), the Centers for Disease Control and Prevention (CDC), and the National Commission on Correctional Health Care (NCCHC).

Limitations

Texas' correctional system includes jails, prisons, detention centers, and community corrections facilities that serve different purposes and operate under different structures, ownership and statutory requirements. Given the complexity of the system, it is not possible to provide uniform requirements and recommendations for all facilities. However, Texas Health and Safety Code Chapter 89, and other statutes and administrative codes, address TB standards for jails and community corrections. For prisons and detention centers, general recommendations are provided.

Key definitions

Administrative Controls: The first and most important level of the TB infection control program; administrative controls are used to reduce the risk for exposure to persons with active TB disease. TB administrative controls include but are not limited to: 1) creating and instituting a written TB infection control plan 2) ensuring timely availability of laboratory processing, testing, and reporting of results, 3) training and educating employees regarding TB, 4) conducting a TB risk assessment, 5) implementing effective work practices for the management of patients with suspected or confirmed TB disease (CDC, 2005).

Airborne infection isolation rooms (AIIR): Single-occupancy patient-care isolation rooms for persons with suspected or confirmed infectious disease. Formerly known as negative-pressure isolation rooms.

Air changes per hour (ACH): The volume of air circulating every hour divided by the room volume. One air change occurs in a room when a volume of air equal to the volume of the room is supplied and/or exhausted. By calculating the air change rate, the room ventilation can be compared to

published standards, codes, and recommendations. It can also be used to estimate the length of time required to remove infectious particles (Francis J. Curry National Tuberculosis Center, 1999).

Capacity: The number of inmates the Texas Commission on Jail Standards (the Commission (TCJS)) authorizes a facility to house. This excludes cells designed to house inmates for holding, detoxification and violent purposes (Texas Administrative Code (TAC), Title 37, Part 9, Chapter 253, Rule §253.1).

Chapter 89 Facility: A jail or community corrections facility that meets the following Texas Health and Safety Code Chapter 89 criteria:

- Has a capacity of at least 100 beds;
- Houses inmates transferred from a county jail with a capacity of at least 100 beds; or
- Houses inmates transferred from another state (Texas Health and Safety Code, Chapter 89, Section 89.002).

Classification: A formal process for separating and managing inmates and administering facilities based upon agency mission, classification goals, agency resources and inmate program needs. The process relies on trained classification staff, use of reliable data, and conducting process assessment and outcome evaluations (TCJS; TAC, Title 37, Chapter 271, Rule §271.1).

Community Corrections Facility: A Community Supervision and Corrections Department facility or contracted entity to treat persons on community supervision or in drug court programs. These facilities provide services and programs to modify criminal behavior, deter criminal activity, protect the public, and restore victims of crime. They include restitution centers, court residential treatment facilities, substance abuse treatment facilities, custody facilities, boot camps, forensic mental facilities, and intermediate sanction facilities (Texas Government Code Chapter 509).

Correctional Facility (or “facility”): A local or contracted private-vendor facility operating to confine persons arrested, charged with, or convicted of criminal offenses (TAC, Title 37, Part 9, Chapter 253, Rule §253.1).

Correctional Tuberculosis Screening Plan: A document designed for jails and community corrections facilities which meet Texas Health and Safety Code Chapter 89 criteria and fall under the purview of the Texas Department of State Health Services (DSHS) (Texas Health and Safety Code, Chapter 89,

Subchapter A, Section 89.002 and Subchapter E, Section 89.101). Its purpose is to provide a framework for the implementation and monitoring of legally required TB prevention and care standards for Chapter 89 correctional facilities.

County Jail (or “jail” or “facility”): A locally-operated or contracted private-vendor facility to confine persons accused or convicted of an offense usually for ≤ 12 months (TAC, Title 37, Part 9, Chapter 253, Rule §253.1).

Detainee: An adult or juvenile individual whose sentence has not yet been adjudicated and is held as a pre-trial detainee or other individual held in lawful custody.

Environmental Controls: The second level of a TB control program; environmental controls prevent the spread, and reduce the concentration of, infectious droplet nuclei. Primary environmental controls consist of controlling the source of infection by using local exhaust ventilation (e.g., hoods, tents, or booths) and diluting and removing contaminated air by using general ventilation. Secondary environmental controls consist of controlling the airflow to prevent contamination of air in areas adjacent to the source (AII rooms) and cleaning the air by using high efficiency particulate air (HEPA) filtration or UVGI (CDC, 2005).

Facility: A jail, prison, or other detention area, includes buildings and site (TAC, Title 37, Part 9, Chapter 253, Rule §253.1).

Federal Prison: A federal confinement or privately-owned and operated contract facility for federal law enforcement agencies (Federal Bureau of Prisons (BOP), Immigration and Customs Enforcement (ICE) and Customs and Border Patrol (CBP). These systems house federal inmates who have violated or are accused of violating federal law.

Health Authority: A physician appointed under the provisions of Local Public Health Reorganization Act, Texas Health and Safety Code, Chapter 121 (health authority’s designee or a physician appointed as a regional director) to administer state and local public health laws and statues within the appointing body’s jurisdiction. The physician must take the official oath of office and file a copy of the statement with the appropriate DSHS Regional Office (Texas Constitution, Article 16, §1).

High efficiency particulate air (HEPA) filter: A filter that removes all airborne particles in the TB droplet nucleic size range from the air that is passed through it.

Holding Cell: A cell designed for the temporary hold of an inmate not to exceed 48 hours (TAC, Title 37, Part 9, Chapter 253, Rule §253.1).

Holding Facility: A facility (or part of a building) used for temporary detention of pretrial detainees prior to arraignment, release, or transfer. Sentenced inmates may be held pending transfer to another facility or authority. Two classifications of holding facilities exist: 1) up to a maximum detention of 12 hours; or 2) up to a maximum detention of 48 hours.

Housing Facility: A correctional or detention facility housing persons in custody.

Initial Custody Assessment: Immediately completed on all newly admitted inmates prior to housing assignments to determine custody levels (TAC, Title 37, Chapter 271, Rule §271.1).

Inmate: Any individual, whether in pretrial, unsentenced, or sentenced status, who is confined in a correctional facility (American Correctional Association (ACA), 2003). For the purposes of this manual, the term is broadly used to include all persons in custody, including detainees and residents of a community corrections facility under court order.

Intake Screening: Immediately completed on all inmates to identify any medical, mental health or other special needs that require placing of inmates in special housing units (TAC, Title 37, Chapter 271, Rule §271.1).

Jail: Local law enforcement agency or a contracted-vendor that administers confinement facilities (intended for adults) to hold persons who have been: 1) charged but not convicted of a crime, or 2) committed after adjudication, typically for sentences of one (1) year or less. They also hold inmates in the custody of another correctional institution pending transfer to a state or federal prison (TAC, Title 37, Part 9, Chapter 253, Rule §253.1).

Referral: The process by which a person is introduced to an agency or service that can provide assistance needed (ACA, 2003).

Respiratory-protection Controls: The third level of a TB control program; respiratory protection controls are the use of respiratory protective equipment in situations that pose a high risk for exposure. Use of respiratory

protection can further reduce risk for exposure of HCWs to infectious droplet nuclei that have been expelled into the air from a patient with infectious TB disease. The following measures can be taken to reduce the risk for exposure: 1) implementing a respiratory-protection program, 2) training HCWs on respiratory protection, and 3) training patients on respiratory hygiene and cough etiquette procedures (CDC, 2005).

