



REPORTED TUBERCULOSIS IN THE UNITED STATES

2013



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Viral Hepatitis, STD, and
TB Prevention

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Ordering Information

Copies of *Reported Tuberculosis in the United States, 2013*, are available from the Division of Tuberculosis Elimination's online ordering system at <http://www.cdc.gov/tb/>.

This report is also accessible via the internet at <http://www.cdc.gov/tb/>

Suggested Citation: CDC. *Reported Tuberculosis in the United States, 2013*. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2014.

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Reported Tuberculosis in the United States

2013

Publication Year 2014

Reported Tuberculosis in the United States, 2013
Centers for Disease Control and Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Tuberculosis Elimination

September 2014

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Preface

Reported Tuberculosis in the United States, 2013 presents summary data for tuberculosis (TB) cases verified and counted in 2013. Report of Verified Case of Tuberculosis (RVCT) forms are submitted to the Division of Tuberculosis Elimination (DTBE), Centers for Disease Control and Prevention (CDC), by 60 reporting areas (the 50 states, the District of Columbia, New York City, Puerto Rico, and seven other jurisdictions in the Pacific and Caribbean). First released in 1993, the RVCT was expanded in 2009 to collect additional information for each reported TB case in order to better monitor trends in TB and TB control.

Reported Tuberculosis in the United States, 2013 is similar to previous publications (see page xi, #19) and contains an Executive Commentary, Technical Notes, seven major data sections, and appendices. The Executive Commentary includes highlights of the 2013 data, and the Technical Notes section provides information about how the data were collected and reported; these sections are included to help the reader interpret the data.

Morbidity Trend Tables present trends in the overall TB case counts and case rates for the United States and the United States Affiliated Pacific Islands by selected demographic, clinical, and genotypic characteristics. *Morbidity Tables, 2013* present overall case counts and case rates for the United States and other jurisdictions by selected demographic and genotypic characteristics for the most recent year for which data are available. *Morbidity Tables, 2011* present overall case counts for the United States by selected demographic and clinical characteristics for the most recent year for which data are available on certain follow-up variables that require a longer data collection period. *Morbidity Tables, Reporting Areas, 2013* present TB case counts and case rates by state and by other jurisdictions with tables of selected demographic and clinical characteristics. *Morbidity Tables, Reporting Areas, 2011*

present data for the most recent year for which data are available on certain follow-up variables that require a longer data collection period. *Morbidity Tables, Cities and Metropolitan Statistical Areas, 2013* provide TB case counts and case rates by metropolitan statistical areas (MSAs: see *Technical Notes*, page 9, for further details) with tables of selected demographic and clinical characteristics. *Surveillance Slide Set, 2013* presents figures from the annual surveillance slide set, which emphasize key recent trends in TB epidemiology in the United States. The slides with accompanying text can also be viewed and downloaded from the DTBE website accessible at <http://www.cdc.gov/tb/>.

The current *Tuberculosis Case Definition for Public Health Surveillance and Recommendations for Reporting and Counting Tuberculosis Cases* are provided in Appendices A and B, respectively (pages 171 and 172). *National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information* is provided in Appendix C (page 181). *Genotyping Background Information and Glossary* is provided in Appendix D (page 182).

Previous Statistical Reports in this Series:

1. *Special Tuberculosis Projects, 1961–1965*. Atlanta: CDC; 1966.
2. *Special Tuberculosis Projects, December 1965*. Atlanta: CDC; 1966.
3. *Special Tuberculosis Projects, June 1966*. Atlanta: CDC; 1967.
4. *Special Tuberculosis Projects, December 1966*. Atlanta: CDC; 1967.
5. Summary Report. Atlanta: CDC; 1967.
6. *Special Tuberculosis Projects, June 1967*. Atlanta: CDC; 1968.
7. *Tuberculosis Program Reports, December 1967*. Atlanta: CDC; 1968.
8. Tuberculin testing during 1966–1967 school year. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1968.
9. *Tuberculosis Program Reports: Six Month Period Ending June 1968*. Atlanta: CDC; 1969.
10. Program Performance Analyses, June–December 1968. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
11. Tuberculin testing data, 1967–1968 school year. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
12. The project years, 1961–1969, In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
13. Tuberculosis programs (for years 1970–1973). In: *Tuberculosis Program Reports*. Atlanta: CDC; 1971–1974.
14. *Reported Tuberculosis Data* (for years 1962–1973). Atlanta: CDC; 1963–1974.
15. *Tuberculosis Statistics: States and Cities* (for years 1974–1985). Atlanta: CDC; 1971–1986.
16. *Tuberculosis in the United States* (for years 1974–1986). Atlanta: CDC; 1976–1987.
17. Tuberculosis program management in the United States, 1984. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1986.
18. *Tuberculosis Statistics in the United States* (for years 1987–1992). Atlanta: CDC; 1989–1993.
19. *Reported Tuberculosis in the United States* (for years 1993–2012). Atlanta: CDC; 1994–2013.

**Reports from 2006 through 2013 are available on the Internet at
<http://www.cdc.gov/tb/statistics/>**

**Access to the TB control offices for individual reporting areas may be found at:
<http://www.cdc.gov/tb/links/tboffices.htm>**

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Executive Commentary

Executive Commentary

Highlights of 2013 Report

Since 1953, in cooperation with state and local health departments, the United States national tuberculosis program has collected information on each newly reported case of tuberculosis (TB) disease in the United States. Currently, each individual TB case report (Report of Verified Case of Tuberculosis or RVCT) is submitted electronically. Following are the highlights of the 2013 report.

1. Updated case counts for each year from 1993 through 2012.
2. Case counts: 9,582 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2013, representing a 3.6% decrease from 2012 (Table 1).
 - Eighteen states reported increased case counts from 2012 (Table 30).
 - California, Texas, New York, and Florida accounted for 51% of the national case total (Table 31).
 - Asians exceeded all other racial or ethnic groups with the largest percentage of total cases (31%) (Table 2).
 - Hispanics comprise the second largest racial or ethnic group (28%) (Table 2).
 - Blacks or African Americans born in the United States represented 37% of TB cases in U.S.-born persons (Table 18) and accounted for 13% of the national case total.
 - Asians born outside the United States represented 46% of TB cases in foreign-born persons (Table 19) and accounted for 30% of the national case total.
3. Case rates: In 2013, the TB case rate declined from 3.2 to 3.0 per 100,000 persons, representing a 4.3% decrease from 2012 (Table 1).
 - Fourteen states and DC reported rates above the national average (Table 30).
 - The TB case rate was 1.2 per 100,000 for U.S.-born persons and 15.6 for foreign-born persons (Table 5).
 - Asians continued to have the highest case rate (18.7 per 100,000 persons) among all racial or ethnic groups (Table 2).
4. Burden among the foreign-born: In 2013, the percentage of cases occurring in foreign-born persons increased to 65% of the national case total (Table 5). This percentage has risen steadily since 1993.
 - Foreign-born Hispanics and Asians together represented 79% of TB cases in foreign-born persons, and accounted for 51% of the national case total (Table 19).
 - In 34 states, $\geq 50\%$ of TB cases occurred among foreign-born persons (Table 34).
 - The top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, India, Vietnam, and China (Table 6).
5. Drug resistance: 1.0% of reported cases had primary multidrug resistance, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin (Table 9). This percentage has remained stable, fluctuating from 0.9% to 1.3%, over the past decade.
6. HIV status: In 2013, 88% of persons with TB reported HIV test results.
 - The percentage of persons with HIV test results reported remained relatively stable between 2012 and 2013 at 86–88% among persons of all ages and 93–94% among persons 25–44 years of age (Table 11).
7. Genotype surveillance coverage: In 2013, genotype surveillance coverage was 94.6%.
 - Genotype surveillance coverage has increased steadily since 2004. Thirty-nine states met or exceeded the national target of 94% genotype surveillance coverage in 2013 (Table 53). Among genotyped cases during 2011–2013, 21% were clustered, suggesting recent transmission (Table 23).

Tuberculosis in the United States

In 2013, the reported number of TB cases (9,582) and case rate (3.0 cases per 100,000) both decreased; these represented declines of 3.6% and 4.3%, respectively, compared to 2012. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 64% (Table 1).

TB case rates vary by well-known factors such as age, race and ethnicity, and country of origin. The proportion of total cases occurring in foreign-born persons has been increasing since 1993. In 2013, 65% of TB cases occurred in foreign-born persons, an all-time high. Foreign-born persons have accounted for the majority of TB cases in the United States every year since 2001. Moreover, the case rate among foreign-born persons in 2013 was approximately 13 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths compiled from National Vital Statistics reports decreased by 5.8%, from 569 deaths in 2010 to 536 deaths in 2011. The number of TB deaths reported annually has decreased by 69% since 1992 (Table 1).

Age

Since 1993, TB case rates have declined annually for almost all age groups. In 2013, TB case rates continued the trend with declines in all age groups except among children aged ≤ 14 , which remained the same as the previous year at 0.8/100,000. The highest burden of disease continues to be among older adults. In 2013, adults aged 65 years and older had a case rate of 4.9 cases per 100,000, while children aged ≤ 14 years had the lowest rate at 0.8 cases per 100,000 (Table 4).

Race and Ethnicity

In 2003, the race and ethnicity category “non-Hispanic, Asian or Pacific Islander” was split into “non-Hispanic Asian” and “non-Hispanic Native Hawaiian or Other Pacific Islander.” In 2013, Asians had the highest TB case rate at 18.7 cases per 100,000, which was a slight decrease from 19.0 in 2012. Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 11.3 cases per 100,000, which is a decrease compared to 12.1 cases per 100,000 reported in 2012. Owing to low case numbers among Native Hawaiians or other Pacific Islanders, case rates fluctuate and must be interpreted with caution (Table 2).

Since 1993, TB case rates have declined in almost all racial and ethnic groups: among Hispanic or Latinos, the decline has been from 19.9 to 5.0 cases per 100,000 (-75%); among non-Hispanic blacks or African Americans, from 28.5 to 5.4 cases per 100,000 (-81%);

among American Indian or Alaska Natives, from 14.0 to 5.4 cases per 100,000 (-61%); among non-Hispanic whites, from 3.6 to 0.7 cases per 100,000 (-81%); and among Asians, from 41.2 to 18.7 cases per 100,000 (-55%). In 2013, the TB case rate for Asians remained over three times higher than that for Hispanics or blacks or African Americans (Table 2).

Origin of Birth

Since 1993, the TB case rate among U.S.-born persons has declined annually. In 2013, the TB case rate for U.S.-born persons was 1.2 cases per 100,000, representing a 84% decrease from 7.4 cases per 100,000 in 1993. The TB case rate among foreign-born persons also declined during the same interval, though the decline was less substantial. In 2013, the TB case rate among foreign-born persons was 15.6 cases per 100,000, representing a 54% decrease from 34.0 cases per 100,000 in 1993 (Table 5).

The proportion of TB cases among persons born in the United States has also declined annually since 1993. In 2013, 35% of TB cases were among U.S.-born persons compared to 69% in 1993 (Table 5). In 34 states, $\geq 50\%$ of TB cases occurred among foreign-born persons. In 17 states (Arizona, California, Colorado, Connecticut, Hawaii, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Oregon, Rhode Island, Utah, Vermont, Virginia, Washington), $\geq 70\%$ of TB cases occurred among foreign-born persons (Table 34).

Country of Origin and World Region

From 2009 through 2013, the top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, India, Vietnam and China (Table 6). The distribution of TB cases by world region of origin reflects immigration patterns among persons settling in the United States. Of the 6,193 TB cases reported among foreign-born persons in 2013, 37% occurred among persons born in the Americas region, and 32% occurred among persons born in the Western Pacific region (Table 20). From 1993 through 2013, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 5% in 2013), the Southeast Asia region (6% in 1993 to 15% in 2013), and the Africa region (2% in 1993 to 8% in 2013) (Table 20).

Multidrug-resistant Tuberculosis

Since 1993 the proportion of patients with primary multidrug-resistant (MDR) TB, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin, decreased from 3% to 1% by 1998. During 2009 through 2013, the percentage of

primary MDR TB cases has remained stable at approximately 1%. Since 1997, the percentage of U.S.-born patients with primary MDR TB has remained below 1%. However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25% (103 of 407) in 1993 to 92% (75 of 82) in 2013 (Table 9).

Extensively Drug-resistant Tuberculosis

CDC has included an updated case count of extensively drug-resistant (XDR) TB cases from 1993 to 2013 in the slide set that accompanies this report. XDR TB is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs (i.e., amikacin, kanamycin, or capreomycin).^{1,2} Four cases were reported as XDR TB in 2013, compared to two cases in 2012, five cases in 2011, one case in 2010, and 0 cases in 2009. Of the 12 XDR TB cases reported since 2009, 9 were among foreign-born persons.

Tuberculosis Therapy

The proportion of TB patients prescribed an initial treatment regimen including isoniazid, rifampin, pyrazinamide, and ethambutol increased from 40.3% in 1993 to 84.1% in 2013. The proportion of patients who completed therapy within 1 year increased from 63.4% in 1993 to 89.0% in 2011 (the latest year for which complete outcome data are available). The proportion of persons receiving directly observed therapy for at least a portion of the treatment duration also increased from 36% in 1993 to 88% in 2011, the latest year for which complete outcome data are available (Table 10).

HIV Status

Between 2012 and 2013, the proportion of persons with TB who reported HIV test results has remained high at 86–88% for all ages and 93–94% for persons aged 25–44 (Table 11). The percentage of persons with TB who reported HIV test results and who were HIV-positive was 7% in 2013, which has remained the same since 2011 (Table 11). Among persons 25–44 years of age, 9% of persons with TB who reported HIV test results were HIV-positive in 2013, decreasing from 11% in 2012 (Table 11). The percentages have declined since 1993, when 48% of persons with TB of all ages with HIV test results reported HIV-positive results; among persons between 25–44 years of age, the percentage

was 63% in 1993 (Table 11). The American Thoracic Society and the Infectious Diseases Society of America recommend that all TB patients be counseled and tested for HIV.³

Genotyping

TB genotyping is a laboratory-based analysis of the genetic material of the bacteria that cause TB disease. In the United States, routine genotyping of isolates from culture-positive TB cases started in 2004 CDC's National Tuberculosis Genotyping Service (NTGS). TB genotyping surveillance coverage, defined as the proportion of culture-positive TB cases with a genotype result, has increased from 53% in 2004 to 95% in 2013 (Table 13). TB genotype clusters are defined as two or more cases with matching genotypes in the same county during a 3-year time period. Cases that are clustered suggest recent transmission, while unique cases are more likely attributable to reactivation of disease that was acquired in the past. Among genotyped cases during 2011–2013, 21% were clustered (Table 23). During this period, the percentage of clustered cases among U.S.-born persons with TB was 35%, compared to 14% among foreign-born persons with TB (Table 22). Among 4,625 cases in clusters during 2011–2013, 976 cases were in 101 high-alert clusters, 997 cases were in 338 medium-alert clusters, and 2652 cases were in 1093 non-alerted clusters (Table 22). In 2013, among all genotyped cases, 1.6% had a genotype that was consistent with *Mycobacterium bovis*; the majority of these (67.3%) were among foreign-born cases (Table 15).

