

# TB Elimination

## *The Revised Report of Verified Case of Tuberculosis*

### What is the Report of Verified Case of Tuberculosis?

The Report of Verified Case of Tuberculosis (RVCT) is the national TB surveillance form. Data are collected by state and local TB programs and submitted electronically to the Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination (DTBE). These data are used to monitor national TB trends, identify priority needs, and create the DTBE Annual Surveillance Report.

### What is the significance of surveillance?

Surveillance is essential to successful TB control. It is a key component of program evaluation and provides a measurement of progress toward TB elimination. State and local surveillance data are essential in providing the epidemiologic profile of TB in a given jurisdiction, as well as on a national level. For example, surveillance data from local and state TB control programs were used to identify the reversal of the declining trend in TB incidence in the United States in the mid-1980's, the peak of resurgence in 1992, and the subsequent steady decline to an unprecedented low number and rate of TB cases.

### Why was the RVCT revised?

To control and eventually eliminate TB, state and local TB control programs must be able to monitor trends in TB disease in high risk populations, as well as identify new patterns of disease and possible outbreaks. The last major revision of the RVCT was completed in 1993—over 15 years ago! Modification of the RVCT is needed to accommodate the changing epidemiology of TB in terms of risk factors, new drug treatments, enhanced laboratory capacity for diagnostic tests, and to identify priority needs.

Timely and accurate reporting of suspected and confirmed TB cases, with inclusion of useful case data, is necessary for public health planning and assessment at all levels. The new data elements included in the revised RVCT assist in this process.

### Who worked on the revision?

Beginning in 2001, a DTBE-sponsored work group consisting of nearly 30 members from 15 TB control programs, DTBE, and the National TB Controllers Association (NTCA) worked to draft the revised RVCT. The work group made variable additions, deletions, and modifications that will improve data collection, yield meaningful and useful data, and be significant for surveillance.

### What are the enhancements to the RVCT?

The revised RVCT includes risk factors such as diabetes, end-stage renal disease, immunosuppressive therapy, and contact with a drug-resistant case. It enables collection of data on parental origin for pediatric TB patients, primary reason for evaluation of TB disease, whether the patient moved, immigration status, the reason therapy was extended, drug susceptibility testing (newer drugs for susceptibility testing), and outcome of directly observed therapy (DOT). Enhancements accommodate the multiple changes in technology that have occurred in recent years, such as nucleic acid amplification tests, interferon gamma release assays, computerized tomography, and genotyping. The changes also capture data on TB cases not meeting the current surveillance definition. The RVCT case number was modified to include the year and jurisdictional code. This allows each TB case to be allocated a unique number with a "linking state case number" field to record source cases or prior TB episodes.

(Page 1 of 2)

## How are the changes affecting TB control programs?

The revised RVCT assists TB control programs in gathering accurate, useful data. The additions and changes made to the variables of the RVCT enable programs to capture data that are more inclusive of a variety of risk factors. These additional data are essential to efficient and effective TB program management.

## How can health professionals learn how to accurately complete the revised RVCT?

The RVCT Self-Study Orientation Modules include instructions, examples, and exercises to help health professionals learn how to accurately complete the RVCT. In addition, the modules can be used in facilitator-led orientation sessions.

## When was the revised RVCT implemented?

The revised RVCT was field tested by TB program staff. After OMB approved the revised RVCT, implementation of the new form began in January 2009. The final form, instructions, and Self-Study Modules have been available since the fall of 2008 and can be accessed at: <http://www.cdc.gov/tb/programs/rvct/default.htm>

## Additional Resources

1. CDC. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005; 54 (No. RR-12). <http://www.cdc.gov/mmwr/PDF/rr/rr5412.pdf>
2. CDC. Reported Tuberculosis in the United States, 2010. Atlanta, GA: U.S. Department of Health and Human Services, CDC, September 2011. <http://www.cdc.gov/tb/statistics/reports/2010/pdf/report2010.pdf>
3. State TB Control Offices. <http://www.cdc.gov/tb/links/tboffices.htm>
4. CDC. Tuberculosis (*Mycobacterium tuberculosis*) 2009 case definition. [http://www.cdc.gov/osels/ph\\_surveillance/nndss/casedef/tuberculosis\\_current.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/casedef/tuberculosis_current.htm)

**NOTE:** A verified case of TB for public health surveillance may be laboratory confirmed or, in the absence of laboratory confirmation, meet the clinical case definition as defined in the CDC document. "CDC. Tuberculosis (*Mycobacterium tuberculosis*) 2009 case definition."

The criteria for determining a laboratory confirmed case are

- isolation of *M. tuberculosis* complex from a clinical specimen OR
- demonstration of *M. tuberculosis* complex from a clinical specimen by nucleic acid amplification test, OR
- demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated.

A clinically verified case of TB meets all of the following criteria:

- A positive tuberculin skin test or positive interferon gamma release assay for *M. tuberculosis*
- Other signs and symptoms compatible with tuberculosis (TB) (e.g., abnormal chest radiograph, abnormal chest computerized tomography scan or other chest imaging study, or clinical evidence of current disease such as: fever, night sweats, cough, weight loss, hemoptysis)
- Treatment with two or more anti-TB medications
- A completed diagnostic evaluation

<http://www.cdc.gov/tb>