Security or Custody: The degree of restriction of inmate movement within a detention or correctional facility, usually divided into maximum, medium, minimum facility security (ACA, 2003).

Short-Term Detention Facility: A facility used to provide temporary secure custody of an individual pending processing, further placement or detention hearing. These facilities may be booking, holding (hold rooms) or staging facilities; processing centers; or short-term detention centers. No sleeping quarters or shower facilities are provided. Individuals may be held up to 48 hours (TAC, Title 37, Chapter 351, Rule §253.1).

Standard: A statement established by authority or based on scientific evidence that defines a required or essential condition to be achieved or maintained.

State Prison: A Texas Department of Criminal Justice (TDCJ) confinement facility, including privately operated state correctional facilities.

TB screening: A TB screening typically consists of a TST or IGRA blood test and a signs and symptoms questionnaire. For persons with documentation of previous completed TB treatment, or documentation of a previous positive TST or IGRA result, screening may include a recent chest x-ray (CXR) and a symptoms questionnaire.

Texas Department of Criminal Justice (TDCJ): Agency that manages the state's prison, parole, and state jail systems. It also provides funding, training, and oversight of community supervision. TDCJ is the largest state agency in Texas.

Training: An organized, planned, and evaluated activity designed to achieve specific learning objectives and enhance the job performance of personnel. Training may occur on site, at an academy or training center, at an institution of higher learning, during professional meetings, or through contract services or closely supervised on-the-job training. Training programs usually include requirements for completion, attendance recording, and a system for recognition of completion (ACA, 2003).

Treating Physician: A person licensed to practice medicine in Texas who provides medical treatment or evaluation at a given time and who has, or has had, an ongoing treatment relationship with the client.

Warden: The individual in charge of the institution; the chief executive or administrative officer. This position is sometimes referred to by other titles such as jail administrator.

I. DSHS Authority and Legal Standards

The DSHS TB Branch has the authority to develop TB standards for jails and community corrections facilities meeting the following criteria set by the Texas Health and Safety Code Chapter 89:

- 1) A capacity of 100 beds or more;
- 2) Housing inmates transferred from a county that has a jail with a capacity of at least 100 beds; or
- 3) Housing inmates transferred from another state.

The TB Branch also provides recommendations and technical assistance on TB prevention and care to all correctional and detention facilities. Likewise, the TB Branch monitors TB disease in these facilities, their prevention and control activities, and their impact on the communities surrounding them. Regardless of size and ownership, all correctional and detention facilities in Texas, including federal, state prisons, local jails and community corrections facilities are subject to the provisions of the Communicable Disease Prevention and Control Act (Texas Health and Safety Code, Chapter 81, Rule § 81.065, 2016) and other applicable federal and state laws.

Medical regulatory standards, professional accreditation and licensing procedures, and a series of court cases also define specific health care standards for correctional and detention facilities. Per Texas statutes, correctional and detention facility owners and operators have the legal responsibility to: 1) report TB cases, suspects, contacts and TB infections; 2) provide TB prevention and control activities, and 3) conduct contact investigations that support the public's health.

Inmate constitutional right to TB care

The Eighth Amendment of the U.S. Constitution prohibits "cruel and unusual punishment." Over time, the courts interpreted the deprivation of medical services for prisoners, including failure to relieve pain and restore function, as prisoner torture (Paris, 2008).

The U.S. Supreme Court established in 1976 that the U.S. Constitution guarantees inmates a right to health care. In the *Estelle v. Gamble* decision, the Supreme Court defined "deliberate indifference to medical needs" and established three basic rights for inmates: 1) the right to access health care; 2) the right to a professional medical opinion; and 3) the right to care that is ordered. When correctional and detention systems fail to provide TB care to meet these legal demands, litigation may follow (Paris, 2008).

II. Reporting Requirements

Correctional facilities must report TB cases, suspects, contacts and TB infections to the appropriate DSHS public health region (PHR) or local health department (LHD) as required by state law.

The report must be submitted through a secure method that complies with the Health Insurance Portability and Accountability Act (HIPAA).

Contact information for PHRs and LHDs is available at <http://www.dshs.state.tx.us>.

TB conditions to be reported in three (3) working days include:

- Suspected TB disease pending final laboratory results;
- Positive nucleic acid amplification tests;
- Clinically or laboratory-confirmed TB disease; and
- All *Mycobacterium tuberculosis* (*M.tb*) complex, including *M.tb*, *M.bovis*, *M.africanum*, *M.canettii*, *M.microti*, *M.caprae*, and *M.pinnipedii*.

✚ The first *M.tb* isolate from each client must be submitted to DSHS laboratory for genotyping. Call (512) 776-7598 for specimen submission information.

TB infection must be reported in five (5) working days and includes the following:

- A positive result from an Interferon-Gamma Release Assay (IGRA) test, such as T-SPOT® TB or QuantiFERON®- TB Gold In-Tube (QFT-G) plus a normal chest x-ray with no presenting TB disease symptoms;
- A tuberculin skin test (TST) result plus a normal chest x-ray with no presenting symptoms of TB disease.

✚ Reporting is required even if the inmate has already been released or transferred from the facility.

In addition to reporting standard demographic, clinical and treatment information, reports should identify:

- The agency with custodial responsibility of an inmate (e.g., county jail, TDCJ, ICE, FBOP or U.S. Marshals);
- Agency identification number (e.g., U.S. alien number, BOP number, or USMS number);
- Dates of admission, transfer, release; and
- Inmate destination or location.

Additional reporting requirements for Chapter 89 facilities

1. Monthly Correctional TB Report

- Chapter 89 facilities must submit the Monthly Correctional TB Report (DSHS form EF-12-11462) and Positive Reactors/Suspects/ Cases Report (DSHS form TB EF-12-11461) to the PHR or LHD (TAC, Title 25, Chapter 97, Subchapter H, Rule §97.178).
- Reports are due to PHRs or LHDs by the fifth (5th) working day of the month via Texas Public Health Information Network (PHIN). These reports capture the:
 - Total number of TB screenings performed;
 - Total number of positive TB skin tests or IGRA tests;
 - Number of TB skin tests or IGRA tests conversions from a documented negative to positive within a two-year period; and
 - Number of persons started on treatment, discharged to the community, and transferred out of a facility.
- The PHR or LHD reviews reports for accuracy and completion and then forwards the report to TB Branch via PHIN.

Information in these reports is used to review screening outcomes and assess risk for TB disease outbreaks. It alerts facility administrators and public health agencies of possible ongoing transmission and undetected cases (i.e., a cluster of TB test conversions may indicate recent transmission).

 **Texas Forms Site:** Download the *Monthly Correctional TB Report Form* (DSHS form EF-12-11462) and *Positive Reactors/ Suspects/ Cases Report Form* (DSHS form EF-12-11461) at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>

2. Correctional Tuberculosis Screening Plan

Counties, judicial districts, and private entities operating Chapter 89 facilities must adopt local standards for TB prevention and care. The standards must be compatible or at least as stringent as the standards in this manual.

Prior to the final adoption of jail TB prevention and control measures, the Correctional Tuberculosis Screening Plan (DSHS form TB-805) must be reviewed and approved annually by the Texas TB Controller.

- Submit a completed *Correctional Tuberculosis Screening Plan (DSHS form TB-805)* to TB Branch for review and approval 90 days prior to plan expiration or anniversary date (TAC, Title 37, Part 9, Chapter 273, Rule §273.7).