United States Affiliated Pacific Islands (USAPI)

The USAPI consist of six jurisdictions in the Pacific Ocean: American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau. As a result of their affiliations with the United States, the USAPI are among the recipients of U.S. federal government funding, including CDC cooperative agreement funding for domestic TB control program activities. In 2013, the USAPI had 357 reported cases of TB. Among these, 186 (52%) were male, 66 (19%) were aged less than 15 years and 107 (30%) were aged 25–44 years. In addition, 28 (8%) were not born in the USAPI jurisdictions or the United States, and of those, 22 (79%) emigrated from the Republic of the Philippines. Some other data highlights of the 357 reported USAPI cases are that 306 (86%) were diagnosed with pulmonary disease only, 171 (48%) were positive culture for *Mycobacterium tuberculosis*; less than

¹ Centers for Disease Control and Prevention. Revised Definition of Extensively Drug-Resistant Tuberculosis. MMWR Morb Mortal Wkly Rep 2006;55:1176.

² Extensively drug-resistant tuberculosis (XDR-TB): recommendations for prevention and control. Wkly Epidemiol Rec 2006;81:430-2.

³ CDC. Treatment of tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11).

1% had MDR TB, and 148 (42%) were unemployed. Genotype surveillance coverage for USAPI was 82% in 2013.

Puerto Rico

In 2013, the Commonwealth of Puerto Rico reported 50 TB cases to CDC, a case rate of 1.4 per 100,000 persons. Among those cases, 37 (74%) were male, four (8%) were aged less than 25 years, and 35 (70%) were aged 45 years and older. Of the 50 reported cases, 13 were born outside of Puerto Rico, and of those, 9 (70%) emigrated from the Dominican Republic. The majority of reported cases (92%) were diagnosed with pulmonary disease only, 90% were positive culture for *Mycobacterium tuberculosis*, 2.3% had MDR TB, and 42% were unemployed. Genotype surveillance coverage for Puerto Rico was 91% in 2013.

Summary

Both the absolute number of TB cases and the TB case rate in the United States have declined each year since 1993. The total case count of 9,582 and case rate of 3.0 per 100,000 persons represent steady progress toward the goal of TB elimination in the United States (< 1 case per 1,000,000 population)⁴. However, despite consistent declines in TB cases and case rates over the past 60 years, vulnerable populations remain at higher risk for TB in the United States.

Although progress has been made in closing the gap among disparate groups, racial and ethnic minorities and the foreign-born continue to be disproportionately affected by TB. In 2013, 85% of all TB cases occurred among persons who were Asian, black or African American, Hispanic, American Indian or Alaskan Native, or Native Hawaiian. Asians accounted for 31% of all TB cases reported in 2013, the highest percentage of any racial or ethnic group; 95% of TB patients in that group were foreign-born. Hispanics comprise the second largest racial or ethnic group at 28%. African Americans represent 37% of TB cases among U.S.-born persons, the highest racial or ethnic group percentage among the U.S.-born. In 2013, the percentage of cases reported in foreign-born persons increased to 65% of the national case total. To achieve TB elimination, intensified efforts are needed to address the persistent disparities that exist between U.S. -born and foreign-born persons, and between whites and minorities in the United States.

There are a number of tables contained in this report that highlight the disproportionate incidence of TB among racial/ethnic and foreign-born minorities. Tables 2, 3, 5, 6, and 21 contain national-level race/ethnicity and country of origin data while Tables 33-37, 59, 65, and 66 contain similar data stratified by state and Metropolitan Statistical Area.

To address cases and case rates among TB disparity groups, CDC and the Division of Tuberculosis are collaborating with national and local organizations to address social determinates of health (SDH), which are the economic and social conditions that influence the health of people and communities as a whole. CDC collects 10 SDH variables: ethnicity (Table 33), occupation (Table 48), incarceration status (Table 42), immigration status and date of arrival in the United States (Tables 36 and 37), country of birth (Table 35), homelessness (Tables 43 and 67), and resident of long-term care facility at time of treatment (Table 44), HIV status (Table 51), and receipt of treatment (Tables 58 and 59). CDC continues to strengthen collaborations with local partners collecting and evaluating progress reports on SHD measures.

Progress toward TB elimination in the United States will require ongoing surveillance and improved TB control and prevention activities to address persistent disparities between U.S.-born and foreign-born persons, and between whites and racial/ethnic minorities. Along with sustained focus on domestic TB control activities, continued support of global TB control initiatives, and focused initiatives are needed to address conditions that might contribute to increased exposure to TB⁵. Disparities and inequalities among racial/ethnic minorities are affected by many unmeasured factors. CDC recommends improving awareness, testing, and treatment of latent infection and TB disease in minorities and foreign-born populations to reduce TB⁵.

⁴ Ending Neglect: The Elimination of Tuberculosis in the United States. Washington, DC: National Academy Press; 2000.

⁵ CDC; Tuberculosis—United States, 1993–2010. CDC Health Disparities and Inequalities Report—United States, MMWR 2013; 62 (Supplement; November 22, 2013).

Technical Notes

Technical Notes

National Tuberculosis Surveillance System

Reporting areas (i.e., the 50 states, the District of Columbia, New York City, Puerto Rico, and other U.S. jurisdictions in the Pacific and Caribbean¹) report tuberculosis (TB) cases to CDC's National TB Surveillance System (NTSS) using a standard case report form, Report of Verified Case of Tuberculosis (RVCT). TB cases are verified according to the Tuberculosis Case Definition for Public Health Surveillance in Appendix A. TB cases are reported and counted according to the Recommendations for Reporting and Counting Tuberculosis Cases in Appendix B.

TB Case Definition

In 2009, the case definition was modified. TB cases are verified according to the following specified laboratory and clinical criteria (see Appendix A, page 171).

Laboratory criteria for diagnosis

A case may be verified by the laboratory case definition with at least one of the following criteria: 1) isolation of *M. tuberculosis* complex from a clinical specimen, OR 2) demonstration of *M. tuberculosis* complex from a clinical specimen by nucleic acid amplification test (NAAT), OR 3) demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated.

Clinical case criteria

A case may be verified by the clinical case definition in the presence of ALL of the following clinical criteria: 1) a positive tuberculin skin test (TST) result or positive interferon gamma release assay (IGRA) result for *M. tuberculosis*, AND 2) other signs and symptoms compatible with TB (e.g., abnormal chest radiograph, abnormal chest computerized tomography scan or other chest imaging study, or clinical evidence of current disease, AND 3) treatment with two or more anti-TB drugs, AND 4) a completed diagnostic evaluation.

Provider Diagnosis

Provider diagnosis is not a component of the case definition for TB as described in Appendix A. However, when cases of TB are diagnosed but do not meet either the clinical or laboratory case definition, reporting areas have the option of verifying TB cases based on provider diagnosis as described in Appendix B. Through 2008,

¹Other U.S. jurisdictions include American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, the Republic of Palau, and U.S. Virgin Islands

the RVCT did not collect information on IGRA results. If an IGRA was performed in lieu of the TST, then the RVCT would have indicated that the TST was not performed. Thus, culture- and smear-negative cases without a TST that are diagnosed by a positive IGRA result prior to 2008 were considered to have been confirmed by provider diagnosis. However, starting in 2009, positive results for an IGRA are included as part of the clinical case definition for TB confirmation. A case of an anergic patient with a clinical presentation consistent with TB but without laboratory evidence of *M. tuberculosis* complex would also be an example of provider diagnosis.

TB Case Verification Criteria Calculation

The software for TB surveillance developed by CDC includes a calculated variable for TB case verification called "Vercrit," which was modified in 2009. The new variables, **Nucleic Acid Amplification Test Result, Interferon Gamma Release Assay (IGRA) for *Mycobacterium tuberculosis* at Diagnosis**, and **Initial Chest CT Scan or Other Chest Imaging Study** were added in the Vercrit calculation.

"Vercrit" is calculated by using the following criteria in hierarchical order:

1. Positive culture
2. Positive nucleic acid amplification test
3. Positive acid-fast bacilli test
4. Clinical case confirmation
5. Provider diagnosis

Changes in Reporting and Counting TB Cases

In 2009, the Recommendations for Reporting and Counting Tuberculosis Cases in Appendix B were modified. TB cases that are verified but not countable for morbidity statistics can now be reported to CDC as a measure of programmatic and case management burden. However, data on noncountable TB cases are incomplete and not included in this report.

The recommendations for counting TB cases among immigrants, refugees, and foreign visitors were revised based on the recommendations in the 2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians.² Regardless of Panel Physician classification or citizenship status, immigrants and refugees examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications should be reported and counted by the lo-

²CDC. *Immigration Requirements: Technical Instructions for Tuberculosis Screening and Treatment*, 2007. Atlanta: CDC, Division of Global Migration and Quarantine, revised September 2007; http://www.cdc.gov/ncidod/dq/pdf/ti_tb_8_9_2007.pdf.

cality of their current residence at the time of diagnosis. Foreign visitors diagnosed with TB, receiving anti-TB therapy, and planning to remain in the United States for 90 days or more should be reported and counted by the locality of current residence.

New and Expanded RVCT Variables

Data on demographic, clinical, laboratory, initial treatment, and treatment outcomes are collected through the RVCT's three data collection reports:

1. Report of Verified Case of Tuberculosis: for all patients with a verified case of TB.
2. Initial Drug Susceptibility Report (Follow-Up Report 1): for all patients who had a culture that was positive for *M. tuberculosis* complex.
3. Case Completion Report (Follow-Up Report 2): for all patients who were alive when TB was diagnosed.

In 2009, the RVCT was modified and expanded to include 11 additional variables. Modifications to the RVCT accommodate the changing epidemiology of TB in terms of risk factors, new drug treatments, and enhanced laboratory capacity for diagnostic tests. The 2013 Report contains many tables reflecting the addition of these variables

The instructions for completing the RVCT forms and the definitions for all data items are available at: CDC. Report of Verified Case of Tuberculosis (RVCT) Instruction Manual. Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2009. <http://www.cdc.gov/tb/programs/rvct/InstructionManual.pdf>.

Tabulation and Presentation of TB Data

This report presents summary data for TB cases reported to CDC in 2013. TB cases are tabulated by year in which the reporting area verified that the patient had TB and included the patient in its official annual TB case count. Since 2004, the published report has reflected updated information on the numbers of cases of confirmed TB for each year from 1993 onward. Totals for the United States include data from the 50 states, the District of Columbia (DC), and New York City.

Trend data are presented in Tables 1 through 15. Age group tabulations are based on the patient's age in the month and year the patient was reported to the health department as a suspected TB case. State or metropolitan area data tabulations are based on the patient's residence at diagnosis of TB.

Rates

Rates are expressed as the number of cases reported each calendar year per 100,000 persons. Population denominators used in calculating TB rates were based on official census and midyear postcensal estimates from the U.S. Census Bureau. In Tables 1, 30, and 31, the U.S. total populations for 2000–2010 were taken from the U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2000 to July 1, 2010); populations for 2011–2013 were taken from the U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 2013).

In 2003, two modifications were made to the RVCT form: 1) entries for multiple race (two or more races reported for a person) were allowed, and 2) the previous category of “Asian/Pacific Islander” was divided into “Asian” and “Native Hawaiian or Other Pacific Islander.” To calculate rates in Table 2, denominators for 2000–2013 were obtained from the National Population Estimates for the 2000s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin and National Population Estimates for the 2010s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin. The population source for nativity is the Current Population Survey and is used to calculate case rates for U.S. and foreign-born TB. This population source includes populations for the 50 states and D.C., those born abroad of U.S. parents, and those born in U.S. outlying areas (the U.S.-affiliated areas) as the U.S.-born population.

To calculate rates for Table 4, denominators were obtained from the Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States (April 1, 2000 to July 1, 2009) and Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios (April 1, 2010 to July 1, 2013). Denominators for computing 2013 rates in Table 17 were obtained from U.S. Census Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin. In 2004, the method for calculating the annual percentage change in the TB case rate was modified. Unrounded figures are applied to calculate the percentage change in the case rate.

In Table 5, the populations for U.S.-born and foreign-born persons for 1993 and 1994 were obtained from Quarterly Estimates of the United States Foreign-born

and Native Resident Populations: April 1, 1990–July 1, 1999. Denominators for computing the 1995–2013 rates were based on extrapolations from the U.S. Census Current Population Survey (July Supplement).

Mortality Data

Official TB mortality statistics for the United States are compiled by the National Center for Health Statistics (NCHS), CDC. The annual mortality rate is calculated as the number of deaths due to TB in that year, divided by the estimated population for the year, multiplied by 100,000 (Table 1). The preliminary number of deaths for 2011 was obtained from the NCHS, National Vital Statistics Report, Vol. 61, No. 6, October 10, 2012. Finalized numbers of deaths for 2011 or preliminary numbers for later years were not available at the time of this publication.

Drug Resistance

Drug-resistance patterns are displayed in separate tables with drug-resistance trend data by previous TB status and origin of birth. Isoniazid (INH) resistance and multidrug resistance (MDR) are shown in Tables 8 and 9, respectively.

Completion of Tuberculosis Therapy

Tables 10, 59, 60, and 61 present rates of completion of TB therapy (COT). Data collected by RVCT Follow Up Report-2 on date and reason therapy stopped (e.g., patient completed therapy) were used to calculate rates of COT. Cases were stratified by the indicated length of therapy, based on American Thoracic Society/CDC/Infectious Diseases Society of America treatment guidelines³ in effect during the period covered, and the patient's initial drug-susceptibility test results, age, and site of disease.

In Table 60, the first column shows the total number of cases reported during 2011. The remaining columns are grouped under three headings: therapy of 1 year or less indicated therapy, greater than 1 year indicated, and overall. Patients eligible to complete therapy within 1 year had to have been alive at diagnosis, and initiated therapy with at least one drug. Eligible patients did not have rifampin resistance, did not die within 1 year of initiating therapy, did not move out of country within 1 year of initiating therapy, and did not have meningeal TB, bone and joint TB or TB of the central nervous system, regardless of age. In addition, TB patients under the age of 15 were not eligible to complete therapy within 1 year if they had disseminated disease (defined

as miliary tuberculosis and/or a positive tuberculosis blood culture). Patients with culture-negative disease, those with an unknown culture status, and those with culture-positive disease but unknown initial drug-susceptibility test results were included under the category of 1 year or less of therapy indicated.

In Table 60, each group under an indicated length of therapy has an initial column showing the number of cases in persons who were alive at diagnosis and prescribed an initial regimen of one or more drugs, and who did not die during therapy. This number was used as the denominator in COT rate calculations.

COT rates, shown as percentages, were only calculated for areas reporting reason therapy stopped for at least 90% of cases shown in the overall column. For the group with an indicated length of therapy of 1 year or less, rates are shown for both COT in 1 year or less (COT ≤ 1 year) and for COT, regardless of duration (i.e., duration of therapy ≤ 1 year, >1 year, or unknown). For COT ≤ 1 year, the numerator included only those patients completing therapy in ≤ 366 days (based on the dates therapy started and stopped). Patients with missing dates were classified as "treatment not completed" for this calculation.

Rates of COT, regardless of duration, were calculated by dividing the number of patients reported as having completed therapy by the number of total eligible patients. Patients with an outcome other than completed therapy (i.e., moved, lost, refused treatment, or other) were classified as "treatment not completed." Patients with an unknown outcome were also classified as "treatment not completed." For the remaining two groups of indicated therapy length (greater than 1 year and overall), only rates of COT, regardless of duration, are presented. Table 10 provides rates for COT ≤ 1 year and for COT, regardless of duration, only for the group with an indicated therapy of 1 year or less. Table 59 presents rates of COT by ethnicity and non-Hispanic race and by state for those in whom therapy less than 1 year was indicated.

