

# A. How to Calculate Conversion Rates

Do not count any baseline TST or IGRA results on new hires in either the numerator or denominator. TB transmission at your facility would only be accurately reflected in TST or IGRA results after the baseline.

Only persons who had a negative TST or IGRA result at your facility in the prior year, and have a positive TST or IGRA result this year should be counted in your numerator.

Only persons who had a negative TST or IGRA result at your facility in the prior year should be counted in your denominator.

$$\text{Annual Conversion Rate} = \frac{\text{Total number of persons (except new hires) with newly positive TST or IGRA results obtained/year}}{\text{Total number of persons (except new hires) who had TSTs applied and read/year or IGRAs completed/year}} \times 100$$

**To help you judge the risk of TB transmission in your setting compared with the entire facility, you should perform the following two calculations:**

1. For each year, note the total number of persons with newly positive TST or IGRA results in your facility (excluding staff in your setting, ex. ED, clinic, etc.). Divide by the number of facility employees (excluding staff in your setting) who received a TST with documented results or who completed an IGRA test.

For example, if seven employees had a positive TST result and you tested a total of 350 employees (in areas other than in your setting), the calculation would be  $7/350$ , or .02, or 2% conversion rate.

2. For each year, note the number of employees in your setting with newly positive TST or IGRA results. Divide by the total number of employees in your setting who received a TST with documented results or who completed an IGRA test.

For example, if 50 employees were tested and two employees had a positive TST result, the calculation would be  $2/50$ , or .04, or 4% conversion rate.

These above examples tell you that the conversion rate is higher for employees in your setting than for employees who work elsewhere in your facility. You should compare the conversion rate of the staff in your setting and the rest of the facility from one year to the next to identify any changing trends.

Please see the sample worksheet on the next page which uses the Emergency Department as an example.

**Note:** Since there is no national, standardized, comparable database against which to evaluate the data for your facility, you must establish your own facility criteria for periodic comparison.

## SAMPLE CONVERSION RATE CALCULATION WORKSHEET FOR EDs

ALL INFORMATION ON THIS WORKSHEET IS FOR THE YEAR: \_\_\_\_\_

### 1. Facility Conversion Rate for Staff Not in ED

- a. Total number of persons (excluding ED staff and new hires) with newly positive TST or IGRA results obtained/year: a. \_\_\_\_\_
- b. Total number of persons (excluding ED staff and new hires) who had TSTs applied and read/year or who had IGRA tests completed/year: b. \_\_\_\_\_
- c.  $A \div B =$  c. \_\_\_\_\_
- d.  $C \times 100 =$  d. \_\_\_\_\_ %
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### 2. ED Conversion Rate

- a. Total number of persons in the ED (excluding new hires) with newly positive TST or IGRA results obtained/year: a. \_\_\_\_\_
- b. Total number of persons in the ED (excluding new hires) who had TSTs applied and read/year or who had IGRA tests completed/year: b. \_\_\_\_\_
- c.  $A \div B =$  c. \_\_\_\_\_
- d.  $C \times 100 =$  d. \_\_\_\_\_ %
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The overall conversion rate for staff not working in the ED is \_\_\_\_\_%. (1d)

The overall conversion rate for ED staff is \_\_\_\_\_%. (2d)