 **Texas Forms Site:** Download the *Correctional Tuberculosis Screening Plan (DSHS form TB-805)* at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>

III. Record Keeping Requirements

Maintaining adequate records relevant to TB prevention and care is a necessity. Proper records ensure compliance with health standards, enable continuity of care, and protect the health and safety of staff and inmates.

Records must be stored where they are readily available.

- At a minimum, the retention period for each paper or electronic record must be the length of time listed in the Texas State Records Retention Schedule, <https://www.tsl.texas.gov/slrn/state/schedules.html#t>
- The retention period for these records is in calendar years based on the creation date (Texas State Library Commission, Texas State Records Retention Schedule, 2016).

Inmate records

Correctional facilities must have procedures for maintaining each inmate's health record (TAC, Title 37, Part 9, Chapter 273, Rule §273.4).

- Medical records containing TB screening results must be secured and separate from custody records to protect PHI.
- Copies of TB records must accompany inmates during each transfer and release. The same PHI privacy standards apply.
- Accurate and complete medical records for TB patients must be kept for seven (7) years after the last date of service provision or until patient's twenty-first (21st) birthday, whichever is later.

At a minimum, the following records must be kept for at least three (3) years for each inmate:

- Dates of incarceration, transfer and release with the names of each housing unit.
- Bed number(s) to identify clients exposed to TB.

Personnel records

The following personnel records must be maintained for each employee or volunteer worker for three (3) years after the end of employment or service:

- *Certificates for initial and annual TB screenings (clearance).*

The deadline for filing certificates in a personnel file is one (1) month after the certificate is completed and signed by a physician. The certificate must be filed with the PHR or LHD (TAC, Chapter 97, Rule § 97.179).

Facility records

The following facility records must be maintained:

- Date(s) of annual TB trainings and sign-in sheets must be retained for three (3) years.
- A bed map to identify exposed persons in the event of a TB outbreak or exposure must be retained for three (3) years.
- Correctional TB Program Screening Plans must be retained for five (5) years.
- Monthly Correctional TB Reports must be retained for three (3) years.
- Airborne infection isolation room (AIIR) control tests and measurements must be retained for five (5) years.
- When a TB outbreak investigation or administrative review is initiated, a record for which the retention period has expired, cannot be destroyed. Its destruction cannot occur until completion of the investigation or review.

IV. TB Risk Assessment and Classifications

Facility TB risk assessments

The implementation of evidence-based TB prevention and care strategies and interventions in correctional facilities is paramount. The Tuberculosis Risk Assessment for Correctional Facilities (DSHS form TB-800) is a tool designed to: 1) assess facilities TB risk based on state, county, and facility epidemiological data; 2) evaluate prior year activities; and 3) guide the implementation of TB guidelines provided by DSHS.

Each correctional facility must perform an initial baseline TB risk assessment. Thereafter, the facility must perform annual re-assessments. The assessments should be made in collaboration with the appropriate PHR or LHD (CDC, 2005; CDC, 2006). DSHS publishes TB statistics at <http://www.dshs.texas.gov/idcu/disease/tb/statistics/> and an Annual Tuberculosis Screening Report for Jail Administrators at <https://wwwstage.dshs.internal/idcu/disease/tb/programs/jails/annualreport/> to support the completion of the assessment.

Risk assessment categories are listed as *high (with potential ongoing transmission)*, *medium* or *low risk*. Screening for TB is based upon each facility's risk for ongoing person to person transmission of TB (CDC, 2005).

To assess a correctional facility's risk for TB transmission, consider the following facility-based questions:

- What is the facility type (e.g., prison, jail, Chapter 89 jail or short-term detention)?
- Has the facility identified a cluster of persons with TB test conversions or confirmed TB disease suggesting recent ongoing TB transmission? A TB test conversion due to recent transmission in the jail requires the baseline negative test and repeat positive test be done in the facility.
- What is the facility's incidence of TB disease? How does the facility compare to state and national incidence of TB disease?
- Is the percentage of screened inmates with previous or newly diagnosed TB infection in the preceding calendar year equal or greater than 10?
- Has a case of infectious TB disease been reported in the last year?

- Does the facility house or employ a substantial number of persons with TB risk factors (e.g., HIV-positive clients)?
- Does the facility house or employ a substantial number of persons who have emigrated from areas of the world with high TB incidence (e.g., Mexico)?
- Does the facility have systems in place for prompt TB screening, respiratory isolation or referral for persons with TB signs and symptoms?

A correctional or detention facility should be classified as medium risk, if uncertainty exists as to whether a setting is low or medium risk.

Table 1: Annual TB risk classification for correctional facilities

High Risk Facility with Potential Ongoing Transmission	Medium Risk Facility *Includes all Chapter 89 Facilities unless temporarily classified as a high risk facility	Low Risk Facility
<ul style="list-style-type: none"> • Two or more cases of infectious TB disease linked by genotyping and/or epidemiologic assessment • A cluster of TB test conversions • Unrecognized and newly discovered TB cases 	<ul style="list-style-type: none"> • Located in a high incidence county (higher incidence than Texas) • Percent of previous and newly diagnosed TB infections is equal or greater than 10 • At least one case of infectious TB disease reported in the past year • Serves a substantial number of high risk individuals • Substantial number of persons from areas of the world with high rates of TB 	<ul style="list-style-type: none"> • Not located in a high incidence county • No cases of infectious TB disease reported in the past year • No substantial number of high risk individuals (e.g., HIV-positive clients) • No residents or staff with documented TB test conversions

 **Texas Forms Site:** Download the Tuberculosis Risk Assessment for Correctional Facilities (DSHS form TB-800) at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>

V. TB Screening Guidelines

The results of a TB risk assessment dictates how screening activities must be implemented. While correctional facilities may use a TST or IGRA test to screen for TB infection, DSHS only supplies TST materials for inmate screening at Chapter 89 facilities.

Persons who can perform TB symptom screenings and testing

The following persons can perform TB symptom screening and testing with a TST or IGRA:

- Registered nurses (RN), nurse practitioners, physician assistants, physicians, or appropriately supervised licensed vocational nurses (LVN); or
- Qualified and properly trained persons who are operating under delegation from a physician, including medical assistants, emergency medical technicians, or paramedics; or
- Any individual who has been trained to administer a facility's health screening (Occupations Code, Title 3, Section 157.001).

Licensed health care workers must supervise unlicensed personnel as per the Board of Medical Examiners and Board of Nurse Examiners in conformity with Texas Medical Practice Act and Nurse Practice Act, §218.11, and other applicable laws.

A registered nurse, nurse practitioner, physician assistant, or physician must approve health screening instruments.

Housing assignments based on screening results

Test results should be received and evaluated before inmates are assigned to housing in the general population. The medical staff must notify classifications, and add a flag or tag on the record accompanying inmates being evaluated for TB disease who require respiratory isolation.

A negative TST or IGRA does not exclude a diagnosis of TB disease. Persons with symptoms consistent with TB disease must be immediately isolated in an AIIR and evaluated for disease even with negative TB test results.

Symptoms of pulmonary TB include a prolonged cough for three (3) weeks or more, chest pain, and bloody sputum.

Suspicion of TB disease should be high when pulmonary symptoms are accompanied by general symptoms of TB, such as:

- Fever
- Chills
- Night sweats
- Weakness
- Loss of appetite
- Weight loss

A thorough medical evaluation should include TST or IGRA screening, chest x-ray and, if indicated, sputum collection for acid fast bacilli testing (AFB).

 **Texas Forms Site:** Download the Correctional and Detention Facilities Symptom Screening form (TB EF12-12870) at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>

TB screening in high risk facilities

This classification should be temporary and warrants immediate investigation and corrective action. Alert PHR or LHD for guidance and recommendations.