Because streptomycin is no longer being used as part of the standard treatment for TB disease, streptomycin has been removed from the calculated variable for initial drug regimen. Consequently, a separate column for the treatment regimen of isoniazid, rifampin, pyrazinamide (IRZ), ethambutol, streptomycin (E/S) is no longer reported in Tables 10 and 49.

³CDC. Treatment of Tuberculosis, American Thoracic Society, CDC, and the Infectious Diseases Society of America. MMWR 2003;52(No.RR-11):1-77.

Site of TB Disease

Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 7, 38, and 39). In publications prior to 1997, miliary disease was classified as extrapulmonary TB unless pulmonary disease was reported as the major site of TB disease. Beginning in 2009, miliary disease could not be classified as a site of TB disease because it is a clinical or radiologic finding and should be recorded under **Initial Chest Radiograph**, **Initial Chest CT Scan**, or **Other Chest Imaging Study**.

Reporting of HIV Status

Information on HIV status for persons with TB is shown in Tables 11 and 51 among those persons not dead at diagnosis; Table 11 additionally shows trend data for persons aged 25–44 years. The completeness of reporting on HIV status among persons with TB has significantly improved to 94% of TB cases tested among persons aged 25–44 years in 2013; however, this variable is still underreported among jurisdictions. Data on the HIV-infection status of persons with reported TB cases should be interpreted with caution. These data are not representative of all TB patients with HIV infection.

HIV testing is performed after a patient receives counseling and gives informed consent. TB patients who are tested anonymously may choose not to share the results of HIV testing with their health care provider. TB patients managed in the private sector may receive confidential HIV testing, but results may not be reported to the TB program in the health department. In addition, many factors may influence HIV testing of TB patients, including the extent to which testing is targeted or routinely offered to specific groups (e.g., 25- to 44-year-old males, injecting drug users, homeless persons), and the availability of and access to HIV testing services. These data may overrepresent or underrepresent the proportion of TB patients known to be HIV infected in a reporting area.

Primary Occupation for the Past Year

Table 48 now reflects the new 2009 RVCT variable, **Primary Occupation Within the Past Year**, which replaces the **Occupation Within Past 24 months of TB Diagnosis** in previous reports. Following the 2009 RVCT revision, “Multiple Occupation” was removed and the “Retired” and “Not Seeking Employment” categories were added.

Reason Therapy Stopped

Tables 12 and 57 now include a patient’s adverse reaction to anti-TB drug therapy as an option for the reason therapy stopped. The 2009 RVCT revision removed

the option of “Moved” as a valid response to the variable **Reason Therapy Stopped** and this option is not reported after 2009.

Metropolitan Statistical Areas

Tables 63 through 67 present data by metropolitan statistical areas (MSAs) with an estimated 2013 population of 500,000 or more. MSAs are defined by the federal Office of Management and Budget, and the definitions were based on the application of the 2010 OMB standards to 2010 Census and 2006–2010 American Community Survey data announced as of February 2013 (<http://www.whitehouse.gov/sites/default/files/omb/bulletins/b-13-01.pdf>).

The MSA definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. MSAs are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. For example, the TB cases and case rates presented for the District of Columbia in Table 30 include only persons residing within the geographic boundaries of the District. However, the TB cases and case rates for the Washington, D.C., MSA (Table 63) include persons residing within the several counties in the metropolitan area, including counties in Maryland, Virginia, and West Virginia.

A city/MSA with incomplete or unavailable data was not included in the tables and some cities’ or MSAs’ total numbers may be underreported owing to missing information

National Tuberculosis Genotyping Service (NTGS)

NTGS laboratories primarily use two genotyping methods: spoligotyping and MIRU–VNTR. Both methods require only a small amount of culture material, provide digital results, and are relatively quick. IS6110-restriction fragment length polymorphism (IS6110-RFLP) and retrospective 24-locus MIRU–VNTR for older isolates can be performed, if requested, and may help in further differentiating genotype clusters. All isolates are prepared for long-term storage at genotyping laboratories or CDC.

Tuberculosis Genotyping Information Management System (TB GIMS)

In March 2010, TB GIMS was launched by CDC as a secure Web-based system to support ongoing use of TB genotyping data in TB control activities. TB GIMS facilitates systematic data collection of TB genotyping results and integrates genotyping results with epidemiologic data collected by the National TB Surveil-

lance System (NTSS) to form a national and centralized database. Primary users of TB GIMS include TB laboratories that submit isolates for genotyping, national CDC-contracted genotyping laboratories, state and local TB control programs, and CDC that apply this information for TB control activities.

Genotyping results from the national genotyping laboratories or CDC are uploaded into TB GIMS as they become available. Line-listed data from the National TB Surveillance System are also uploaded into TB GIMS weekly. Once genotyping results have been linked to individual patient surveillance data in TB GIMS, the record is considered complete. Complete records are essential for most of the applications of TB genotyping, including all reports and maps as well as using the outbreak detection system to identify potential chains of transmission and outbreaks.

There have been 16 system updates adding new reports, data management functions, and other tools since TB GIMS was released in March 2010. As of June 2014, there were 463 local, state, and federal users of the system.

Genotype Clustering

A genotype cluster consists of two or more cases in a jurisdiction during a specified time period with *M. tuberculosis* isolates that share matching genotypes. The jurisdiction and time period used vary based on the specific application. Cases that are part of the same genotype cluster are likely to be related by TB transmission in some way; however, the cases may not be directly related (i.e., one case did not necessarily give TB to another case in the cluster) or recently related (i.e., both cases may have gotten TB from the same person, but the exposure may have happened years ago). Therefore, while we use genotype clustering to identify likely TB transmission, transmission must be confirmed using field data from contact investigations or other sources. In TB GIMS, clustering is defined as 2 or more cases with matching genotypes (spoligotype and 24-locus MIRU-VNTR) in a single county within a 3-year time period.

Mycobacterium bovis

Mycobacterium bovis can be defined on the basis of spoligotyping results; spoligotyping is a tool for differentiating *M. bovis* from *M. tuberculosis*. The spoligotyping-based definition requires either (1) the absence of spacers 3, 9, 16, and 39–43; the presence of at least 1 of the spacers 29–32; and the presence of at least 1 of the spacers 33–36; or (2) the absence of spacers 3, 9, 16, and 39–43 and 2 copies of the repeated sequence at MIRU locus 24.

Morbidity Trend Tables

Table 1. Tuberculosis Cases, Case Rates per 100,000 Population, Deaths, and Death Rates per 100,000 Population, and Percent Change: United States, 1953–2013

Year	Tuberculosis Cases				Tuberculosis Deaths			
	Number	Rate	Percent Change		Number ¹	Rate ¹	Percent Change	
			Number	Rate			Number	Rate
1953	84,304	52.6	--	--	19,707	12.4	--	--
1954	79,775	48.9	-5.4	-7.0	16,527	10.2	-16.1	-17.7
1955	77,368	46.6	-3.0	-4.7	15,016	9.1	-9.1	-10.8
1956	69,895	41.4	-9.7	-11.1	14,137	8.4	-5.9	-7.7
1957	67,149	39.0	-3.9	-5.8	13,390	7.8	-5.3	-7.1
1958	63,534	36.3	-5.4	-6.9	12,417	7.1	-7.3	-9.0
1959	57,535	32.4	-9.4	-10.7	11,474	6.5	-7.6	-8.5
1960	55,494	30.7	-3.5	-5.2	10,866	6.0	-5.3	-7.7
1961	53,726	29.2	-3.2	-4.9	9,938	5.4	-8.5	-10.0
1962	53,315	28.6	-0.8	-2.1	9,506	5.1	-4.3	-5.6
1963	54,042	28.6	1.4	0.0	9,311	4.9	-2.1	-3.9
1964	50,874	26.5	-5.9	-7.3	8,303	4.3	-10.8	-12.2
1965	49,016	25.2	-3.7	-4.9	7,934	4.1	-4.4	-4.7
1966	47,767	24.3	-2.5	-3.6	7,625	3.9	-3.9	-4.9
1967	45,647	23.0	-4.4	-5.3	6,901	3.5	-9.5	-10.3
1968	42,623	21.2	-6.6	-7.8	6,292	3.1	-8.8	-11.4
1969	39,120	19.3	-8.2	-9.0	5,567	2.8	-11.5	-9.7
1970	37,137	18.1	-5.1	-6.2	5,217	2.6	-6.3	-7.1
1971	35,217	17.0	-5.2	-6.1	4,501	2.2	-13.7	-15.4
1972	32,882	15.7	-6.6	-7.6	4,376	2.1	-2.8	-4.5
1973	30,998	14.6	-5.7	-7.0	3,875	1.8	-11.4	-14.5
1974 ²	30,122	14.1	-2.8	-3.4	3,513	1.7	-9.3	-5.6
1975	33,989	15.7	--	--	3,333	1.6	-5.1	-5.9
1976	32,105	14.7	-5.5	-6.4	3,130	1.5	-6.1	-6.3
1977	30,145	13.7	-6.1	-6.8	2,968	1.4	-5.2	-6.7
1978	28,521	12.8	-5.4	-6.6	2,914	1.3	-1.8	-7.1
1979 ³	27,669	12.3	-3.0	-3.9	2,007	0.9	-31.1	-30.8
1980	27,749	12.2	0.3	-0.7	1,978	0.9	-1.4	0.0
1981	27,373	11.9	-1.4	-2.3	1,937	0.8	-2.1	-11.1
1982	25,520	11.0	-6.8	-7.7	1,807	0.8	-6.7	0.0
1983	23,846	10.2	-6.6	-7.4	1,779	0.8	-1.5	0.0
1984	22,255	9.4	-6.7	-7.5	1,729	0.7	-2.8	-12.5
1985	22,201	9.3	-0.2	-1.1	1,752	0.7	1.3	0.0
1986	22,768	9.5	2.6	1.6	1,782	0.7	1.7	0.0
1987	22,517	9.3	-1.1	-2.0	1,755	0.7	-1.5	0.0
1988	22,436	9.2	-0.4	-1.3	1,921	0.8	9.5	14.3
1989	23,495	9.5	4.7	3.7	1,970	0.8	2.6	0.0
1990	25,701	10.3	9.4	8.2	1,810	0.7	-8.1	-12.5
1991	26,283	10.4	2.3	0.9	1,713	0.7	-5.4	0.0
1992	26,673	10.4	1.5	0.1	1,705	0.7	-0.5	0.0
1993	25,102	9.7	-5.9	-7.1	1,631	0.6	-4.3	-14.3
1994	24,206	9.2	-3.6	-4.7	1,478	0.6	-9.4	0.0
1995	22,726	8.5	-6.1	-7.2	1,336	0.5	-9.6	-16.7
1996	21,210	7.9	-6.7	-7.8	1,202	0.5	-10.0	0.0
1997	19,751	7.2	-6.9	-8.0	1,166	0.4	-3.0	-20.0
1998	18,286	6.6	-7.4	-8.5	1,112	0.4	-4.6	0.0
1999	17,499	6.3	-4.3	-5.4	930	0.3	-16.4	-25.0
2000	16,308	5.8	-6.8	-7.8	776	0.3	-16.6	0.0
2001	15,945	5.6	-2.2	-3.2	764	0.3	-1.6	0.0
2002	15,055	5.2	-5.6	-6.5	784	0.3	2.6	0.0
2003	14,835	5.1	-1.5	-2.3	711	0.2	-10.2	-33.3
2004	14,499	4.9	-2.3	-3.2	662	0.2	-6.9	0.0
2005	14,061	4.8	-3.0	-3.9	648	0.2	-2.1	0.0
2006	13,727	4.6	-2.4	-3.3	644	0.2	-0.6	0.0
2007	13,282	4.4	-3.2	-4.2	554	0.2	-14.0	0.0
2008	12,893	4.2	-2.9	-3.8	590	0.2	6.5	0.0
2009	11,519	3.8	-10.7	-11.4	529	0.2	-10.3	0.0
2010	11,164	3.6	-3.1	-3.8	569	0.2	7.6	0.0
2011	10,509	3.4	-5.9	-6.5	536	0.2	-5.8	0.0
2012	9,940	3.2	-5.4	-6.1	...	...	...	...
2013	9,582	3.0	-3.6	-4.3	...	...	...	...

¹ Official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC, National Vital Statistics Reports.

² Case data after 1974 are not comparable to prior years due to changes in the surveillance case definition that became effective in 1975.

³ The large decrease in death rate in 1979 occurred because late effects of tuberculosis (e.g., bronchiectasis or fibrosis) and pleurisy with effusion (without mention of cause) are no longer included in tuberculosis deaths.

Percent change in tuberculosis death rates is calculated with rounded figures. See Technical Notes.

Note: 1993 to 2013 tuberculosis case counts and rates updated as of June 11, 2014, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 ([ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc](http://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc)) (accessed July 15, 2014) and Intercensal Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2010 (<http://www.census.gov/popest/data/intercensal/state/state2010.html>) (accessed July 15, 2014) and Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2013 (<http://www.census.gov/popest/data/national/totals/2013/index.html>) (accessed July 15, 2014).

Percentage change results reported to one decimal. Ellipses indicate data not available. See Surveillance Slides #2 and #3.

Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race: United States, 1993–2013

Year	Total Cases	Non-Hispanic														Hispanic or Latino ⁴			Unknown or Missing ⁵								
		American Indian or Alaska Native			Asian ¹			Black or African American			Native Hawaiian or Other Pacific Islander ²			White							Multiple Race ³						
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
1993	25102	272	(1)	14.0	3454	(14)	41.2	8947	(36)	28.5	...	...	...	6903	(27)	3.6	...	...	...	5137	(20)	19.9	389	(2)			
1994	24206	327	(1)	16.4	3639	(15)	41.5	8383	(35)	26.2	...	...	...	6572	(27)	3.4	...	...	...	5019	(21)	18.6	266	(1)			
1995	22726	319	(1)	15.6	3840	(17)	41.8	7554	(33)	23.2	...	...	...	5972	(28)	3.1	...	...	...	4834	(21)	17.2	207	(1)			
1996	21210	287	(1)	13.7	3666	(17)	38.1	7097	(33)	21.5	...	...	...	5487	(26)	2.8	...	...	...	4492	(21)	15.2	181	(1)			
1997	19751	264	(1)	12.3	3683	(19)	36.6	6604	(33)	19.7	...	...	...	4824	(24)	2.5	...	...	...	4217	(21)	13.6	159	(1)			
1998	18286	254	(1)	11.5	3516	(19)	33.5	5823	(32)	17.0	...	...	...	4475	(24)	2.3	...	...	...	4089	(22)	12.6	129	(1)			
1999	17499	242	(1)	10.7	3519	(20)	32.1	5549	(32)	16.0	...	...	...	4227	(24)	2.1	...	...	...	3864	(22)	11.4	98	(1)			
2000	16308	232	(1)	11.0	3392	(21)	31.3	5148	(32)	15.0	...	...	...	3638	(22)	1.9	...	...	...	3803	(23)	10.7	95	(1)			
2001	15945	226	(1)	10.6	3499	(22)	31.2	4782	(30)	13.7	...	...	...	3346	(21)	1.7	...	...	...	4009	(25)	10.8	83	(1)			
2002	15055	185	(1)	8.6	3322	(22)	28.6	4467	(30)	12.7	...	...	...	3042	(20)	1.5	...	...	...	3973	(26)	10.3	66	(0)			
2003	14835	179	(1)	8.2	3460	(23)	29.9	4159	(28)	11.7	64	(0)	16.2	2792	(19)	1.4	37	(0)	1.0	4105	(28)	10.3	39	(0)			
2004	14499	157	(1)	7.1	3335	(23)	28.0	4070	(28)	11.4	63	(0)	15.6	2631	(18)	1.3	34	(0)	0.9	4181	(29)	10.2	28	(0)			
2005	14061	153	(1)	6.8	3201	(23)	26.0	3955	(28)	10.9	54	(0)	13.1	2567	(18)	1.3	45	(0)	1.1	4044	(29)	9.5	42	(0)			
2006	13727	164	(1)	7.2	3297	(24)	26.1	3730	(27)	10.2	52	(0)	12.3	2387	(17)	1.2	39	(0)	0.9	4049	(29)	9.2	9	(0)			
2007	13282	133	(1)	5.8	3447	(26)	26.5	3477	(26)	9.4	95	(1)	22.1	2207	(17)	1.1	24	(0)	0.6	3875	(29)	8.5	24	(0)			
2008	12893	137	(1)	5.9	3395	(26)	25.4	3280	(25)	8.8	69	(1)	15.7	2143	(17)	1.1	43	(0)	1.0	3801	(29)	8.1	25	(0)			
2009	11519	102	(1)	4.3	3201	(28)	23.4	2871	(25)	7.6	73	(1)	16.3	1818	(16)	0.9	48	(0)	1.1	3372	(29)	7.0	34	(0)			
2010	11164	151	(1)	6.7	3082	(28)	20.9	2677	(24)	7.0	96	(1)	19.2	1760	(16)	0.9	152	(1)	2.7	3231	(29)	6.4	15	(0)			
2011	10509	132	(1)	5.8	3073	(29)	20.2	2410	(23)	6.3	82	(1)	16.1	1651	(16)	0.8	142	(1)	2.4	3003	(29)	5.8	16	(0)			
2012	9940	145	(1)	6.3	2963	(30)	19.0	2238	(23)	5.8	63	(1)	12.1	1575	(16)	0.8	139	(1)	2.3	2790	(28)	5.3	27	(0)			
2013	9582	126	(1)	5.4	3005	(31)	18.7	2096	(22)	5.4	60	(1)	11.3	1429	(15)	0.7	149	(2)	2.4	2699	(28)	5.0	18	(0)			

¹ Asian race category reporting includes Pacific Islander from 1993–2002.

