

How are tuberculin skin test conversion rates calculated?

Tuberculin skin test (TST) conversion rates are a simple way of comparing the number of staff who have converted their TST since the prior year and the TST-negative staff who did not convert over the same time period.

Do not count any baseline TSTs on new hires in either the numerator or denominator. TB transmission at your facility will only be accurately reflected in the results of skin tests after the baseline.

Numerator

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

Denominator

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

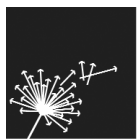
Annual conversion rate =

Total # (except new hires) with newly positive TST results

Total # (except new hires) who had TSTs applied & read

Example

In 1997, you tested 350 employees, not including new hires. Seven of the employees tested (who had had negative TSTs in 1996) had newly positive TSTs. The calculation is 7/350, which equals 0.02, or 2% conversion rate.



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A conversion rate gives you an estimate of the risk of TB transmission. It gives you information needed to determine the significance of the actual number of conversions. It can be misleading to look only at the *number* of conversions. Conversions must be looked at within the context of the TST-negative staff population. For example, a facility might say, "We had five staff conversions in the past year." If the number of TST-negative staff who were tested that year was 5000, five conversions may not represent a large percentage of staff (0.1%). But if the number of TST-negative staff who were tested that year was only 25, five conversions represents a much greater percentage of the staff (20%).

Since there is currently no national, standardized, comparable database against which to evaluate the conversion rates for your facility, you must establish your own data for periodic comparison.

This information is available at our website: www.nationaltbcenter.edu