- Repeat TB screenings every 8-10 weeks. Follow with a new risk assessment until: 1) no cases of infectious TB or TB test conversions are identified, and 2) lapses in infection control have been corrected.
- Reclassify the facility as medium risk for one year after ongoing transmission has ceased.

TB screening in medium risk facilities

This classification includes all Chapter 89 facilities, including short-term, unless temporarily classified as a high risk facility with potential ongoing transmission.

- Evaluate all inmates upon entry for TB history and symptoms.
- Immediately evaluate inmates with symptoms to rule out infectious TB disease.
 - House inmates in an AIIR until evaluated. If facility does not have an AIIR, transfer inmates to a facility equipped with an AIIR for evaluation.

- Non-infectious inmates may be released from an AIIR: 1) if TB diagnosis is excluded, or 2) if they meet the criteria to discontinue isolation before a final diagnosis is made.
 - Infectious inmates should remain in isolation until treatment has rendered them noninfectious.
- Evaluate all inmates for TB clinical conditions and risk factors. Require screening with TST or IGRA within seven (7) days of arrival.
 - Inmates with a documented history of previous, adequate treatment for TB infection or disease should not have the TST or IGRA repeated.

In some correctional facilities, it may be more practical to screen with chest x-rays to identify individuals with TB disease. While the chest x-ray method is more expensive, it is an acceptable technique to promptly identify and segregate inmates with suspected TB disease. However, use of the chest x-ray screening method on intake must be followed by testing for TB infection within 14 days (TAC, Chapter 97, Rule § 97.173).

TB screening in medium risk, short-term facilities

The primary purpose of screening in short-term correctional settings is to detect TB disease. TST or IGRA screening is often not practical to initiate treatment for TB infection because of the high turnover rate and short lengths of stay. The following initial screening steps must be taken:

- Evaluate all inmates upon entry for TB history and symptoms.
- Immediately evaluate inmates with symptoms to rule out infectious TB disease and house them in an AIIR until evaluated. If facility does not have an AIIR, transfer inmates to a facility equipped with an AIIR for evaluation.
- Non-infectious inmates may be released from an AIIR if: 1) TB diagnosis is excluded, or 2) they meet the criteria to discontinue isolation before a final diagnosis is made.
- Infectious inmates should remain in isolation until treatment renders them noninfectious.

TB screening in low risk facilities

The following initial screening steps must be taken:

- Evaluate all inmates upon entry for history and symptoms of TB.

- Provide additional screening with a TST or an IGRA test for inmates with risk factors but without TB symptoms within seven (7) days of arrival.
- Evaluate persons with TB signs and symptoms for active disease immediately and house them in an AIIR until evaluated or transported to a facility with an AIIR room.
- Inmates placed in isolation may be released from AIIR, if a diagnosis of TB is ruled out.
- Inmates with a documented history of inadequate TB treatment disease or infection should have a thorough medical evaluation to rule out active TB. Treatment recommendations are based on evaluation findings.

Employee and volunteer screening in all facilities

All employees and volunteers who share the same air with inmates should be screened for TB.

- Provide TB screening and testing, or request proof of TB clearance prior to employment.
- Provide TB screenings annually for all employees without documented history of a positive TB test.
- Conduct immediate TB screening for persons with TB signs and symptoms.

To improve the accuracy of baseline results, a two-step TST or a single-step IGRA should be used for initial employee screening without documented evidence of a TST or an IGRA in the past 12 months.

Employment or service is not contingent upon test results. If medical evaluation and chest x-ray is suggestive of active TB, place the employee or volunteer on sick leave until a diagnosis of infectious TB has been excluded. The employee or volunteer must provide a written release from a provider to return to work.

Human immunodeficiency virus (HIV) status

Correctional facilities have relatively high rates of HIV infection. Patients with HIV infection might be anergic and unable to mount a full immune response which might create false-negative TB test results.

A chest x-ray must be part of initial screenings for HIV-positive patients and for those persons at risk for HIV infection but with unknown status.

HIV is the greatest risk factor for progression from TB infection to disease. Therefore, HIV counseling, testing and referral should be routinely offered to all inmates and correctional facility staff with TB infection or disease, if their HIV infection status is unknown at time of diagnosis.

Frequency of TB screening tests

Employees, volunteers and inmates must have initial and annual screenings.

- Frequency of TB screening increases when the risk of person to person transmission is suspected (e.g., contact investigation, cluster of TB test conversions or two or more persons with TB epidemiological and/or genotyped linkages).
- Persons with a history of a positive test should be screened annually for disease symptoms. Annual chest x-rays are not recommended for follow-up evaluations in the absence of symptoms.

Exceptions for TB screening and testing

Persons with any of the following are exempt from receiving a TST or IGRA test:

- Documented history of a positive TST or IGRA result;
- Documented history of previously diagnosed TB disease; or
- Documented history of severe reaction to a TST.

A person has the right to choose treatment by prayer or spiritual means (Texas Health and Safety Code, Chapter 81). However, they should be: 1) isolated in an AIIR or quarantined in an appropriate facility, and 2) instructed to follow directives from the facility's medical director or health authority.

An exemption from medical treatment under the law does not apply during an emergency, or a quarantined area, or after the governor issues an

executive order or proclamation under Chapter 418 Government Code (Texas Disaster Act of 1975).

Refusal of TB testing

All facilities must have a policy and defined procedures for managing informed consent and refusal of TB screening.

- A mentally competent adult has the right to informed consent and may refuse TB screening. However, the right to refuse TB screening is not absolute. It may be superseded when a person is a health risk to others.
- When a health authority has reasonable grounds to believe that a person has TB disease and refuses voluntary screening and treatment, the health authority must order a person to undergo examination.
- A physical restraint may not be applied to a person unless the treating physician prescribes the restraint. Each use should be documented in the inmate's medical record (Texas Health and Safety Code, Chapter 81).

In consultation with the local health authority (LHA), a facility's physician and warden may make involuntary TB screening and treatment decisions. An individual performing duties in compliance with the orders or instructions of a health authority is not liable for the death or injury to a person or for property damage, except in a case of willful misconduct or gross negligence (Texas Health and Safety Code, Chapter 81).

General recommendations when an inmate refuses TB testing:

- Provide education on TB screening risks and benefits. Make a reasonable effort to encourage voluntary acceptance of screening.
- Offer to screen with an IGRA if an inmate refuses TST, or vice versa.

Symptom screening with a chest x-ray, and if indicated, laboratory examination of sputum samples or other body tissues can also be used for TB disease screening.

- Separate inmates who refuse TB testing from the general population for observation; provide education and offer screening daily for fourteen (14) to thirty (30) days. Separation should only be for medical reasons and not for punitive purposes.

- Place inmates with signs and symptoms suggestive of TB in an AIIR. Asymptomatic inmates may be placed in a single cell with mechanical ventilation and outdoor air supply, if an AIIR is not available.
- Release inmates to general population, if they remain asymptomatic after fourteen (14) to thirty (30) days and if the medical provider believes the inmate poses no health risk to others.
- Consult the local health authority for continued isolation, involuntary screening and treatment for symptomatic patients who refuse testing or treatment after fourteen (14) to thirty (30) days.

All TB services refusals and involuntary screenings and treatment must be documented including:

- Description of the services being refused (e.g., TST, IGRA or TB treatment).
- Informed consent form or medical record notes signed by the patient and witness from the health services staff indicating the inmate has been made aware of the risk and benefits of TB screening, and any TB treatment recommendations (Texas Administrative Code, Title 37, Rule § 163.39).