² Native Hawaiian or Other Pacific Islander race first reported separately in 2003.

³ Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.

⁴ Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

⁵ The higher count for unknown or missing race results for 1993 - 2001 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

Note: Rates for 1993–1999 have been updated using Resident Population: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (http://www.census.gov/popest/data/national/asrh/1990s/nat_monthly_resident.html) (accessed July 15, 2014). Denominators for computing 2000–2013 case rates were obtained from the National Population Estimates for the 2000s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/data/national/asrh/2000/2009-nat-res.html>) (accessed July 15, 2014) and National Population Estimates for the 2010s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/data/national/asrh/2013/2013-nat-res.html>) (accessed July 15, 2014).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.

Data for all years updated through June 11, 2014.

Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #10.

Zero % (0) denotes <0.5%.

Table 3. Tuberculosis Cases and Percentages by Hispanic Ethnicity and non-Hispanic Race, and Origin of Birth: United States, 1993–2013

Year	Non-Hispanic																								Hispanic or Latino ⁴				Unknown or Missing ⁵	
	American Indian or Alaska Native				Asian ¹				Black or African American				Native Hawaiian or Other Pacific Islander ²				White				Multiple Race ³									
	US-born		Foreign-born		US-born		Foreign-born		US-born		Foreign-born		US-born		Foreign-born		US-born		Foreign-born		US-born		Foreign-born							
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)		
1993	263 (97.0)	8 (3.0)	103 (3.0)	3299 (97.0)	8250 (92.9)	630 (7.1)	28 (63.6)	16 (36.4)	6317 (92.3)	528 (7.7)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	2235 (44.0)	2849 (56.0)	238 (77.3)	70 (22.7)	238 (77.3)	70 (22.7)						
1994	322 (98.5)	5 (1.5)	133 (3.7)	3443 (96.3)	7576 (91.1)	738 (8.9)	40 (75.5)	13 (24.5)	6009 (92.4)	494 (7.6)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1989 (40.1)	2967 (59.9)	121 (57.1)	91 (42.9)	121 (57.1)	91 (42.9)						
1995	313 (98.1)	6 (1.9)	114 (3.0)	3665 (97.0)	6750 (89.4)	797 (10.6)	45 (77.6)	13 (22.4)	5427 (91.1)	529 (8.9)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	1907 (39.6)	2911 (60.4)	118 (60.8)	76 (39.2)	118 (60.8)	76 (39.2)						
1996	281 (97.9)	6 (2.1)	132 (3.7)	3479 (96.3)	6301 (88.8)	793 (11.2)	37 (77.1)	11 (22.9)	4968 (90.8)	503 (9.2)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1603 (35.9)	2859 (64.1)	75 (46.0)	88 (54.0)	75 (46.0)	88 (54.0)						
1997	259 (98.5)	4 (1.5)	132 (3.6)	3494 (96.4)	5718 (86.7)	875 (13.3)	34 (66.7)	17 (33.3)	4255 (88.6)	546 (11.4)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)	1464 (34.9)	2727 (65.1)	72 (47.7)	79 (52.3)	72 (47.7)	79 (52.3)						
1998	249 (98.0)	5 (2.0)	115 (3.3)	3329 (96.7)	4972 (85.5)	845 (14.5)	48 (72.7)	18 (27.3)	3914 (87.6)	553 (12.4)	4 (100.0)	0 (0.0)	4 (100.0)	0 (0.0)	4 (100.0)	0 (0.0)	4 (100.0)	0 (0.0)	1280 (31.5)	2785 (68.5)	51 (44.3)	64 (55.7)	51 (44.3)	64 (55.7)						
1999	237 (97.9)	5 (2.1)	121 (3.5)	3336 (96.5)	4607 (83.3)	924 (16.7)	40 (80.0)	10 (20.0)	3637 (86.3)	575 (13.7)	5 (71.4)	2 (28.6)	5 (71.4)	2 (28.6)	5 (71.4)	2 (28.6)	5 (71.4)	2 (28.6)	1119 (29.2)	2717 (70.8)	39 (54.2)	33 (45.8)	39 (54.2)	33 (45.8)						
2000	226 (97.4)	6 (2.6)	115 (3.5)	3217 (96.5)	4106 (79.8)	1038 (20.2)	39 (78.0)	11 (22.0)	3102 (85.3)	534 (14.7)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	1015 (26.8)	2770 (73.2)	42 (50.6)	41 (49.4)	42 (50.6)	41 (49.4)						
2001	214 (95.1)	11 (4.9)	102 (3.0)	3320 (97.0)	3664 (76.7)	1114 (23.3)	45 (78.9)	12 (21.1)	2787 (83.6)	547 (16.4)	1 (33.3)	2 (66.7)	1 (33.3)	2 (66.7)	1 (33.3)	2 (66.7)	1 (33.3)	2 (66.7)	1025 (25.7)	2965 (74.3)	34 (46.6)	39 (53.4)	34 (46.6)	39 (53.4)						
2002	183 (98.9)	2 (1.1)	109 (3.3)	3159 (96.7)	3401 (76.4)	1051 (23.6)	34 (77.3)	10 (22.7)	2547 (83.9)	490 (16.1)	3 (33.3)	6 (66.7)	3 (33.3)	6 (66.7)	3 (33.3)	6 (66.7)	3 (33.3)	6 (66.7)	980 (24.8)	2973 (75.2)	25 (48.1)	27 (51.9)	25 (48.1)	27 (51.9)						
2003	176 (98.3)	3 (1.7)	152 (4.4)	3297 (95.6)	3087 (74.4)	1064 (25.6)	50 (78.1)	14 (21.9)	2369 (85.0)	418 (15.0)	9 (24.3)	28 (75.7)	9 (24.3)	28 (75.7)	9 (24.3)	28 (75.7)	9 (24.3)	28 (75.7)	1000 (24.5)	3089 (75.5)	18 (52.9)	16 (47.1)	18 (52.9)	16 (47.1)						
2004	154 (98.1)	3 (1.9)	146 (4.4)	3181 (95.6)	2972 (73.1)	1096 (26.9)	55 (87.3)	8 (12.7)	2211 (84.1)	418 (15.9)	15 (44.1)	19 (55.9)	15 (44.1)	19 (55.9)	15 (44.1)	19 (55.9)	15 (44.1)	19 (55.9)	1064 (25.5)	3107 (74.5)	15 (55.6)	12 (44.4)	15 (55.6)	12 (44.4)						
2005	147 (96.1)	6 (3.9)	121 (3.8)	3077 (96.2)	2875 (72.8)	1075 (27.2)	41 (75.9)	13 (24.1)	2131 (83.1)	434 (16.9)	23 (51.1)	22 (48.9)	23 (51.1)	22 (48.9)	23 (51.1)	22 (48.9)	23 (51.1)	22 (48.9)	955 (23.7)	3073 (76.3)	13 (35.1)	24 (64.9)	13 (35.1)	24 (64.9)						
2006	161 (98.2)	3 (1.8)	133 (4.0)	3161 (96.0)	2595 (69.6)	1132 (30.4)	38 (73.1)	14 (26.9)	1959 (82.1)	426 (17.9)	16 (41.0)	23 (59.0)	16 (41.0)	23 (59.0)	16 (41.0)	23 (59.0)	16 (41.0)	23 (59.0)	983 (24.4)	3051 (75.6)	3 (37.5)	5 (62.5)	3 (37.5)	5 (62.5)						
2007	129 (97.0)	4 (3.0)	135 (3.9)	3302 (96.1)	2460 (71.0)	1003 (29.0)	72 (75.8)	23 (24.2)	1785 (81.2)	412 (18.8)	9 (37.5)	15 (62.5)	9 (37.5)	15 (62.5)	9 (37.5)	15 (62.5)	9 (37.5)	15 (62.5)	877 (22.8)	2968 (77.2)	14 (77.8)	4 (22.2)	14 (77.8)	4 (22.2)						
2008	134 (97.8)	3 (2.2)	153 (4.5)	3238 (95.5)	2239 (68.3)	1041 (31.7)	52 (75.4)	17 (24.6)	1755 (81.9)	387 (18.1)	16 (37.2)	27 (62.8)	16 (37.2)	27 (62.8)	16 (37.2)	27 (62.8)	16 (37.2)	27 (62.8)	921 (24.3)	2876 (75.7)	12 (48.0)	13 (52.0)	12 (48.0)	13 (52.0)						
2009	98 (96.1)	4 (3.9)	150 (4.7)	3047 (95.3)	1922 (67.0)	947 (33.0)	66 (90.4)	7 (9.6)	1438 (79.1)	379 (20.9)	15 (31.3)	33 (68.8)	15 (31.3)	33 (68.8)	15 (31.3)	33 (68.8)	15 (31.3)	33 (68.8)	847 (25.2)	2513 (74.8)	7 (21.2)	26 (78.8)	7 (21.2)	26 (78.8)						
2010	149 (98.7)	2 (1.3)	128 (4.2)	2954 (95.8)	1774 (66.3)	901 (33.7)	79 (83.2)	16 (16.8)	1423 (80.9)	336 (19.1)	22 (14.5)	130 (85.5)	22 (14.5)	130 (85.5)	22 (14.5)	130 (85.5)	22 (14.5)	130 (85.5)	806 (25.0)	2419 (75.0)	0 (0.0)	15 (100.0)	0 (0.0)	15 (100.0)						
2011	130 (98.5)	2 (1.5)	132 (4.3)	2940 (95.7)	1541 (64.0)	868 (36.0)	60 (73.2)	22 (26.8)	1323 (80.1)	328 (19.9)	26 (18.4)	115 (81.6)	26 (18.4)	115 (81.6)	26 (18.4)	115 (81.6)	26 (18.4)	115 (81.6)	765 (25.5)	2235 (74.5)	4 (25.0)	12 (75.0)	4 (25.0)	12 (75.0)						
2012	144 (99.3)	1 (0.7)	118 (4.0)	2841 (96.0)	1342 (60.0)	895 (40.0)	51 (81.0)	12 (19.0)	1271 (80.8)	302 (19.2)	29 (20.9)	110 (79.1)	29 (20.9)	110 (79.1)	29 (20.9)	110 (79.1)	29 (20.9)	110 (79.1)	692 (24.8)	2097 (75.2)	9 (36.0)	16 (64.0)	9 (36.0)	16 (64.0)						
2013	124 (98.4)	2 (1.6)	152 (5.1)	2851 (94.9)	1257 (60.0)	837 (40.0)	44 (73.3)	16 (26.7)	1099 (77.0)	328 (23.0)	34 (23.1)	113 (76.9)	34 (23.1)	113 (76.9)	34 (23.1)	113 (76.9)	34 (23.1)	113 (76.9)	658 (24.4)	2036 (75.6)	7 (41.2)	10 (58.8)	7 (41.2)	10 (58.8)						

¹ Asian race category reporting includes Pacific Islander from 1993–2002.

² Native Hawaiian or Other Pacific Islander race first reported separately in 2003.

³ Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.

⁴ Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

⁵ The higher count for unknown or missing race results for 1993 - 2001 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.

Data for all years updated through June 11, 2014.

Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #15.

Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2013

Year	Total Cases	0–14			15–24			25–44			45–64			≥64			Unknown¹	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25102	1660	(7)	2.9	1821	(7)	5.0	9589	(38)	11.5	6195	(25)	12.4	5820	(23)	17.7	17	(0)
1994	24206	1659	(7)	2.9	1832	(8)	5.0	9043	(37)	10.7	6126	(25)	11.9	5540	(23)	16.6	6	(0)
1995	22726	1536	(7)	2.6	1697	(7)	4.6	8200	(36)	9.7	5960	(26)	11.3	5328	(23)	15.8	5	(0)
1996	21210	1356	(6)	2.3	1637	(8)	4.4	7564	(36)	8.9	5572	(26)	10.2	5076	(24)	14.9	5	(0)
1997	19751	1251	(6)	2.1	1674	(8)	4.5	6884	(35)	8.0	5278	(27)	9.4	4663	(24)	13.6	1	(0)
1998	18286	1077	(6)	1.8	1543	(8)	4.1	6335	(35)	7.4	4954	(27)	8.5	4377	(24)	12.6	0	(0)
1999	17499	1038	(6)	1.7	1518	(9)	3.9	6062	(35)	7.1	4860	(28)	8.1	4019	(23)	11.5	2	(0)
2000	16308	964	(6)	1.6	1618	(10)	4.1	5576	(34)	6.6	4635	(28)	7.4	3515	(22)	10.0	0	(0)
2001	15945	929	(6)	1.5	1597	(10)	4.0	5610	(35)	6.6	4515	(28)	7.0	3293	(21)	9.3	1	(0)
2002	15055	944	(6)	1.6	1498	(10)	3.7	5288	(35)	6.3	4182	(28)	6.3	3142	(21)	8.8	1	(0)
2003	14835	911	(6)	1.5	1573	(11)	3.8	5074	(34)	6.1	4283	(29)	6.3	2994	(20)	8.3	0	(0)
2004	14499	952	(7)	1.6	1603	(11)	3.8	4940	(34)	5.9	4192	(29)	5.9	2811	(19)	7.8	1	(0)
2005	14061	851	(6)	1.4	1540	(11)	3.6	4738	(34)	5.7	4123	(29)	5.7	2809	(20)	7.7	0	(0)
2006	13727	803	(6)	1.3	1532	(11)	3.6	4689	(34)	5.6	4039	(29)	5.4	2663	(19)	7.2	1	(0)
2007	13282	777	(6)	1.3	1580	(12)	3.7	4313	(32)	5.2	4037	(30)	5.3	2574	(19)	6.8	1	(0)
2008	12893	786	(6)	1.3	1444	(11)	3.4	4238	(33)	5.1	3929	(30)	5.0	2496	(19)	6.4	0	(0)
2009	11519	647	(6)	1.0	1278	(11)	3.0	3886	(34)	4.7	3424	(30)	4.3	2284	(20)	5.8	0	(0)
2010	11164	636	(6)	1.0	1198	(11)	2.7	3670	(33)	4.5	3432	(31)	4.2	2228	(20)	5.5	0	(0)
2011	10509	578	(6)	0.9	1031	(10)	2.4	3364	(32)	4.1	3291	(31)	4.0	2245	(21)	5.4	0	(0)
2012	9940	487	(5)	0.8	1019	(10)	2.3	3117	(31)	3.8	3116	(31)	3.8	2199	(22)	5.1	2	(0)
2013	9582	485	(5)	0.8	978	(10)	2.2	2960	(31)	3.6	2965	(31)	3.6	2191	(23)	4.9	3	(0)

¹Includes unknown and missing.

