

Tuberculosis Case Cohort Review Definitions

Listed below are definitions to aid in understanding the cohort review process and to assist in the completion of the TB Cohort Review presentation form.

TB Cohort - a group of persons with tuberculosis, counted as cases in a selected geographic area in Virginia within a specified time frame. *Exclusion: those counted by another jurisdiction.*

TB Cohort Review – a retrospective and systematic presentation and discussion of selected data on every TB case in the identified cohort, focusing on selected program goals, and useful for assessment of program strengths, weaknesses, performance progress over time, and collaborative educational discussion.

Virginia Case # - a unique number assigned by TB surveillance staff to each counted case. It can be found on the faxed list of cases for review.

Respiratory site of disease – tuberculosis affecting the lungs, pleura, or larynx identified either clinically or by culture.

Sputum culture reported – a lab report of a sputa sample that is culture positive for *Mycobacterium tuberculosis* (not including bronchoscopy or other sample sites). Acceptable cultures can include positive DNA probe results for *Mycobacterium tuberculosis* complex (MTC) from a *growing* culture. Do not include rapid test probe results (NAA, PCR, GeneXpert, MTD). Cohort review calculates the proportion of TB patients with respiratory site of disease with a sputum culture reported. *Exclusions: patients under age 12 years.*

Sputum culture conversion – the collection date of the first sputum sample that is reported as culture negative, after a previous positive sputum culture for *M.tb*. The “first” sample is the one with the earliest collection date. The collection date must be **7 days after the last positive culture** was collected, and there must be no *M.tb* positive cultures after this date. Conversion is counted from the date of treatment start to the date of the first negative sputa culture, with the goal that conversion occurs within 60 days of treatment start. Non-tuberculous mycobacteria identified are considered a negative culture if the results are 6-8 weeks after specimen collection, i.e. “final” results. Contaminated cultures do not count as either positive or negative cultures. *Exclusions: patients dead at diagnosis or who died within 60 days of start of TB therapy.*

Drug susceptibility result – TB cases with initial drug susceptibility results from any site in the body. Cohort review calculates the proportion of culture positive TB cases with drug susceptibility results.

Recommended initial therapy – TB cases that start on INH, RIF or rifabutin, PZA and EMB. *Exclusions: patients dead at diagnosis.*

Treatment completion – the proportion of patients who complete treatment within 366 days of initial treatment start, for whom 12 months or less of treatment is indicated. Treatment start is the first day the person ingested any TB medications, regardless of if the regimen was subsequently changed. *Exclusions:*

- *patients dead at time of diagnosis or who died within 12 months of starting treatment,*
- *those who left the country before treatment completion **and** within 12 months of starting treatment, and*
- *those not appropriate by disease site for completion within 366 days. Those not appropriate for treatment in ≤ 366 days includes those with RIF resistant TB, meningeal TB, and children aged 14 or younger with disseminated TB. Disseminated TB is defined by having “miliary” checked on the RVCT form as represented on CXR or CT scan or a positive blood culture.*

Known HIV status – TB cases with an HIV result in the medical record. Documentation should be a lab report from the health department or a hospital, clinic, or private provider. Medical records from another provider that include progress notes of a result will be counted. Tests that meet this requirement are completed at the time of diagnostic work-up, which Virginia will consider up to 8 weeks after treatment start, or within one year prior to it. Persons with diagnosed HIV infection may have reports or records confirming diagnosis with any date previous to diagnostic evaluation. *Exclusions: none.*

AFB smear positive – answer “Yes” or “No” on sputum *smear* status. If “No,” do not enter contact information. Cohort review only evaluates contacts related to smear positive cases, as these are the highest priority for contact investigation. AFB smear negative cases may still require a contact investigation per CDC guidelines, but cohort review does not evaluate them.

If AFB smear positive, # of contacts identified – The current CDC standard for AFB smear positive cases is that at least 3 contacts are identified. Include those with prior positive tests for infection in this number. When investigating the contacts of a secondary case identified during a contact investigation of an index case, do not include the contacts already counted relative to the index case in the number for the secondary case. List only those contacts that are unique to the 2nd case of TB. If there are no unique additional contacts for this case, enter “0.”

Number of completely evaluated contacts to AFB smear positive cases – Completely evaluated means:

- 1st and 2nd round TST or IGRA, if appropriate by date,
- CXR if symptomatic or new/first +test for infection,
- sputa x 3 if CXR is abnormal or person is symptomatic, and
- a symptom review for those with history of + test for infection. Those without symptoms and a prior + test for infection do not need a CXR.
- Include CXR and medical exam for all children < age 5 or persons with immune suppression.

In most cases, persons identified as low priority per CDC guidelines would not be tested or included on this list.

Number of contacts with newly identified positive test for TB infection - Provide the number of contacts with a NEW positive test for TB infection (+TST or IGRA) on the first or second round of testing.

- Do not include those with a history of a past + test for infection, or contacts subsequently diagnosed with TB disease in this number (though both should be on the TB 502 form),
- Do not include persons started on window therapy unless they subsequently test positive for infection (also listed on TB 502 form).

Number of persons newly identified with + test for TB infection starting treatment for latent TB infection – This is the subset of the persons counted in the previous section that start treatment for LTBI.

Number of persons completing treatment for LTBI – the number counted in the previous section that complete treatment. For the 9 months of isoniazid regimen, taking 6 months of INH can be considered complete.

Please remember to bring client records to the cohort review session. Thank you!