If the inmate refuses to sign the consent form, the health services staff witness must document the inmate's refusal.

VI. Treatment

TB disease treatment

Correctional facilities housing inmates with TB disease should provide medical treatment in coordination with a PHR or LHD. The TDCJ manages TB patients diagnosed in state prisons.

TB treatment is complicated and lasts for a long time. Proper TB case management leads to treatment completion and prevents serious problems, including development of drug resistant TB and transmission. The following actions are essential for a successful treatment outcome:

- Notify a PHR or LHD within one (1) working day when an inmate has suspected or confirmed TB disease and begin clinical case management consultation.
- Transfer individuals who need advanced health care beyond facility resources to an appropriate facility where care is available.
- Educate inmates about reasons for taking medications, name of medications, side effects, and importance of treatment adherence.
- Contact a PHR or LHD if TB expert consultation is required (e.g., drug-resistant TB).
- Start medication for TB disease, regardless of incarceration length.
- Directly observe the inmate swallowing TB medication to prevent relapse and drug resistance.
- Conduct face-to-face clinical monitoring for adverse reactions to medications (i.e., symptoms of liver failure).

TB infection treatment

Screening programs at correctional facilities are key to identifying persons with TB infection who are at high risk for progressing to TB disease. Infected persons incarcerated long term without preventive treatment may progress to active TB disease and pose a risk to themselves and others.

Treatment for TB infection is generally started on inmates who will be incarcerated for the duration of care or inmates likely to complete treatment under supervision when released from a facility. Inmates with the following

risk factors should be started on treatment regardless of their expected duration of incarceration: 1) HIV co-infected or other immunocompromised condition; 2) close contact with an active TB case; and 3) TB test conversion within a two-year period.

Attending physicians make decisions on treatment recommendations (i.e., a four-month course of rifampin). The PHR or LHD provides consultation when needed.

If the attending physician prescribes preventive treatment and inmates consents to care, follow these recommendations to ensure a successful treatment outcome:

- Screen inmates for TB disease before starting TB infection treatment.
- Start sentenced inmates on TB infection medication. Coordinate continuity of care with receiving facility for inmates transferred during treatment.
- Follow attending physician's orders for TB infection treatment. Consult with PHR or LHD, if TB expert guidance is needed or facility medical orders are not available.
- Directly observe inmates swallowing TB medication. Record in medication records.
- Monitor medication records at least weekly to ensure inmates take all prescribed medications.
- Prior to starting medication, educate inmates about reasons for taking medications, medication name(s), time to administer, side effects, and importance of adherence.
- Conduct clinical monitoring of side effects. A health professional should evaluate all inmates taking TB infection treatment at least monthly.
- Direct healthcare workers to stop medications and consult with PHR or LHD, if inmate has any serious adverse reactions (such as nausea, vomiting, bleeding, etc.).

Inmates failing to complete treatment for TB infection on two or more occasions should be evaluated to determine if additional efforts to treat are clinically prudent. Some considerations to reinstate treatment include: 1) risk factors for TB disease; 2) previous cumulative doses of administered treatment; and 3) anticipated treatment adherence.

VII. Coordinated Release Planning

Regardless of size and ownership, all correctional facilities must assure continuity of care for inmates receiving TB treatment (TAC, Chapter 97, Rule § 97.191). Coordinating TB services when inmates are transferred or released to another facility is critical. It prevents interruptions in treatment and minimizes risk to public health.

The housing facility, destination facility, PHR or LHD, and the inmate must initiate the continuity of care plan as soon as TB is suspected. The classifications unit should notify health services staff when an inmate is scheduled for release or transfer. However, inmates may be released any time due to an unexpected or immediate order of the court. When this occurs, the notification should be provided immediately after the inmate's release.

Advising an inmate to go to the PHR or LHD upon release is not a continuity of care plan. Continuity of care and services refers to the process of: 1) identifying an inmate's educational, medical or psychological needs; 2) developing a plan to meet treatment, care, and service needs; and 3) coordinating treatment provision, care, and services between various agencies to ensure continuity while incarcerated and after release.

Housing facility responsibilities

The housing facility is a correctional or detention facility housing persons in custody. The following recommendations for the housing facility support continuity of TB care in the event of transfer or release:

- Document all inmates' TB care needs to be considered in classification, housing and transfer decisions.
- Provide information and counseling at the time of initial TB testing or diagnosis to ensure inmate understands importance of treatment adherence and receives specific instructions for seeking care upon release.
- Follow the inmate from intake to release: 1) using a "contact card" or a sticker (i.e., Stop Sign) attached to the records which must accompany the inmate during each transfer and release, and 2) adding a note on the custody record and the medical record.
- Review transferring inmates' health records to ensure the receiving unit has the required health resources to continue TB treatment and

prevent transmission (TAC, Title 37, Part 11, Chapter 343, Subchapter D, Rule §343.600).

- Request a medical hold, if receiving unit does not have necessary health resources (i.e., medical personnel or AIIR).
- Send the Texas Uniform Health Status Update Form with complete information to the destination facility and to the receiving PHR or LHD for inmates *prior* to transfer or release (TAC, Title 37, Part 9, Chapter 273, Rule §273.4; TAC, Title 37, Part 11, Chapter 343, Subchapter D, Rule §343.600). Include lab results, medication regiment, medical history, etc. (TAC, Title 37, Part 9, Chapter 273, Rule §273.4).
 - Federal prisons use Medical Summary of Federal Prisoner/Alien in Transit (U.S. Marshals Services form USM-553 (USMS)) for all inmate transfers.
- Send a referral to a PHR or LHD, if release date is known. Instruct inmate to follow-up with PHR or LHD in case of unexpected release.
- Perform scheduled checks of TB suspects and cases to determine if they have been released without notifying health services staff. Notify the PHR or LHD immediately if the patient has been released.
- Ensure that appropriate precautions are taken during transfer or release to prevent TB exposure to others.
- Work with PHR and LHD to facilitate national and international referrals and continuity of care, as needed.
- Supply TB medications for estimated lapse of time between inmate release and first health department appointment. Consult with destination PHR, LHD or facility to estimate time lapse.
- Facilities must have a policy that permits health staff to place medical hold on inmates to prevent institutional transfers, until it can be determined that the receiving facility has sufficient resources and notification to ensure proper TB prevention and care.

✚ **Texas Forms Site:** Download the Medical Hold form (Form No. 12-14685) and the Texas Uniform Health Status Update form and the Medical Summary of Federal Prisoner/Alien in Transit form at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>

Destination facility, PHR or LHD responsibilities

The destination facility is a designated correctional or detention facility where inmates will transfer. For inmates due for release, the destination facility for TB care services is the PHR or LHD closest to where the inmate will reside. The following recommendations for the destination facility support continuity of TB care in the event of transfer or release:

- Document TB screenings to ensure necessary precautions are taken and treatment can immediately resume (TAC, Title 37, Part 11, Chapter 343, Subchapter D, Rule § 343.600).
- Acknowledge and document patient referral from transferring facility, PHR or LHD.
- Review and approve TB treatment plan submitted within 48 hours of receipt.

PHR or LHD responsibilities

The PHR or LHD in the jurisdiction where the inmate was diagnosed must follow these recommendations to prevent lapses in needed TB services:

- Work with the housing facility to facilitate national and international referrals and continuity of care.
- Actively follow-up on all released inmates with TB disease or infection (and HIV co-infection) and their known contacts to ensure therapy completion. Request health record or summary.
- Offer treatment to all released inmates voluntarily reporting to PHRs or LHDs with TB infection or disease.
- Contact all referred or discharged inmates on TB infection treatment to encourage completion of preventive therapy.