Note: Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgedpop/documentationbridgedintercena1.doc) (accessed July 15, 2014). Denominators for computing 2000–2013 case rates were obtained from the Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2009 (http://www.census.gov/popest/data/historical/2000s/vintage_2009/index.html), and Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipalities: April 1, 2010 to July 1, 2013 (<http://www.census.gov/popest/data/national/asrh/2013/index.html>) (accessed July 15, 2014).

Data for all years updated through June 11, 2014.

See Technical Notes.

Zero % (0) denotes <0.5%.

See Surveillance Slides #7 and #8.

Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2013

Year	Total Cases	U.S.-born Persons			Foreign-born Persons¹			Unknown or Missing	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25102	17435	(69)	7.4	7401	(29)	34.0	266	(1)
1994	24206	16191	(67)	6.8	7751	(32)	36.0	264	(1)
1995	22726	14675	(65)	6.1	7998	(35)	38.0	53	(0)
1996	21210	13398	(63)	5.6	7739	(36)	32.0	73	(0)
1997	19751	11935	(60)	4.9	7742	(39)	30.8	74	(0)
1998	18286	10633	(58)	4.4	7599	(42)	28.8	54	(0)
1999	17499	9805	(56)	4.0	7602	(43)	28.1	92	(1)
2000	16308	8647	(53)	3.5	7619	(47)	26.4	42	(0)
2001	15945	7872	(49)	3.2	8010	(50)	27.6	63	(0)
2002	15055	7282	(48)	2.9	7718	(51)	25.5	55	(0)
2003	14835	6861	(46)	2.7	7929	(53)	23.8	45	(0)
2004	14499	6632	(46)	2.6	7844	(54)	23.1	23	(0)
2005	14061	6306	(45)	2.5	7724	(55)	22.2	31	(0)
2006	13727	5888	(43)	2.3	7815	(57)	21.6	24	(0)
2007	13282	5481	(41)	2.1	7731	(58)	20.8	70	(1)
2008	12893	5282	(41)	2.0	7602	(59)	20.1	9	(0)
2009	11519	4543	(39)	1.7	6956	(60)	18.7	20	(0)
2010	11164	4381	(39)	1.6	6773	(61)	17.7	10	(0)
2011	10509	3981	(38)	1.5	6522	(62)	16.9	6	(0)
2012	9940	3656	(37)	1.4	6274	(63)	15.9	10	(0)
2013	9582	3375	(35)	1.2	6193	(65)	15.6	14	(0)

¹Includes persons born outside the United States. American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: Denominators for computing rates for years 1993–1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990–July 1, 1999, located at <http://www.census.gov/population/estimates/nation/nativity/ftab001.txt> (accessed July 15, 2014). Denominators for computing the 1995–2013 rates are based on the U.S. Census Bureau, Current Population Survey (July Supplement) via Data Ferret (<http://dataferret.census.gov/>).

Data for all years updated through June 11, 2014.

See Technical Notes.

Zero % (0) denotes <0.5%.

See Surveillance Slides #13, #14, #17, and #18.

Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons¹ by the Top 30 Countries² of Birth: United States, 2009–2013

Country of Origin	Year									
	2013		2012		2011		2010		2009	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Total Cases	6193	(100)	6274	(100)	6522	(100)	6773	(100)	6956	(100)
Mexico	1,244	(20)	1,312	(21)	1,444	(22)	1,542	(23)	1,593	(23)
Philippines	783	(13)	772	(12)	756	(12)	757	(11)	806	(12)
India	495	(8)	531	(8)	511	(8)	585	(9)	540	(8)
Viet Nam	456	(7)	454	(7)	550	(8)	542	(8)	529	(8)
China	377	(6)	353	(6)	378	(6)	370	(5)	344	(5)
Guatemala	213	(3)	194	(3)	172	(3)	198	(3)	214	(3)
Haiti	172	(3)	197	(3)	189	(3)	195	(3)	207	(3)
Ethiopia	157	(3)	162	(3)	154	(2)	162	(2)	171	(2)
Honduras	122	(2)	125	(2)	129	(2)	143	(2)	150	(2)
Myanmar	102	(2)	116	(2)	92	(1)	116	(2)	104	(2)
Korea, Republic of	101	(2)	109	(2)	131	(2)	120	(2)	155	(2)
El Salvador	97	(3)	116	(2)	103	(2)	116	(2)	118	(2)
Somalia	85	(1)	100	(2)	116	(2)	124	(2)	113	(2)
Peru	90	(1)	79	(1)	93	(1)	111	(2)	94	(1)
Cambodia	72	(1)	78	(1)	91	(1)	70	(1)	99	(1)
Ecuador	79	(1)	65	(1)	79	(1)	84	(1)	99	(1)
Pakistan	78	(1)	68	(1)	87	(1)	74	(1)	84	(1)
Nepal	73	(1)	81	(1)	77	(1)	64	(1)	74	(1)
Dominican Republic	62	(1)	74	(1)	75	(1)	85	(1)	71	(1)
Laos	88	(1)	64	(1)	62	(1)	70	(1)	60	(1)
Kenya	48	(1)	58	(1)	75	(1)	63	(1)	73	(1)
Bangladesh	71	(1)	54	(1)	66	(1)	58	(1)	44	(1)
Nigeria	69	(1)	58	(1)	52	(1)	43	(1)	46	(1)
Bhutan	56	(1)	58	(1)	39	(1)	37	(1)	33	(0)
Thailand	38	(1)	33	(1)	37	(1)	47	(1)	57	(1)
Indonesia	35	(1)	41	(1)	32	(0)	58	(1)	34	(0)
Colombia	37	(1)	25	(0)	32	(0)	43	(1)	40	(1)
Korea, Dem. Peoples Republic	37	(1)	47	(1)	38	(1)	35	(1)	16	(0)
Cuba	25	(0)	30	(0)	40	(1)	33	(0)	36	(1)
Liberia	29	(0)	33	(1)	28	(0)	36	(1)	33	(0)
All Others ³	802	(12)	787	(13)	794	(12)	792	(12)	919	(13)

¹Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

²The top 30 countries were selected based on their ranked 5-year average number of TB cases.

³Includes Not Specified for Country of Origin.

Note: Zero (0) denotes <0.5%.

Data for all years updated through June 11, 2014.

Table 7. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2013

Year	Total Cases	Verification Criterion ¹										Site of Disease ⁵			
		Positive Culture		Positive NAA ²		Positive Smear		Clinical Case Definition		Provider Diagnosis		Pulmonary ³		Extra-pulmonary ⁴	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	25102	20306	(81)	0	(0)	185	(1)	3088	(12)	1523	(6)	21153	(84)	3940	(16)
1994	24206	19507	(81)	0	(0)	189	(1)	2917	(12)	1593	(7)	20318	(84)	3886	(16)
1995	22726	18265	(80)	0	(0)	189	(1)	2749	(12)	1523	(7)	18887	(83)	3834	(17)
1996	21210	17154	(81)	0	(0)	131	(1)	2607	(12)	1318	(6)	17387	(82)	3814	(18)
1997	19751	15979	(81)	0	(0)	155	(1)	2411	(12)	1206	(6)	16239	(82)	3509	(18)
1998	18286	14789	(81)	0	(0)	155	(1)	2253	(12)	1089	(6)	14801	(81)	3483	(19)
1999	17499	13994	(80)	0	(0)	172	(1)	2103	(12)	1230	(7)	14065	(80)	3431	(20)
2000	16308	13013	(80)	0	(0)	148	(1)	1950	(12)	1197	(7)	13085	(80)	3211	(20)
2001	15945	12750	(80)	0	(0)	123	(1)	1886	(12)	1186	(7)	12724	(80)	3217	(20)
2002	15055	11974	(80)	0	(0)	104	(1)	1822	(12)	1155	(8)	11901	(79)	3148	(21)
2003	14835	11683	(79)	0	(0)	116	(1)	1783	(12)	1253	(8)	11805	(80)	3020	(20)
2004	14499	11327	(78)	0	(0)	80	(1)	1824	(13)	1268	(9)	11524	(80)	2971	(20)
2005	14061	10955	(78)	0	(0)	96	(1)	1797	(13)	1213	(9)	11122	(79)	2933	(21)
2006	13727	10744	(78)	0	(0)	93	(1)	1629	(12)	1261	(9)	10852	(79)	2872	(21)
2007	13282	10426	(78)	0	(0)	69	(1)	1496	(11)	1291	(10)	10592	(80)	2687	(20)
2008	12893	10022	(78)	18	(0)	60	(0)	1549	(12)	1244	(10)	10236	(79)	2653	(21)
2009	11519	8882	(77)	56	(0)	74	(1)	1780	(15)	727	(6)	9008	(78)	2497	(22)
2010	11164	8460	(76)	106	(1)	68	(1)	1878	(17)	652	(6)	8721	(78)	2437	(22)
2011	10509	8086	(77)	125	(1)	58	(1)	1680	(16)	560	(5)	8323	(79)	2183	(21)
2012	9940	7615	(77)	124	(1)	38	(0)	1636	(16)	527	(5)	7834	(79)	2092	(21)
2013	9582	7358	(77)	169	(2)	45	(0)	1495	(16)	515	(5)	7578	(79)	1994	(21)

¹Based on the public health surveillance case definition for tuberculosis; see Appendix A.

² Nucleic Acid Amplification test

³ Includes all cases among persons with pulmonary as the only site of disease, and persons with both pulmonary and extrapulmonary sites of disease.

⁴ Includes cases among persons with extrapulmonary TB disease only.

⁵Excludes missing and unknowns.

Note: See Technical Notes.

Data for all years updated through June 11, 2014.

Table 8. Tuberculosis Cases and Percentages, by Resistance to INH¹, Origin of Birth, and Previous History of TB: United States, 1993–2013

	Year	All INH-resistant ^{1,2}	Isoniazid Resistant TB Cases																		
			Total INH-resistant						U.S.-born INH-resistant ³						Foreign-born ^{3,4} INH-resistant						
			Previous TB			No Previous TB			Previous TB			No Previous TB			Previous TB			No Previous TB			
			Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	
			1534	982	161	(16.4)	16600	1367	(8.2)	668	83	(12.4)	11809	789	(6.7)	301	75	(24.9)	4663	564	(12.1)
			1543	1033	175	(16.9)	16417	1352	(8.2)	693	81	(11.7)	11019	709	(6.4)	336	93	(27.7)	5281	631	(11.9)
			1350	958	168	(17.5)	16021	1172	(7.3)	593	77	(13.0)	10350	555	(5.4)	363	91	(25.1)	5640	616	(10.9)
			1284	862	142	(16.5)	15358	1133	(7.4)	559	68	(12.2)	9646	496	(5.1)	303	74	(24.4)	5665	636	(11.2)
			1195	742	109	(14.7)	14448	1078	(7.5)	455	35	(7.7)	8705	435	(5.0)	286	74	(25.9)	5698	640	(11.2)
			1120	749	98	(13.1)	13418	1011	(7.5)	485	38	(7.8)	7711	366	(4.7)	262	60	(22.9)	5674	643	(11.3)
			999	669	82	(12.3)	12655	899	(7.1)	383	25	(6.5)	7020	283	(4.0)	283	55	(19.4)	5583	614	(11.0)
			981	632	84	(13.3)	11825	889	(7.5)	360	22	(6.1)	6144	269	(4.4)	272	62	(22.8)	5652	617	(10.9)
			897	629	87	(13.8)	11510	800	(7.0)	324	28	(8.6)	5583	242	(4.3)	302	59	(19.5)	5891	557	(9.5)
			912	569	80	(14.1)	10813	826	(7.6)	303	23	(7.6)	5069	206	(4.1)	264	57	(21.6)	5703	619	(10.9)
			903	524	65	(12.4)	10751	822	(7.6)	253	16	(6.3)	4864	214	(4.4)	271	49	(18.1)	5858	605	(10.3)
			872	537	64	(11.9)	10481	801	(7.6)	274	15	(5.5)	4698	214	(4.6)	263	49	(18.6)	5773	587	(10.2)
			842	506	70	(13.8)	10064	761	(7.6)	239	18	(7.5)	4412	188	(4.3)	267	52	(19.5)	5635	567	(10.1)
			845	493	67	(13.6)	9905	770	(7.8)	203	9	(4.4)	4144	173	(4.2)	289	57	(19.7)	5745	596	(10.4)
			798	496	71	(14.3)	9647	715	(7.4)	206	14	(6.8)	3878	164	(4.2)	288	57	(19.8)	5716	547	(9.6)
			835	429	57	(13.3)	9305	774	(8.3)	170	13	(7.6)	3677	189	(5.1)	259	44	(17.0)	5622	584	(10.4)
			762	341	52	(15.2)	7739	651	(8.4)	116	6	(5.2)	3042	187	(6.1)	224	46	(20.5)	4688	464	(9.9)
			700	359	62	(17.3)	7814	629	(8.0)	128	12	(9.4)	2977	168	(5.6)	231	50	(21.6)	4830	461	(9.5)
			753	345	59	(17.1)	7545	687	(9.1)	137	9	(6.6)	2724	172	(6.3)	208	50	(24.0)	4818	515	(10.7)
			681	356	56	(15.7)	7044	625	(8.9)	127	8	(6.3)	2523	142	(5.6)	229	48	(21.0)	4517	483	(10.7)
			653	286	47	(16.4)	6734	595	(8.8)	90	8	(8.9)	2258	126	(5.6)	196	39	(19.9)	4468	468	(10.5)

Resistance to at least isoniazid. Isolates may be resistant to other drugs. Cases are culture positive with initial drug susceptibility testing done. Excludes cases with susceptibility testing not done or unknown for isoniazid.

Resistance to at least isoniazid. Isolates may be resistant to other drugs. Cases are culture positive with initial drug susceptibility testing only. Excluded?

^a Excludes cases where previous history of TB is unknown and cases where origin of birth is unknown.

Includes persons born outside the United States. American Samoa where origin of birth is unknown. Excludes cases where previous history of IB is unknown and cases where origin of birth is unknown.

Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: Data for all years updated through June 11, 2014.

