TEXAS Health and Human Services | Texas Department of State Health Services

Report of Tuberculosis Test Conversion in TB Staff

This form is for DSHS-funded tuberculosis (TB) programs to report TB test conversions of TB staff.

TB program managers or designees should investigate the cause of TB test conversions in TB staff. The investigation should consider gaps in administrative, environmental and respiratory protection measures that may have contributed to the conversion. Managers or designees should also consider the staff member's role in the TB clinic and factors that may have contributed to an exposure outside of work.

Complete page 1 and sections 1–3. Return to the TB and Hansen's Disease Section Nurse Administrator within 60 days of the screening date. Use Attachment 1: Details on Staff with TB Test Conversions and Attachment 2: Calculating TB Test Conversation Rates to supplement the investigation.

Discuss implications of TB test conversions that happen at work with the medical director, human resources personnel, and local and regional administrators as necessary.

Health Department Name: _____

Address: _____

TB Program Manager Name: _____

Contact Phone: _____ Email Address: _____

Type of Screening:

☐ Annual

☐ Recent exposure (specify): _____

☐ Other: _____

Date of Screening: _____

Number of TB Personnel tested with an IGRA or TST: _____

Number of TB Personnel with TB test conversions: _____

Definitions:

TB Test Conversion — When screening TB staff who are potentially at risk for TB exposures, a TB test conversion is a change from a negative TB test result to a positive TB test result within the past two years.

TB Screening — A TB screening includes a TB test with an IGRA (or TST if IGRA is contraindicated); an individual risk assessment to interpret the TB test result (DSHS TB 601, After Hire TB Assessment for Health Care Personnel or equivalent); and a TB signs and symptoms screening questionnaire (DSHS TB 207, Targeted Tuberculin/IGRA Testing Screening Form, DSHS TB 601, After Hire TB Assessment for Health Care Personnel or equivalent). For staff with documented previously positive test results, baseline screening includes a TB signs and symptoms screening questionnaire and an initial chest x-ray. TB screening after baseline consists of a TB signs and symptoms screening questionnaire.

Section 1: Investigation of TB Test Conversion of TB Staff	
What is the TB test conversion rate? (See Attachment 1: Details on Staff with TB Test Conversions).	**Response:**
Do you refer staff with TB test conversion(s) for further medical evaluation?	**Response:**
Was there a potential break in protocol (administrative, environmental or respiratory measures) that may have contributed to test conversion(s)? If so, describe. Include follow-up on staff use, access and knowledge of N-95 masks.	**Response:**
What steps did you take to identify potential reasons for occupational exposure?	**Response:**
What corrective actions did you implement to address known or suspected reasons for TB test conversions?	**Response:**
Is there a need to expand testing to other clinic staff based on this conversion? Why or why not?	**Response:**
Other Comments (include the address or site[s] of test conversion if the clinic has more than one location):	

Section 2: Recommendations and Date of Next Screening

If you identified conversion at this screening:

- Refer staff for medical care.
- Complete an investigation on the conversion(s) using this form or equivalent:
  - If the investigation reveals that conversions are or may be related to lapses in infection control, put a system in place to address the lapses. Notify the applicable staff.
  - If the investigation reveals that conversions are related to specific roles or job duties, use resources (i.e. training, additional infection prevention measures) to prevent conversions in that area.
- Update the local/regional infection control policy or procedure as needed, ensuring it is reviewed every three years.
- Provide TB education to staff in direct response to the current TB infection control plan or changes made based on the investigation.
- Ensure environmental, administrative and respiratory measures are in place and working properly.
- Consider increasing frequency of TB screening until you no longer identify test conversions and lapses in infection control.
- Screen qualifying TB staff at least every year.

Date of next TB screening:

Section 3: Signature

Name of TB Program Manager or Infection Control Designee:	
Signature and Date:	
Person completing this form (if different from above):	

Return this form to the DSHS TB and Hansen's Disease Section within 60 days of TB screening.

Do not include PHI. Email the completed form to TB.Feedback@dshs.texas.gov.

Attachment 1: Details on Staff with TB Test Conversions

Employee # (*complete a new page for each employee as needed; do not include PHI)*	
Baseline TB Test Results	☐ IGRA, date, result: ☐ TST, date, result: ☐ CXR, date, result: ☐ Symptom screening, date, result:
Previous TB Test Results	☐ IGRA, date, result: ☐ TST, date, result: ☐ CXR, date, result: ☐ Symptom screening, date, result:
Current TB Test Results	☐ IGRA, date, result: ☐ TST, date, result: ☐ CXR, date, result: ☐ Symptom screening, date, result:

Question	**Response**
1. Date employee signed the TB Program Infection Control Policy:	
2. Does the employee work in direct patient care or the same airspace as someone with infectious TB? If yes, describe.	
3. Did you fit-test the employee and train them on how to use an N-95 mask? If so, what is the date of fit testing and training?	
4. Does the employee have a correctly sized N-95 mask?	
5. Since the last negative TB test, has the employee worked in a setting with known breaks in environmental controls? If yes, describe.	
6. On any occasion did the employee not follow infection control practices when required? If yes, describe.	
7. Are there factors that may have contributed to the test conversion? If yes, describe.	
8. Does the employee have any risk factors for TB outside of employment if known? If yes, describe.	

Attachment 2: Calculating TB Test Conversation Rates

Conversion Rates

When performing routine testing for *M. tuberculosis* infection, providers can calculate TB conversion rates. Use the number calculated to estimate the risk for test conversion in staff and let managers know how their infection control is working.

Calculate a conversion rate by dividing the number of staff conversions in a specified period (numerator) by the number of staff who got tests in the setting over the same period (denominator) and multiplying by 100.

$$\frac{\text{\# of TB test conversions at this screening}}{\text{\# of staff tested with a TST or IGRA at this screening}} \text{ X } 100 = \text{Conversion Rate}$$

Use of Conversion Test Data to Identify Lapses in Infection Control

Reviewing the conversion rate may help to evaluate the likelihood of health-care–associated transmission if providers determine conversions are the result of transmission related to exposure in the healthcare setting.

Compare conversion rates over five years for a better understanding of infection control practices over time:

Year	Number of TB Staff Tested	Number of TB Test Conversions	Conversion Rate
(Current)			