Release planning and continuity of care resources

Various programs work with correctional facilities to ensure TB services are provided for inmates after their release or transfer in-state, out-of-state, or internationally. Depending on the program (e.g., PHR, LHD, CureTB or TB Net), services may be available to TB cases and suspects, contacts, and person with TB infection. Follow these steps for coordinated release planning:

- Contact the program before the person leaves your facility.
- Review the program eligibility criteria to ensure referral is sent to appropriate program.
- Complete the referral carefully and provide accurate information.

Interstate and intrastate transfers

An inter-jurisdictional referral system is supported by the National Tuberculosis Controllers Association (NTCA) and DSHS for patients who move across state lines and locally in Texas.

- Fill out the *Inter-jurisdictional TB Notification (IJN)* completely. Specify the name of the form recipient in the TB Program and date of notification.

- ✚ To download the **Interjurisdictional TB Notification (IJN) Form** and instructions visit <http://www.tbcontrollers.org/resources/interjurisdictional-transfers/#.W3R5IOhKhPY>

Table 2: Interstate and local referrals

Interstate and local transfers	
<p><i>Interstate transfers</i> NTCA process applies</p>	<p><i>For transfers to Texas:</i> Contact DSHS TB/HIV/STD Epidemiology and Surveillance Branch Phone: 512-533-3026 Secure fax: 512-533-3176</p> <p><i>For transfers to another state:</i> See NTCA contact list for state, city and territory TB programs contacts. Website: http://www.tbcontrollers.org/community/satecityterritory/#.W3SQBOhKiM8</p>
<p><i>Intrastate transfers</i> DSHS guidelines apply</p>	<p>To identify the TB program in the area: See the map of Texas TB program areas http://www.dshs.texas.gov/IDCU/disease/tb/programs/corrections/MapofTBProgramAreas.pdf</p> <p>For the PHR or LHD contact information: Visit http://www.dshs.state.tx.us; or</p>

	See Texas correctional liaisons directory at http://www.dshs.texas.gov/IDCU/disease/tb/programs/corrections/TexasCorrectionalLiaisonsDirectory.pdf
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Binational referrals: Texas - Mexico Border

The Texas binational TB programs provide assistance or make recommendations in evaluating, diagnosing, treating, and monitoring persons with suspected or confirmed TB disease. Persons who meet the following criteria may be referred to a Texas binational programs:

- 1) Resides in Mexico but has relatives in the U.S.;
- 2) Dual resident of U.S. and Mexico;
- 3) Has contacts on both sides of the border, in the U.S. and Mexico;
- 4) Starts treatment in the U.S. but returns to live in Mexico; or
- 5) Referred from the U.S. for treatment or follow-up in Mexico.

Table 3: Binational TB Programs

Binational TB Referrals: Texas - Mexico Border	
<i>Juntos Project</i> Service area: El Paso, Texas - Ciudad Juarez, Chihuahua	TX Dept. of State Health Services, PHR 9/10 401 E. Franklin, Suite 210 El Paso, Texas 79901 Telephone: (915) 834-7792 Fax: (915) 834-772
<i>Los Dos Laredos Project</i> Service area: Laredo, Texas - Nuevo Laredo, Tamaulipas	City of Laredo Health Department 2600 Cedar, Laredo, Texas 78040 Telephone: (956) 795-4911 or (956) 795-4900 Fax: (956) 795-2419
<i>Grupo Sin Fronteras</i> Service area: Brownsville, Texas - Matamoros, Tamaulipas; and McAllen, Texas - Reynosa, Tamaulipas	TX Dept. of State Health Services, HRS 11 601 W. Sesame Drive, Harlingen, Texas 78550 Telephone: (956) 444-3205 Fax: (956) 444-3236 for confidential documents
<i>Esperanza y Amistad</i> Service area: Del Rio, Texas - Ciudad Acuña, Coahila; and Eagle Pass, Texas - Piedras Negras, Coahila	TX Dept. of State Health Services, PHR 8 1593 Veterans Blvd., Eagle Pass, Texas 78852 Telephone: (830) 773-9438 Ext. 17 or (830) 758-4274; Cell: (830) 513-8070

International referrals

CureTB and TB Net, link TB patients to care at their destination, transfer medical records, and provide continuing health education. In general, persons who meet the following criteria may be referred:

- 1) Mobile, migrant or likely to leave the country, regardless of nationality;
- 2) Has a working phone number or family member with phone number;
- 3) At least 30 days to complete treatment after leaving the U.S. for Cure TB referral; or
- 4) Signed consent form for TB Net referral.

Table 4: International TB Referral Programs

International TB Referrals	
<p><i>Division of Global Migration and Quarantine/CDC - CureTB Program</i></p> <p><i>Provides referral services for all ICE detainees per interagency agreement.</i></p>	<p>Telephone: (619) 542-4013 Fax: 404-471-8905 Toll Free Patient and International Provider Line: 001-800-789-1751 Email: curetb@cdc.gov Website: https://www.cdc.gov/usmexicohealth/curetb.html https://www.cdc.gov/usmexicohealth/es/curetb.html</p>
<p><i>Migrant Clinicians Network –TB Net Program</i></p>	<p>Telephone: (512) 327-2017 Fax: (512) 327-6140 or (512) 327-0719 Toll free patient line # (800) 825-8205 http://www.migrantclinician.org/services/tbnet.html</p>

- ✚ For the Binational Tuberculosis Program Manual, see <http://www.dshs.texas.gov/IDCU/disease/tb/policies/TBBinationalProgramManual.pdf>
- ✚ For TB management of undocumented and deportable inmates, prisoners and detainees in federal custody, see http://tbcontrollers.org/docs/corrections/Federal_TBCaseMgmt_for_Undo-c-Deport_Corrections_v3_08-12-2014.pdf

VIII. Infection Control

Effective infection control measures in correctional facilities reduce or eliminate TB transmission risk.

- All facilities, including low risk TB facilities, should assign a person with experience in infection control and occupational health to be responsible for TB prevention and control. This person must have the authority to develop, implement, enforce and evaluate TB control policies.
- A TB risk assessment is the first step of a TB control plan. It determines the types of administrative, environmental, and respiratory-protection controls needed and should be repeated annually in collaboration with a PHR or LHD (TAC, Chapter 97, Rule § 97.177).

Most TB outbreaks reported in correctional facilities involve an infectious person who remained undetected for a prolonged period of time. Immediate isolation of infectious patients can interrupt TB transmission in correctional facilities. Inmates must be placed in an AIIR or safely transferred to other institutions, facility or hospital with a functional AIIR, when the following conditions exist: 1) signs and symptoms of TB disease are present; 2) an inmate has documented TB disease and incomplete treatment; or 3) a qualified provider has not ruled out infectious TB.

Patients with suspected or confirmed TB disease and not on TB treatment should be considered infectious, if characteristics include:

- Prolonged cough for 3 weeks or longer
- Chest pain
- Hemoptysis (bloody sputum)
- Cavitation on chest radiograph
- Positive acid-fast bacilli (AFB) sputum smear result
- Respiratory tract disease with involvement of the lung or airways, including larynx
- Undergoing cough-inducing or aerosol-generating procedures (e.g., sputum induction, bronchoscopy, airway suction)

If patients with one or more of the characteristics above are on standard multidrug therapy with documented clinical improvement, usually with smear conversion over several weeks, risk of infectiousness is reduced.