Table 9. Tuberculosis Cases and Percentages, by Multidrug Resistance¹, Origin of Birth, and Previous History of TB: United States, 1993–2013

Year	All MDR ²	Multidrug Resistant TB Cases															
		Total MDR ³								U.S.-born MDR ³							
		Previous TB				No Previous TB				Previous TB				No Previous TB			
		Eligible	No.	(%)	(%)	Eligible	No.	(%)	(%)	Eligible	No.	(%)	(%)	Eligible	No.	(%)	(%)
1993	484	982	76	(7.7)	(2.5)	16600	407	(2.5)		668	30	(4.5)	11809	301	(2.5)	4663	103
1994	431	1033	74	(7.2)	(2.2)	16417	353	(2.2)		693	35	(5.1)	11019	238	(2.2)	5281	110
1995	327	958	70	(7.3)	(1.6)	16021	254	(1.6)		593	28	(4.7)	10350	169	(1.6)	5640	85
1996	250	862	43	(5.0)	(1.3)	15358	207	(1.3)		559	21	(3.8)	9646	105	(1.1)	5665	101
1997	201	742	44	(5.9)	(1.1)	14448	155	(1.1)		455	12	(2.6)	8705	76	(0.9)	5698	79
1998	155	749	23	(3.1)	(1.0)	13418	132	(1.0)		485	6	(1.2)	7711	55	(0.7)	5674	76
1999	157	669	28	(4.2)	(1.0)	12655	127	(1.0)		383	6	(1.6)	7020	39	(0.6)	5583	88
2000	146	632	26	(4.1)	(1.0)	11825	120	(1.0)		360	2	(0.6)	6144	40	(0.7)	5652	80
2001	151	629	33	(5.2)	(1.0)	11510	115	(1.0)		324	7	(2.2)	5583	34	(0.6)	5891	81
2002	158	569	26	(4.6)	(1.2)	10813	132	(1.2)		303	3	(1.0)	5069	35	(0.7)	5703	97
2003	119	524	21	(4.0)	(0.9)	10751	94	(0.9)		253	2	(0.8)	4864	24	(0.5)	5858	70
2004	128	537	27	(5.0)	(1.0)	10481	100	(1.0)		274	4	(1.5)	4698	26	(0.6)	5773	74
2005	125	506	23	(4.5)	(1.0)	10064	98	(1.0)		239	2	(0.8)	4412	20	(0.5)	5635	77
2006	124	493	20	(4.1)	(1.0)	9905	103	(1.0)		203	1	(0.5)	4144	19	(0.5)	5745	84
2007	124	496	19	(3.8)	(1.0)	9647	101	(1.0)		206	3	(1.5)	3878	19	(0.5)	5716	82
2008	107	429	19	(4.4)	(0.9)	9305	88	(0.9)		170	3	(1.8)	3677	21	(0.6)	5622	67
2009	114	341	19	(5.6)	(1.2)	7739	89	(1.2)		116	1	(0.9)	3042	11	(0.4)	4688	78
2010	105	359	16	(4.5)	(1.1)	7814	87	(1.1)		128	2	(1.6)	2977	14	(0.5)	4830	73
2011	127	345	27	(7.8)	(1.3)	7545	100	(1.3)		137	1	(0.7)	2724	16	(0.6)	4818	84
2012	86	356	13	(3.7)	(1.0)	7044	73	(1.0)		127	0	(0.0)	2523	10	(0.4)	4517	63
2013	95	286	12	(4.2)	(1.2)	6734	82	(1.2)		90	2	(2.2)	2258	7	(0.3)	4468	75

¹ Resistance to at least isoniazid and rifampin. Isolates may be resistant to other drugs. Cases are culture positive with initial drug susceptibility testing done. Excludes cases with susceptibility testing not done or unknown for isoniazid and rifampin.

² This column provides an overall total of all MDR cases, including those where previous history of TB is unknown and origin or birth is unknown.

³ Excludes cases where previous history of TB is unknown and cases where origin of birth is unknown.

⁴ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: Data for all years updated through June 11, 2014.

Table 10. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2011

Year	Initial Drug Regimen ^{1,2}			Directly Observed Therapy ³		Therapy ≤1 Year Indicated ⁴	
				Both DOT and Self-			
	IR	IRZ	IRZE	DOT Only	Administered	COT ≤1 Year	COT
1993	(13.0)	(31.2)	(40.3)	(21.7)	(14.4)	(63.4)	(86.0)
1994	(7.0)	(23.3)	(55.7)	(28.1)	(20.5)	(68.6)	(86.8)
1995	(5.2)	(20.3)	(62.7)	(37.3)	(21.5)	(74.1)	(89.2)
1996	(4.2)	(17.5)	(67.3)	(42.5)	(22.4)	(76.8)	(90.2)
1997	(3.2)	(15.1)	(71.9)	(47.0)	(23.8)	(78.7)	(91.0)
1998	(2.6)	(12.9)	(74.3)	(47.7)	(26.6)	(81.2)	(92.2)
1999	(2.2)	(11.2)	(76.9)	(49.4)	(27.6)	(81.4)	(92.2)
2000	(2.0)	(10.4)	(78.5)	(52.5)	(25.8)	(82.2)	(92.5)
2001	(1.7)	(9.6)	(79.8)	(53.6)	(27.5)	(82.5)	(92.7)
2002	(1.8)	(8.9)	(80.3)	(55.4)	(27.8)	(83.0)	(92.5)
2003	(1.4)	(8.1)	(81.3)	(56.5)	(28.5)	(83.6)	(92.8)
2004	(1.5)	(6.4)	(82.4)	(58.9)	(27.7)	(84.3)	(92.6)
2005	(1.3)	(5.5)	(83.7)	(57.9)	(29.6)	(84.0)	(92.5)
2006	(1.2)	(4.8)	(83.3)	(57.5)	(30.4)	(84.8)	(93.2)
2007	(1.1)	(4.6)	(83.6)	(56.3)	(32.9)	(85.6)	(93.9)
2008	(1.0)	(3.5)	(84.3)	(56.3)	(33.5)	(86.0)	(93.3)
2009	(0.9)	(3.1)	(84.6)	(59.5)	(30.3)	(88.7)	(95.5)
2010	(0.8)	(2.8)	(84.8)	(59.0)	(31.2)	(89.6)	(96.0)
2011 ⁵	(0.7)	(2.6)	(85.4)	(62.0)	(29.3)	(89.0)	(95.7)

¹ Includes persons alive at diagnosis.

² I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol. Excludes cases with no information on initial drug regimen; In 2013, 0.57% received no initial drug therapy, 0.02% were started on one drug, and 12.36% had an initial multidrug regimen other than IR, IRZ, or IRZE.

³ Includes persons alive at diagnosis with initial drug regimen of one or more drugs prescribed.

⁴ Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture.

⁵ Beginning in 2011, those who moved out of country during treatment are excluded from the denominator of those eligible for COT.

Note: Data for all years updated through June 11, 2014.

See Technical Notes for description of COT calculation.

See Surveillance Slides #30 and #31.

Table 11. Tuberculosis Cases and Percentages in Persons with HIV Test Results¹ and with HIV Coinfection by Age Group: United States, 1993–2013

Year	25–44 Years Old				All Ages			
	Total No.	HIV Test Results		HIV Positive	Total No.	HIV Test Results		HIV Positive
		No.	(%)			No.	(%)	
1993	9329	4211	(45)	2633	24052	7185	(30)	3466
1994	8805	4288	(49)	2524	23273	7644	(33)	3403
1995	8016	4156	(52)	2063	21882	7940	(36)	2869
1996	7400	4246	(57)	1757	20441	8595	(42)	2461
1997	6757	4058	(60)	1407	19082	8593	(45)	1999
1998	6261	3810	(61)	1194	17745	8158	(46)	1755
1999	5983	3752	(63)	1125	16968	8295	(49)	1658
2000	5499	3476	(63)	917	15888	7990	(50)	1398
2001	5550	3544	(64)	892	15567	8007	(51)	1369
2002	5237	3475	(66)	822	14725	7924	(54)	1344
2003	5028	3396	(68)	786	14509	8037	(55)	1280
2004	4886	3399	(70)	655	14208	8415	(59)	1150
2005	4697	3254	(69)	598	13768	8151	(59)	1017
2006	4647	3269	(70)	546	13411	8230	(61)	927
2007	4266	3133	(73)	468	12993	8266	(64)	846
2008	4203	3089	(73)	399	12642	8165	(65)	792
2009	3854	2835	(74)	384	11267	7336	(65)	687
2010	3631	2756	(76)	308	10914	7433	(68)	593
2011 ²	3331	3041	(91)	329	10265	8677	(85)	647
2012	3096	2870	(93)	326	9720	8393	(86)	608
2013	2935	2769	(94)	263	9364	8283	(88)	543

¹ Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS, and those persons not dead at diagnosis. Rhode Island did not report HIV test results for years 1993–1997. HIV test results for Vermont are not included for years 2007–2010. HIV test results for California are not included for years 2005–2010.

² California began reporting HIV test results to CDC in 2011
Note: Data for all years updated through June 11, 2014.
 See Surveillance Slides #26 and #27.

**Table 12. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped:
United States, 1993–2011**

Year	Total Cases ¹	Completed Therapy		Adverse Event		Moved ²		Lost		Refused		Died ³		Unknown ⁴	
	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	23740	18043	(76.0)	0	(0.0)	1120	(4.7)	1086	(4.6)	223	(0.9)	3053	(12.9)	215	(0.9)
1994	23052	17764	(77.1)	0	(0.0)	1194	(5.2)	740	(3.2)	183	(0.8)	2743	(11.9)	428	(1.9)
1995	21705	17306	(79.7)	0	(0.0)	969	(4.5)	570	(2.6)	155	(0.7)	2396	(11.0)	309	(1.4)
1996	20298	16528	(81.4)	0	(0.0)	783	(3.9)	525	(2.6)	156	(0.8)	1998	(9.8)	308	(1.5)
1997	18930	15673	(82.8)	0	(0.0)	667	(3.5)	444	(2.3)	119	(0.6)	1755	(9.3)	272	(1.4)
1998	17583	14766	(84.0)	0	(0.0)	533	(3.0)	411	(2.3)	104	(0.6)	1579	(9.0)	190	(1.1)
1999	16861	14234	(84.4)	0	(0.0)	456	(2.7)	359	(2.1)	104	(0.6)	1437	(8.5)	271	(1.6)
2000	15784	13407	(84.9)	0	(0.0)	406	(2.6)	397	(2.5)	112	(0.7)	1294	(8.2)	168	(1.1)
2001	15409	13242	(85.9)	0	(0.0)	378	(2.5)	402	(2.6)	99	(0.6)	1121	(7.3)	167	(1.1)
2002	14564	12482	(85.7)	0	(0.0)	336	(2.3)	412	(2.8)	87	(0.6)	1080	(7.4)	167	(1.1)
2003	14379	12418	(86.4)	0	(0.0)	313	(2.2)	389	(2.7)	84	(0.6)	994	(6.9)	181	(1.3)
2004	14080	12118	(86.1)	0	(0.0)	337	(2.4)	370	(2.6)	82	(0.6)	975	(6.9)	198	(1.4)
2005	13674	11728	(85.8)	1	(0.0)	323	(2.4)	338	(2.5)	90	(0.7)	985	(7.2)	209	(1.5)
2006	13316	11540	(86.7)	0	(0.0)	292	(2.2)	358	(2.7)	79	(0.6)	939	(7.1)	108	(0.8)
2007	12907	11348	(87.9)	0	(0.0)	241	(1.9)	327	(2.5)	73	(0.6)	819	(6.3)	99	(0.8)
2008	12550	10886	(86.7)	7	(0.1)	257	(2.0)	329	(2.6)	78	(0.6)	843	(6.7)	150	(1.2)
2009	11182	9830	(87.9)	22	(0.2)	96	(0.9)	166	(1.5)	82	(0.7)	681	(6.1)	305	(2.7)
2010	10833	9534	(88.0)	29	(0.3)	...	(0.0)	155	(1.4)	64	(0.6)	653	(6.0)	396	(3.7)
2011	10203	8912	(87.3)	28	(0.3)	...	(0.0)	124	(1.2)	68	(0.7)	684	(6.7)	385	(3.8)

¹ Includes all cases in persons reported as alive at diagnosis and taking one or more TB drugs.

² In 2009 the moved variable was removed from the RVCT; see Technical Notes for details.

³ Died = died of any cause (not only TB).

⁴ Includes cases in persons reporting reason therapy stopped = Other, Missing, or Unknown.

Note: Data for all years are updated through June 11, 2014.

Data complete through 2011 only. See Technical Notes for details.

**Table 13. National Tuberculosis Genotyping Surveillance Coverage¹:
United States, 2004–2013**

Year	Reported TB Cases	Reported Culture Positive Cases	Cases with Genotype Result	Genotype Surveillance Coverage
	No.	No.	No.	(%)
2004	14,499	11,327	5,955	52.6
2005	14,061	10,955	7,500	68.5
2006	13,727	10,744	7,527	70.1
2007	13,282	10,426	8,431	80.9
2008	12,893	10,022	8,179	81.6
2009	11,519	8,882	7,712	86.8
2010	11,164	8,460	7,745	91.5
2011	10,509	8,086	7,610	94.1
2012	9,940	7,615	7,210	94.7
2013	9,582	7,358	6,957	94.6

¹ Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

NOTE: This table reflects genotyping surveillance coverage for the 50 states and the District of Columbia; for genotyping surveillance coverage of the United States Affiliated Pacific Islands, please see Table 14.
See Surveillance Slide #33.

**Table 14. National Tuberculosis Genotyping Surveillance Coverage¹:
United States Affiliates², 2004–2013**

Year	Reported TB Cases	Reported Culture Positive Cases	Cases with Genotype Result	Genotype Surveillance Coverage
	No.	No.	No.	(%)
2004	288	213	19	8.9
2005	388	237	95	40.1
2006	344	211	84	39.8
2007	526	180	84	46.7
2008	553	240	72	30.0
2009	533	237	207	87.3
2010	617	308	270	87.7
2011	462	229	187	81.7
2012	488	247	221	89.5
2013	407	216	176	81.5

¹ Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate

² The United States affiliates include: American Samoa, Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, Palau, Puerto Rico, and United States Virgin Islands.

Table 15. Genotyped Tuberculosis Cases with *Mycobacterium bovis*¹ by Origin of Birth: United States, 2004–2013

Year	Total Genotyped Cases	<i>Mycobacterium bovis</i> cases					
		Total		U.S.-born		Foreign-born	
	No.	No. ²	(%)	No.	(%) ³	No.	(%) ³
2004	5,955	87	1.5	28	32.2	59	67.8
2005	7,500	100	1.3	33	33.0	67	67.0
2006	7,527	129	1.7	33	25.6	95	73.6
2007	8,431	129	1.5	27	20.9	101	78.3
2008	8,179	147	1.8	39	26.5	108	73.5
2009	7,712	131	1.7	39	29.8	92	70.2
2010	7,745	121	1.6	30	24.8	91	75.2
2011	7,610	134	1.8	43	32.1	91	67.9
2012	7,210	125	1.7	31	24.8	94	75.2
2013	6,957	113	1.6	37	32.7	76	67.3

¹ Defined by Spoligotype motifs ending in "600".

² This column reports all genotyped *M. bovis* cases, including those where origin of birth is unknown.

³ Denominator is all *M. bovis* cases.

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Morbidity Tables 2013

Table 16. Tuberculosis Cases and Percentages Among Foreign-born Persons¹ by the Top 30 Countries of Birth and Years in the United States Before TB Diagnosis: United States, 2013

Country of Origin ²	No. Years in U.S. ³					
	Total Cases	< 1 Year		1 - 4 Years		Unknown
	No.	No.	(%)	No.	(%)	No. (%)
Total	6193	949	(15)	994	(16)	3688 (60)
Mexico	1244	98	(8)	99	(8)	918 (74)
Philippines	783	83	(11)	99	(13)	529 (68)
India	495	101	(20)	106	(21)	243 (49)
Vietnam	456	44	(10)	63	(14)	285 (63)
China	377	58	(15)	44	(12)	244 (65)
Guatemala	213	39	(18)	42	(20)	120 (56)
Haiti	172	36	(21)	54	(31)	75 (44)
Ethiopia	157	43	(27)	56	(36)	55 (35)
Honduras	122	33	(27)	17	(14)	64 (52)
Myanmar	102	32	(31)	40	(39)	22 (22)
Korea, Republic of	101	8	(8)	3	(3)	80 (79)
El Salvador	97	11	(11)	13	(13)	66 (68)
Peru	90	13	(14)	15	(17)	57 (63)
Laos	88	2	(2)	3	(3)	71 (81)
Somalia	85	27	(32)	18	(21)	37 (44)
Ecuador	79	6	(8)	10	(13)	57 (72)
Pakistan	78	17	(22)	14	(18)	38 (49)
Nepal	73	21	(29)	29	(40)	21 (29)
Cambodia	72	4	(6)	6	(8)	54 (75)
Bangladesh	71	18	(25)	23	(32)	23 (32)
Nigeria	69	21	(30)	25	(36)	22 (32)
Dominican Republic	62	12	(19)	12	(19)	36 (58)
Bhutan	56	35	(63)	18	(32)	1 (2)
Kenya	48	12	(25)	13	(27)	21 (44)
Thailand	38	8	(21)	8	(21)	18 (47)
Colombia	37	5	(14)	3	(8)	29 (78)
Korea Dem People S. Republic	37	3	(8)	0	(0)	22 (59)
Indonesia	35	2	(6)	13	(37)	15 (43)
Congo	32	13	(41)	7	(22)	10 (31)
Liberia	29	9	(31)	3	(10)	13 (45)
All Others ⁴	795	135	(17)	138	(17)	442 (56)

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

² Ranked by total case count.

³ Among foreign-born persons, the number of years since arrival in the United States before diagnosis with tuberculosis.

⁴ Includes Not Specified for Country of Origin.

See Surveillance Slide #20.

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Table 17. (Con't) Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2013

	All Ages		Age Group																			
			Under 5			5-14			15-24			25-44			45-64			≥65			Unknown	
			No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Race/Ethnicity and Sex			No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Native Hawaiian or Other Pacific Islander			60	11.3	6	15.1	4	5.1	10	11.3	19	11.3	18	15.5	3	7.6	0	--				
Male			27	10.1	4	19.7	1	2.5	5	11.0	6	7.0	9	15.6	2	11.0	0	--				
Female			33	12.5	2	10.3	3	7.8	5	11.7	13	15.7	9	15.3	1	4.7	0	--				
Unknown			0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--				
White			1,429	0.7	27	0.3	19	0.1	50	0.2	266	0.5	571	1.0	496	1.4	0	--				
Male			948	1.0	17	0.3	8	0.1	27	0.2	155	0.6	434	1.5	307	2.0	0	--				
Female			481	0.5	10	0.2	11	0.1	23	0.2	111	0.5	137	0.5	189	1.0	0	--				
Unknown			0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--				
Multiple Race²			149	2.4	5	0.5	3	0.2	14	1.2	48	3.6	42	5.0	37	12.1	0	--				
Male			84	2.8	2	0.4	1	0.1	6	1.0	21	3.3	32	8.1	22	16.3	0	--				
Female			65	2.1	3	0.7	2	0.3	8	1.3	27	3.8	10	2.3	15	8.7	0	--				
Unknown			0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--				
Unknown			18	--	1	--	0	--	0	--	5	--	6	--	6	--	0	--				
Male			10	--	0	--	0	--	0	--	2	--	5	--	3	--	0	--				
Female			7	--	1	--	0	--	0	--	3	--	0	--	3	--	0	--				
Unknown			1	--	0	--	0	--	0	--	0	--	1	--	0	--	0	--				

¹Persons of Hispanic or Latino origin may be of any race or multiple race.

²Indicates two or more races reported for a person.

Note: Denominators for computing 2013 case rates were obtained from the U.S. Census Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/data/national/asrh/2013/files/NC-EST2013-ALLDATA-R-File08.csv>) (accessed July 15, 2014).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slides #9 and #11.

Table 18. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2013

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	3,375	262	123	324	693	1,233	739	1
Male	2,183	135	64	169	415	906	494	0
Female	1,188	127	59	155	276	325	245	1
Unknown	4	0	0	0	2	2	0	0
Hispanic or Latino¹	658	109	53	129	157	131	79	0
Male	397	55	27	67	108	99	41	0
Female	261	54	26	62	49	32	38	0
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	124	6	6	15	25	49	23	0
Male	83	4	5	13	15	34	12	0
Female	38	2	1	2	8	14	11	0
Unknown	3	0	0	0	2	1	0	0
Asian	152	50	13	40	25	10	13	1
Male	81	26	6	19	13	6	11	0
Female	71	24	7	21	12	4	2	1
Unknown	0	0	0	0	0	0	0	0
Black or African American	1,257	63	29	100	292	533	240	0
Male	804	32	17	50	170	368	167	0
Female	453	31	12	50	122	165	73	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	44	5	4	9	14	11	1	0
Male	19	3	1	5	4	5	1	0
Female	25	2	3	4	10	6	0	0
Unknown	0	0	0	0	0	0	0	0
White	1,099	23	16	25	173	484	378	0
Male	774	13	7	12	101	382	259	0
Female	325	10	9	13	72	102	119	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race²	34	5	2	6	5	13	3	0
Male	22	2	1	3	3	11	2	0
Female	12	3	1	3	2	2	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	7	1	0	0	2	2	2	0
Male	3	0	0	0	1	1	1	0
Female	3	1	0	0	1	0	1	0
Unknown	1	0	0	0	0	1	0	0

¹ Persons of Hispanic or Latino origin may be of any race or multiple race.

² Indicates two or more races reported for a person.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slide #15.

Table 19. Tuberculosis Cases in Foreign-born Persons¹ by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2013

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	6,193	33	65	654	2,264	1,728	1,447	2
Male	3,623	19	33	371	1,270	1,068	861	1
Female	2,568	14	32	283	994	659	586	0
Unknown	2	0	0	0	0	1	0	1
Hispanic or Latino²	2,036	5	14	219	830	565	403	0
Male	1,320	4	6	154	540	391	225	0
Female	715	1	8	65	290	173	178	0
Unknown	1	0	0	0	0	1	0	0
American Indian or Alaska Native	2	0	0	0	0	1	1	0
Male	2	0	0	0	0	1	1	0
Female	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
Asian	2,851	15	22	289	868	833	822	2
Male	1,605	8	12	144	412	492	536	1
Female	1,245	7	10	145	456	341	286	0
Unknown	1	0	0	0	0	0	0	1
Black or African American	837	9	25	112	423	204	64	0
Male	449	3	14	55	244	105	28	0
Female	388	6	11	57	179	99	36	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	16	1	0	1	5	7	2	0
Male	8	1	0	0	2	4	1	0
Female	8	0	0	1	3	3	1	0
Unknown	0	0	0	0	0	0	0	0
White	328	3	3	25	92	87	118	0
Male	172	3	1	15	53	52	48	0
Female	156	0	2	10	39	35	70	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race³	113	0	1	8	43	28	33	0
Male	61	0	0	3	18	20	20	0
Female	52	0	1	5	25	8	13	0
Unknown	0	0	0	0	0	0	0	0
Unknown	10	0	0	0	3	3	4	0
Male	6	0	0	0	1	3	2	0
Female	4	0	0	0	2	0	2	0
Unknown	0	0	0	0	0	0	0	0

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

² Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

³ Indicates two or more races reported for a person.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slide #15.

**Table 20. Tuberculosis Cases Among Foreign-born Persons¹ by Country of Birth²:
United States, 2013**

African Region					
Total Cases = 524					
Algeria	1	Ethiopia	157	Niger	1
Angola	6	Gabon	0	Nigeria	69
Benin	0	Gambia	6	Rwanda	6
Botswana	1	Ghana	21	Sao Tome and Principe	0
Burkina Faso	1	Guinea	9	Senegal	5
Burundi	1	Guinea-Bissau	2	Seychelles	0
Cameroon	27	Kenya	48	Sierra Leone	22
Cape Verde	6	Lesotho	0	South Africa	10
Central African Republic	2	Liberia	29	Swaziland	1
Chad	2	Madagascar	0	Tanzania, UR	0
Comoros	0	Malawi	1	Togo	1
Congo, Republic of	32	Mali	3	Uganda	6
Côte d'Ivoire	7	Mauritania	1	Zambia	7
DR Congo	2	Mauritius	0	Zimbabwe	3
Equatorial Guinea	0	Mozambique	3		
Eritrea	24	Namibia	1		

Americas Region					
Total Cases = 2,275					
Anguilla	0	Costa Rica	4	Netherland Antilles	0
Antigua and Barbuda	2	Cuba	25	Nicaragua	15
Argentina	6	Dominica	0	Panama	5
Bahamas	0	Dominican Republic	62	Paraguay	2
Barbados	1	Ecuador	79	Peru	90
Belize	1	El Salvador	97	St. Kitts and Nevis	0
Bermuda	0	Grenada	0	St. Lucia	0
Bolivia	9	Guatemala	213	St. Vincent & Grenadines	0
Brazil	21	Guyana	14	Suriname	0
British Virgin Islands	0	Haiti	172	Trinidad and Tobago	9
Canada	6	Honduras	122	Turks and Caicos Islands	1
Cayman Islands	0	Jamaica	17	Uruguay	4
Chile	2	Mexico	1244	Venezuela	15
Colombia	37	Montserrat	0		

Eastern Mediterranean Region					
Total Cases = 286					
Afghanistan	18	Lebanon	1	Sudan	17
Bahrain	0	Libyan Arab Jamahiriya	0	Syrian Arab Republic	0
Djibouti	1	Morocco	11	Tunisia	1
Egypt	5	Oman	0	United Arab Emirates	2
Iran, Islamic Republic of	24	Pakistan	78	West Bank and Gaza	0
Iraq	19	Qatar	1	Yemen	10
Jordan	0	Saudi Arabia	10		
Kuwait	3	Somalia	85		

**Table 20. (Cont'd) Tuberculosis Cases Among Foreign-born Persons¹ by Country of Birth²:
United States, 2013**

European Region					
Total Cases = 188					
Albania	7	Greece	8	Poland	11
Andorra	0	Hungary	1	Portugal	4
Armenia	4	Iceland	0	Romania	11
Austria	1	Ireland	4	Russian Federation	22
Azerbaijan	3	Israel	4	San Marino	0
Belarus	1	Italy	5	Serbia	5
Belgium	0	Kazakhstan	0	Slovakia	0
Bosnia and Herzegovina	15	Kyrgyzstan	3	Slovenia	1
Bulgaria	2	Latvia	1	Spain	6
Croatia	2	Lithuania	0	Sweden	1
Cyprus	0	Luxembourg	0	Switzerland	0
Czech Republic	1	Macedonia, TFYR	1	Tajikistan	3
Denmark	1	Malta	0	Turkey	5
Estonia	1	Moldova, Republic of	2	Turkmenistan	0
Finland	0	Monaco	0	Ukraine	23
France	2	Montenegro	1	United Kingdom	6
Georgia	2	Netherlands	0	Uzbekistan	4
Germany	12	Norway	2		

Southeast Asia Region					
Total Cases = 917					
Bangladesh	71	Korea, DPR	37	Sri Lanka	10
Bhutan	56	Maldives	0	Thailand	38
India	495	Myanmar	102	Timor-Leste	0
Indonesia	35	Nepal	73		

Western Pacific Region					
Total Cases = 1,954					
Australia	0	Kiribati	0	Philippines	783
Brunei Darussalam	0	Korea, Rep.	101	Samoa	0
Cambodia	72	Lao, PDR	88	Singapore	2
China	377	Malaysia	16	Solomon Islands	0
China, Hong Kong SAR	24	Mongolia	10	Tokelau	0
China, Macao SAR	0	Nauru	0	Tonga	3
Cook Islands	3	New Caledonia	0	Tuvalu	0
Fiji	2	New Zealand	0	Vanuatu	0
French Polynesia	0	Niue	0	Vietnam	456
Japan	14	Papua New Guinea	3	Wallis and Futuna	0

Other³					
Total Cases = 32					

Unknown					
Total Cases = 17					

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands

² Country as reported by patient.

³ Includes country codes currently reported via the National Tuberculosis Surveillance System that are not represented by WHO member states.

Note: Regional composition of countries based on WHO Report *Global Tuberculosis Report 2013*, World Health Organization (http://www.who.int/tb/publications/global_report/en).

Table 21. Tuberculosis Risk Factors¹ by Origin and Race/Ethnicity: United States, 2013

	Total Eligible Cases ²	MDR Patient Contact		Missed Contact		Infectious TB Patient Contact		Incomplete LTBI Therapy		TNF-α Inhibitors		Post-organ Transplantation		Diabetes Mellitus		Renal Disease		Immuno- suppression		Other		None		Unknown	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9568	20	(0.2)	54	(0.6)	735	(7.7)	237	(2.5)	58	(0.6)	52	(0.5)	1409	(14.7)	184	(1.9)	424	(4.4)	2033	(21.2)	4875	(51.0)	254	(2.7)
U.S.-born Total	3375	10	(0.3)	43	(1.3)	509	(15.1)	98	(2.9)	22	(0.7)	19	(0.6)	391	(11.6)	56	(1.7)	190	(5.6)	824	(24.4)	1430	(42.4)	101	(3.0)
American Indian/ Alaska Native	124	0	(0.0)	2	(1.6)	40	(32.3)	8	(6.5)	1	(0.8)	1	(0.8)	16	(12.9)	2	(1.6)	5	(4.0)	18	(14.5)	45	(36.3)	2	(1.6)
Asian	152	7	(4.6)	2	(1.3)	47	(30.9)	4	(2.6)	0	(0.0)	0	(0.0)	10	(6.6)	0	(0.0)	2	(1.3)	25	(16.4)	61	(40.1)	4	(2.6)
Black/African American	1257	1	(0.1)	19	(1.5)	171	(13.6)	45	(3.6)	5	(0.4)	5	(0.4)	146	(11.6)	26	(2.1)	73	(5.8)	294	(23.4)	543	(43.2)	53	(4.2)
Hispanic ³	658	2	(0.3)	4	(0.6)	128	(19.5)	11	(1.7)	2	(0.3)	4	(0.6)	83	(12.6)	12	(1.8)	20	(3.0)	148	(22.5)	287	(43.6)	9	(1.4)
Multiple races ⁴	34	0	(0.0)	1	(2.9)	7	(20.6)	2	(5.9)	0	(0.0)	0	(0.0)	2	(5.9)	1	(2.9)	1	(2.9)	10	(29.4)	13	(38.2)	2	(5.9)
Native Hawaiian/ Pacific Islander	44	0	(0.0)	1	(2.3)	14	(31.8)	1	(2.3)	1	(2.3)	0	(0.0)	12	(27.3)	3	(6.8)	0	(0.0)	5	(11.4)	13	(29.5)	1	(2.3)
White	1099	0	(0.0)	14	(1.3)	100	(9.1)	27	(2.5)	13	(1.2)	9	(0.8)	122	(11.1)	12	(1.1)	89	(8.1)	323	(29.4)	467	(42.5)	27	(2.5)
Unknown	7	0	(0.0)	0	(0.0)	2	(28.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)	1	(14.3)	3	(42.9)