The following guidance is central to effective isolation measures.

- 1) Do not isolate or segregate TB patients and suspects without proper health monitoring. The general medical and mental health of isolated inmates should be monitored daily given their TB medications. They must also be given time to make their health needs known, including discussing adverse side effects from their TB regimen.
- 2) Do not use "lock-down" or single solitary confinement rooms to isolate persons with TB signs and symptoms. TB can be transmitted into adjacent corridors and rooms unless adequate ventilation system maintains negative pressure and appropriate room exhaust.
- 3) Post appropriate respiratory precautions outside AIIRs.
- 4) Medical and security staff should use particulate N-95 respirators when caring for infectious TB patients.

Discontinuation of isolation

An inmate with suspected or confirmed TB disease should remain in an AIIR until all of the following have occurred:

- The patient has three (3) consecutive negative AFB sputum smear results obtained eight (8) to twenty-four (24) hours apart, with at least one (1) being an early morning specimen;
- The patient has demonstrated clinical improvement as a result of directly observed therapy (DOT) TB treatment for a minimum of two (2) weeks; and
- A knowledgeable and experienced TB physician has determined that the patient is noninfectious.
- A longer isolation period must be considered for patients with multidrug-resistant TB (MDR TB) due to the possibility of treatment failure or relapse which may prolong infectiousness.

Transporting infectious TB patients

Measures must be taken to prevent transmission when transporting a person with suspected or confirmed infectious TB disease. Transport patient in an ambulance whenever possible.

- Provide instructions and ensure that only mask fitted personnel transport infectious patients. An N-95 must be worn in all enclosed areas.
- Provide enough surgical masks for the patient to wear over the mouth or nose to prevent TB particles from the respiratory tract from being released into the air. The patient's masks should be changed when they become moist or torn. (Note: Patients should not wear N-95 respirators. A respirator has the opposite function of a surgical mask.)
- Set ventilation system to non-recirculating mode. This maximizes outdoor air and facilitates TB particles dilution.
- Use rear exhaust, if available. Airflow should go from the vehicle front to rear exhaust fan. Open as many windows as possible to reduce exposure risk, if a vehicle with a HEPA filter is not available.
- Transport additional passengers and staff members in a separate vehicle to reduce exposure risk.
- Leave vehicle unoccupied with windows open for at least one (1) hour after end of journey. Post a sign on vehicle indicating when it can be used again.

Airborne infection isolation rooms

A properly designed and operating AIIR can be an effective infection control measure. However, a badly designed or incorrectly operating AIIR does not contain infectious particles or effectively reduce their concentration in the room. Consequently, health care workers and other patients are placed at risk for TB (Francis J. Curry National Tuberculosis Center, 1999).

Correctional and detention facilities with an AIIR must develop and implement monitoring and maintenance procedures. When an AIIR does not function according to code, the appropriate staff must be notified to take appropriate corrective action.

AIIRs must provide negative room pressure (such that air flows under the door gap into the room). A properly functioning must:

- Have an air flow rate of 6-12 ACH; 6 ACH for existing structures and 12 ACH for new construction or renovation.

- Have direct exhaust of air from room to outside the building or recirculation of air through a HEPA filter before returning to circulation control tests and measurements (CDC, 2005).

✚ For more information on isolation rooms, see Francis J. Curry National Tuberculosis Center's manual *Isolation Room: Design, Assessment, and Upgrade*. <http://www.abatement.com/media/pdf/isolation-rooms-design-assessment-upgrade.pdf>

Respiratory protection

Staff must wear respiratory protection to: 1) enter rooms housing individuals with suspected or confirmed TB disease; or 2) transport an individual with suspected or confirmed TB disease. In addition, visitors to inmates with TB disease (e.g., law enforcement officials, social workers, ministers) should be offered respirators to wear while in AIIR and instructed on proper use.

The minimum respiratory protection is a filtering face-piece respirator and must be selected from those approved by CDC/National Institute for Occupational Safety and Health (NIOSH) under Title 42 CFR, Part 84. Decisions regarding which respirator is appropriate for a particular situation and setting should be based on the TB risk assessment. For correctional facilities, a CDC/NIOSH-approved N95 air-purifying respirator will provide adequate respiratory protection in the majority of situations that require the use of respirators (CDC, 2006).

Respirators must fit different face sizes and features properly. Staff must also understand the difference between respirators and surgical masks. When respirators are used, a respiratory protection program including education, initial fit testing, and annual fit testing should be part of a correctional facility's TB control program. The OSHA standard on respirators fit testing procedures, 29 CFR 1910.134, is applicable and should be followed.

✚ To view CDC/National Institute for Occupational Safety and Health (NIOSH) Title 42 CFR, Part 84, visit <https://www.cdc.gov/niosh/npptl/topics/respirators/pt84abs2.html>

✚ For *Mask Fit Testing Procedures*, see OSHA Standard Number 1910.134 Appendix A, see https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9780

Medical and health care quality assurance program

Periodic review of the following should be conducted:

- Administrative, environmental and respiratory controls
 - Respiratory isolation of inmates with confirmed or suspected TB disease
 - Reporting of TB cases and suspects to the PHR or LHD
 - New and delayed TB diagnoses
 - Medical holds
- ✚ For administrative, environmental and respiratory protection controls, see CDC fact sheet *Infection Control in Health-Care Settings*, <http://www.cdc.gov/tb/publications/factsheets/prevention/ichcs.htm>

IX. Contact Investigation

Identification of an inmate with probable or confirmed TB disease calls for a rapid response due to the potential for widespread TB transmission in a correctional facility. A prompt response can prevent a TB outbreak or contain an outbreak that has already begun. Persons exposed to an individual with infectious TB are known as TB contacts. A TB contact investigation is a TB control strategy used to identify and assess TB contacts and provide appropriate treatment for TB infection or disease, if needed (CDC, 2014).

Health departments are responsible for ensuring a complete contact investigation is done and must guide facilities in planning, implementing and evaluating a TB contact investigation. Contact investigations are complicated requiring many interdependent decisions and time consuming interventions.

Facilities have an obligation to protect inmates and employees from health hazards and must fully cooperate and collaborate with PHRs or LHDs on contact investigations (TAC, Chapter 37, Rule § 163.40).

Decision to initiate a contact investigation

A physician who attends to a case of suspected or active TB must notify the PHR or LHD within one (1) working day and not wait for culture confirmation to begin a TB contact investigation, if high suspicion of active TB exists.

Competing demands restrict the resources for contact investigations. A decision to initiate an investigation depends on the presence of factors used to predict the likelihood of transmission which include:

- Person's degree of infectiousness and infectious period;
- Contacts with the greatest degree of exposure (8 hours or more per week);
- Characteristics of each person exposed (co-morbid conditions);
- Ventilation and air flow;
- Proximity and length of exposure to TB patient;
- Situations affecting infection risk (masks, isolation areas, transit); and
- Infection rate to assess the level of TB transmission.

Planning a contact investigation

The aid of epidemiologists or properly trained personnel is important to decide which contact investigations should be assigned higher priority and which contacts to evaluate first. A contact investigation plan includes:

- Assessment of need and scope of investigations;

- Management of staff and inmate notifications;
- Contact testing which generally includes two (2) rounds of testing;
- Expansion of investigation, if the infection rate is above 20%.

✚ **Texas Forms Site:** Use the Environmental Risk Assessment for Congregate Settings (DSHS form TB-505) to gather environmental information prior to initiating a contact investigation. Download it at <http://www.dshs.texas.gov/idcu/disease/tb/forms/>

✚ **Texas Forms Site:** Use the Tuberculosis Infectious Period Calculation Sheet (DSHS form TB-425) to plan the contact investigation scope. Download it at <http://www.dshs.texas.gov/IDCU/disease/tb/forms/PDFS/TB-425.pdf>

✚ **Texas Forms Site:** Use the TB Contact Investigation Expansion Analysis Check-List (DSHS form TB-460), to determine, if expansion of investigation is needed. Download it at <http://www.dshs.texas.gov/IDCU/disease/tb/forms/DOCS/TB-406.doc>

Depending on the facility's health care resources, health departments may be responsible for conducting the contact investigation, or some steps of the investigation may be performed by the facility's health care staff with the health department's supervision. For example, a correctional facility may evaluate exposed inmates and staff, while a health department may evaluate contacts outside the facility.

Because wide-scale investigations divert attention from high-priority activities necessary to interrupt transmission in the facility, mass TB testing of all persons (such as those who had minimal contact with the TB patient) should be avoided.

Incarceration, movement and housing history for TB patients and contacts

The following resources can be used to determine: 1) if an inmate is in the custody of a correctional facility, and 2) to track the inmate's movement history through the correctional system during the infectious period.

- Law enforcement agency's medical program;
- Federal Bureau of Prisons (BOP) inmate locator <http://www.bop.gov/iloc2/LocateInmate.jsp>;
- Immigration and Customs Enforcement (ICE) detainee locator <https://locator.ice.gov/odls/homePage.do>;
- Detention facility's booking or classifications unit;
- Texas Department of Criminal Justice

- <https://offender.tdcj.texas.gov/OffenderSearch/index.jsp>; and
 - U.S. Marshals Service (USMS) local district.
The USMS does not have an online locator available. Go to:
<https://www.usmarshals.gov/index.html>, click on map labeled "Your Local U.S. Marshals Office";
 - VINELink victim notification network <https://vinelink.com/#/home>.
- ✚ For complete guidelines on contact investigations, see Guidelines for the Investigation of Contacts of Persons with Infectious TB, *MMWR* 2005.54 (no. RR-14), <http://www.cdc.gov/mmwr/PDF/rr/rr5415.pdf>.

X. Training

All correctional staff and inmates play an important role in TB prevention. Modest investments in training and education can significantly improve the understanding of TB, infection control, and reduce active TB disease and infections.

All employees and volunteers should receive initial training that includes: 1) review and explanation of the facility's TB prevention and control policies; 2) review of TB educational material(s) that explain transmission modes, common signs and symptoms, and treatment and prevention methods; and 3) information on local resources and health departments for TB care and consultation.

TB evaluation staff should receive training on the following (Texas Administrative Code, Chapter 343, Rule § 342.604, from Texas Juvenile Justice Department):

- How to take medical histories and make the required observations.
- How to dispose inmates based on observations and responses to clinician questions or make a referral for additional screening.
- How to document findings on the medical record.

Infection control and health staff should be familiar with the content of the Texas TB Manual and current guidelines from the American Thoracic Society (ATS) and the CDC.

Annual or periodic trainings should be offered and could include webinars, health educator or clinical presentations, and community provider or health department presentations.

Inmate educational materials (pamphlet, video, informed consents) should be presented at intake to increase awareness about TB. This could include: 1) benefits of the TB screening and 2) review of TB signs and symptoms, transmission, prevention and care.

- ✚ Five TB Regional Training and Medical Consultation Centers provide TB training/technical assistance, education materials, and medical consultation. The Heartland National TB Center services Texas and the heartland states, see <http://www.cdc.gov/tb/education/rtmc/> and <http://www.heartlandntbc.org>.

XI. Program Collaboration

TB prevention and care in correctional and detention facilities is complex. It requires the collaborative efforts of a broad range of correctional and public health partners. The organizations and institutions referenced in this section work closely with DSHS to reduce TB infection and disease in Texas and contributed greatly to the development of these guidelines.

Federal prisons

All federal correctional systems (BOP, ICE, CBP and USMS) maintain facilities in Texas, including contracted facilities. Federal correctional systems must comply with applicable federal, state and local laws and regulations. Additionally, each system has general TB policies that support conforming to local and state standards where each facility is located.

The *42 U.S. Code § 13911* requires Federal prisons and holding facilities operated by or under contract with ICE to comply with CDC and National Institute of Corrections (Cornell University Law School, Legal Information Institute, 2016). PHRs and LHDs must work with these facilities to provide TB services based on each facility's resources and needs.

Texas Commission on Jail Standards (TCJS, or the Commission)

TCJS regulates standards of construction, maintenance and operation for county and municipal jails. It has the legal authority to enforce compliance with state law and DSHS TB control and prevention standards. The Commission inspects Chapter 89 jails annually to ensure standards are met and investigates DSHS noncompliance reports.

Texas Corrections Planning Committee

The DSHS TB and Hansen's Disease Branch formed the Texas Correctional Planning Committee (CPC) in 2014 to address challenges and develop strategies for TB prevention and control in Texas' correctional and detention facilities. Committee members from thirty-five public health and correctional key organizations with a vested interest in correctional TB prevention and care are involved. They include:

- County and private jails (Chapter 89 facilities)
- Cure TB
- Customs and Border Patrol
- DSHS TB Branch

Federal Bureau of Prisons
Heartland National TB Center
Immigration and Customs Enforcement
U.S. Department of Health and Human Services' Office of Refugee
Resettlement
TB Net Binational Program (Migrant Clinician's Network)
Texas Center for Infectious Disease
Texas Commission on Jail Standards
Texas Department of Criminal Justice Health Services Division
Texas Jail Association
Texas Local Health Departments and Health Service Regions
U.S. Marshalls Service.

Members represent multiple disciplines, including healthcare administrators, physicians, nurses, operations specialists, policy and regulation, TB program managers, correctional liaisons, epidemiologists, contact investigators, program collaboration service integration specialist, and education/training specialists. They advise DSHS, help focus resources, and design strategies for correctional TB prevention and care.

Texas Department of Criminal Justice (TDCJ)

TDCJ Medical Division provides TB services in state prisons and community corrections facilities and coordinates with DSHS on reporting and investigations. Each agency has distinct areas of authority and responsibility.

State prisons

Chapter 501, Government Code, authorizes the Correctional Managed Health Care Committee (CMHCC) to coordinate TDCJ health care delivery policy development (Government Code, Title 4, Subtitle G, Chapter 501).

State medical school contractors provide state prison healthcare services depending on the geographic location of prison units. Texas Tech University Science Center (TTUHSC) contracts for defined areas in West Texas and the University of Texas Medical Branch contract covers the remainder.

The TDCJ Health Services Division oversees the contracted medical services in state prisons. It has the statutory authority and responsibility to ensure access to care, monitor quality of care, investigate medical grievances, and conduct audits of health care services.

Community corrections

TDCJ's Community Justice Assistance Division (CJAD) sets minimum standards and provides oversight for community corrections facilities. These facilities are operated by, for, or with funding from TDCJ CJAD. Some locations may be secured facilities for inpatient treatment. Other programs may be offered at other locations, such as outpatient substance abuse treatment (TAC, Chapter 37, Rule § 163.40).

DSHS has the statutory authority and responsibility to provide guidance and oversight for TB prevention and care in CJAD community corrections facilities that meet Chapter 89 criteria.

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