U.S.-born

Table 21. (Con't) Tuberculosis Risk Factors¹ by Origin and Race/Ethnicity: United States, 2013

	Total Eligible Cases ²	MDR Patient Contact		Missed Contact		Infectious TB Patient Contact		Incomplete LTBI therapy		TNF- α Inhibitors		Post-organ Transplantation		Diabetes Mellitus		Renal Disease		Immuno- suppression		Other		None		Unknown	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9568	20	(0.2)	54	(0.6)	735	(7.7)	237	(2.5)	58	(0.6)	52	(0.5)	1409	(14.7)	184	(1.9)	424	(4.4)	2033	(21.2)	4875	(51.0)	254	(2.7)
Foreign-born Total	6193	10	(0.2)	11	(0.2)	226	(3.6)	139	(2.2)	36	(0.6)	33	(0.5)	1018	(16.4)	128	(2.1)	234	(3.8)	1209	(19.5)	3445	(55.6)	153	(2.5)
American Indian/ Alaska Native	2	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Asian	2851	5	(0.2)	3	(0.1)	95	(3.3)	60	(2.1)	21	(0.7)	24	(0.8)	507	(17.8)	64	(2.2)	123	(4.3)	588	(20.6)	1522	(53.4)	76	(2.7)
Black/African American	837	1	(0.1)	3	(0.4)	29	(3.5)	40	(4.8)	2	(0.2)	1	(0.1)	60	(7.2)	6	(0.7)	29	(3.5)	138	(16.5)	536	(64.0)	28	(3.3)
Hispanic ³	2036	2	(0.1)	4	(0.2)	86	(4.2)	31	(1.5)	11	(0.5)	6	(0.3)	381	(18.7)	45	(2.2)	60	(2.9)	372	(18.3)	1145	(56.2)	31	(1.5)
Multiple races ⁴	113	1	(0.9)	1	(0.9)	1	(0.9)	1	(0.9)	0	(0.0)	0	(0.0)	21	(18.6)	4	(3.5)	3	(2.7)	36	(31.9)	55	(48.7)	1	(0.9)
Native Hawaiian/ Pacific Islander	16	0	(0.0)	0	(0.0)	1	(6.3)	0	(0.0)	0	(0.0)	1	(6.3)	3	(18.8)	1	(6.3)	1	(6.3)	3	(18.8)	7	(43.8)	0	(0.0)
White	328	1	(0.3)	0	(0.0)	12	(3.7)	6	(1.8)	2	(0.6)	1	(0.3)	42	(12.8)	8	(2.4)	18	(5.5)	70	(21.3)	175	(53.4)	16	(4.9)
Unknown	10	0	(0.0)	0	(0.0)	1	(10.0)	1	(10.0)	0	(0.0)	0	(0.0)	2	(20.0)	0	(0.0)	0	(0.0)	2	(20.0)	5	(50.0)	1	(10.0)

¹ Includes the number of risk factors reported (which may be more than one per case) and the number of cases with no information on additional risk factors. The sum of risk factors is greater than the total number of cases because more than one risk factor may be selected per case.

² Excludes TB risk factor information for 14 cases with unknown origin

³ Persons of Hispanic or Latino origin may be of any race or multiple race.

⁴ Indicates two or more races reported for a person.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

Table 22. Epidemiologic Characteristics of Cases in GENType Clusters¹ by Alert Levels Based on Log-likelihood Ratios (LLR)²: United States, 2011–2013

Case Characteristics	Unique	Alert Levels for Clustered Cases ³								
		Clustered		Non-alerted (LLR <5)		Medium (LLR 5 – <10)		High (LLR ≥10)		
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	
Total	17,077	78.7	4,625	21.3	2,652	57.3	997	21.6	976	21.1
Race and Ethnicity										
Hispanic or Latino	4,746	77.0	1,415	23.0	923	65.2	305	21.6	187	13.2
American Indian/Alaska Native	165	51.6	155	48.4	17	11	31	20.0	107	69.0
Asian	5,824	87.0	870	13.0	747	85.9	71	8.2	52	6
Black or African American	3,205	68.7	1,457	31.3	613	42.1	356	24.4	488	33.5
Native Hawaiian/Other Pacific Islander	80	54.4	67	45.6	34	50.8	30	44.8	3	4.5
White	2,737	81.6	618	18.4	292	47.3	196	31.7	130	21.0
Multiple Race	287	89.7	33	10.3	22	66.7	5	15.2	6	18.2
Unknown or Missing	33	76.7	10	23.3	4	40.0	3	30.0	3	30.0
Age Group (Years)										
0–4	80	35.1	148	64.9	74	50.0	44	29.7	30	20.3
5–14	113	57.7	83	42.3	47	56.6	15	18.1	21	25.3
15–24	1,617	71.6	642	28.4	378	58.9	139	21.7	125	19.5
25–44	5,454	78.9	1,462	21.1	839	57.4	318	21.8	305	20.9
45–64	5,152	75.3	1,687	24.7	892	52.9	375	22.2	420	24.9
≥65	4,658	88.5	603	11.5	422	70	106	17.6	75	12.4
Unknown	3	100.0	0	0.0	--	--	--	--	--	--
Origin of Birth										
U.S-born	5,008	65.3	2,661	34.7	1,130	42.5	710	26.7	821	30.9
Foreign-born	12,056	86.1	1,952	13.9	1,516	77.7	285	14.6	151	7.7
Unknown or Missing	13	52.0	12	48.0	6	50	2	16.7	4	33.3
Disease Site										
Pulmonary Only	12,147	76.7	3,698	23.3	2,093	56.6	807	21.8	798	21.6
Extrapulmonary	3,033	86.9	457	13.1	287	62.8	91	19.9	79	17.3
Both	1,886	80.1	468	19.9	272	58.1	99	21.2	97	20.7
Unknown	11	84.6	2	15.4	0	0	0	0	2	100
Sputum Smear										
Positive	7,836	75.8	2,504	24.2	1,390	55.5	574	22.9	540	21.6
Negative	6,898	80.8	1,637	19.2	992	60.6	306	18.7	339	20.7
Not Done	2,321	82.8	482	17.2	270	56	117	24.3	95	19.7
Unknown or Missing	22	91.7	2	8.3	0	0	0	0	2	100
Cavitary disease										
Yes	178	75.4	58	24.6	22	37.9	20	34.5	16	27.6
No	1,348	79.6	346	20.4	213	61.6	63	18.2	70	20.2
Unknown or Missing	360	84.9	64	15.1	37	57.8	16	25	11	17.2

Table 22. (Con't) Epidemiologic Characteristics of Cases in GENType Clusters¹ by Alert Levels Based on Log-likelihood Ratios (LLR)²: United States, 2011–2013

Case Characteristics	Unique		Alert Levels for Clustered Cases ³							
			Clustered		Non-alerted (LLR <5)		Medium (LLR 5 – <10)		High (LLR ≥10)	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Homeless Within Past Year										
Yes	718	56.4	556	43.6	203	36.5	80	14.4	273	49.1
No	16,210	80.1	4,023	19.9	2,420	60.2	908	22.6	695	17.3
Unknown or Missing	149	76.4	46	23.6	29	63	9	19.6	8	17.4
Excess Alcohol Use Within the Past Year										
Yes	1,781	63.9	1,005	36.1	396	39.4	248	24.7	361	35.9
No	15,026	81.0	3,531	19.0	2,202	62.4	736	20.8	593	16.8
Unknown or Missing	270	75.2	89	24.8	54	60.7	13	14.6	22	24.7
Injecting Illicit Drug Use Within Past Year										
Yes	186	59.4	127	40.6	67	52.8	19	15	41	32.3
No	16,618	79.0	4,408	21.0	2,535	57.5	965	21.9	908	20.6
Unknown or Missing	273	75.2	90	24.8	50	55.6	13	14.4	27	30
Non-Injecting Illicit Drug Use Within Past Year										
Yes	922	55.5	740	44.5	303	40.9	164	22.2	273	36.9
No	15,864	80.7	3,796	19.3	2,300	60.6	820	21.6	676	17.8
Unknown or Missing	291	76.6	89	23.4	49	55.1	13	14.6	27	30.3
Resident of a Correction Facility at the Time of Diagnosis										
Yes	608	72.0	236	28.0	120	50.9	51	21.6	65	27.5
No	16,406	79.0	4,371	21.0	2,523	57.7	944	21.6	904	20.7
Unknown or Missing	63	77.8	18	22.2	9	50	2	11.1	7	38.9
HIV Status										
Positive	957	70.7	397	29.3	210	52.9	70	17.6	117	29.5
Negative	13,623	78.5	3,729	21.5	2,146	57.6	809	21.7	774	20.8
Refused	737	86.1	119	13.9	73	61.3	35	29.4	11	9.2
Not Offered	1,312	81.3	301	18.7	172	57.1	65	21.6	64	21.3
Unknown, Missing or Indeterminate	448	85.0	79	15.0	51	64.6	18	22.8	10	12.7
Multi-Drug Resistant TB										
Yes	248	83.2	50	16.8	43	86	5	10	2	4
No	16,460	78.6	4,484	21.4	2,567	57.3	975	21.7	942	21
Unknown or Missing	369	80.2	91	19.8	42	46.2	17	18.7	32	35.2

¹ GENType clusters have two or more cases with matching spoligotype and 24-locus Mycobacterial interspersed repetitive unit-variable number tandem repeat type within a county during the specified 3-year time period.

² Alert levels are based on a log-likelihood ratio (LLR), which calculates the geographic concentration of a genotype in a county compared to the rest of the country during a 3-year period.

³ There were 4,625 cases in 1,532 alerted clusters: 976 cases were in 101 (6.6%) high alert clusters; 997 cases were in 338 (22.1%) medium alert clusters and 2,652 were in 1,093 (71.3%) non-alert clusters.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity. See Surveillance Slide #36

Table 23. Tuberculosis Cases by Cluster Status¹: United States, 2011–2013

Cluster Status	Cases	
	No.	(%)
Total	21,702	(100.0)
Unique ²	17,077	(78.7)
Clustered ³	4,625	(21.3)

¹ Cluster status indicates whether a case is unique or clustered within a county for cases with a valid GENType.

² A unique case is a case with a GENType (spoligotype and 24 locus mycobacterial interspersed repetitive unit-variable number tandem repeat type) that does not match any other case in that county during the specified three-year time period.

³ Clustered cases are defined as two or more cases with same GENType within a county during the specified 3-year time period.
See Surveillance Slide #34

Table 24. Tuberculosis Cases and Clusters by Cluster Size¹: United States, 2011–2013

Cluster Size	Clusters		Cases ²	
	No.	(%) ³	No.	(%) ⁴
Total	1,532	(100.0)	4,625	(100.0)
2 case cluster	1,015	66.3	2030	43.9
3 case cluster	250	16.3	750	16.2
4 case cluster	111	7.3	444	9.6
5 case cluster	59	3.8	295	6.4
6 case cluster	23	1.5	138	3.0
7 case cluster	17	1.1	119	2.6
8 case cluster	12	0.8	96	2.1
9 case cluster	7	0.5	63	1.4
≥10 case cluster	38	2.5	690	14.9

¹ Clusters have two or more cases with matching spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENType) within a county during the specified 3-year time period .

² Cases with matching spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENType) are members of a cluster within a county during the specified 3-year time period.

³ Denominator is total number of clusters

⁴ Denominator is total number of cases

See Surveillance Slide #35.

Table 25. Ten Most Frequently Reported GENTypes¹ Among Genotyped Tuberculosis Cases: United States, 2011–2013

GENType	PCRType ²	Spoligotype	24-locus MIRU-VNTR		TB Cases with GENType ³		Reporting Areas ⁴ with GENType
					No.	(%)	No.
G00010	PCR00002	0000000000003771	223325173533	444534423428	181	(0.8)	23
G00012	PCR00002	0000000000003771	223325173533	445644423328	140	(0.6)	28
G05056	PCR00041	677777477413771	254326223432	14a943263217	109	(0.5)	19
G10345	PCR00160	777776777760601	224325143323	244234423337	97	(0.4)	6
G00016	PCR00041	677777477413771	254326223432	14a843263217	96	(0.4)	24
G00011	PCR00015	777776777760601	224325153323	444234423337	92	(0.4)	29
G00013	PCR00016	700036777760731	222325143223	434534412334	73	(0.3)	20
G00014	PCR00051	77603777760771	223125163324	242434223525	71	(0.3)	17
G01521	PCR01201	0000000000003771	223325173534	244544423239	63	(0.3)	11
G00017	PCR00803	0000000000003771	222325173533	445644423328	62	(0.3)	13

¹ GENType is defined as a unique combination of spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat (MIRU-VNTR) type.

² PCRType is defined as a unique combination of spoligotype and 12-locus MIRU-VNTR; every GENType has a corresponding PCRType.

³ Among 21,702 cases with GENTypes during 2011–2013.

⁴ This table reflects common GENTypes for the 50 states and the District of Columbia; for common GENTypes in the United States Affiliated Pacific Islands, please see Table 26.

Table 26. Five Most Frequently Reported GENTypes² Among Genotyped Tuberculosis Cases: United States Affiliates¹, 2011–2013

GENType	PCRTYPE ³	Spoligotype	24-locus MIRU-VNTR		TB Cases with GENType ⁴		Reporting Areas with GENType
					No.	(%)	No.
G00017	PCR00803	000000000003771	222325173533	445644423328	124	(20.9)	2
G01967	PCR03284	000000007720771	225413153223	133532423434	19	(3.2)	1
G01284	PCR00002	000000000003771	223325173533	44474442334A	18	(3.0)	3
G04701	PCR00117	677777477413771	254326223422	147843263217	14	(2.4)	2
G13204	PCR01535	777777770020771	122325143323	233334213326	13	(2.2)	1

¹ The United States affiliates include: American Samoa, Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, Palau, Puerto Rico, and United States Virgin Islands.

² GENType is defined as a unique combination of spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat (MIRU-VNTR) type.

³ PCRTYPE is defined as a unique combination of spoligotype and 12-locus MIRU-VNTR; every GENType has a corresponding PCRTYPE.

⁴ Among culture-positive genotyped TB cases during 2011–2013 (n=584).

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Morbidity Tables 2011

Table 27. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2011

Type of Move	Total Cases	Completed Therapy	Adverse Event	Lost	Refused	Died	Other ¹	Unknown
	No.	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Moved in state ²	336	258 (76.8)	2 (0.6)	7 (2.1)	5 (1.5)	24 (7.1)	34 (10.1)	6 (1.8)
Moved out of state ³	284	213 (75.0)	0 (0.0)	17 (6.0)	2 (0.7)	6 (2.1)	38 (13.4)	8 (2.8)
Moved out of country ⁴	397	165 (41.6)	0 (0.0)	22 (5.5)	0 (0.0)	7 (1.8)	193 (48.6)	10 (2.5)
Did not move ⁵	9134	8211 (89.9)	26 (0.3)	72 (0.8)	61 (0.7)	645 (7.1)	28 (0.3)	91 (1.0)

¹ Therapy was discontinued for a known reason other than those listed (e.g. patient moved outside the U.S., or patient moved from state A to state B, and though state A notified state B, state B never followed up).

² Includes patients who were alive at diagnosis, started on treatment, and moved in state.

³ Includes patients who were alive at diagnosis, started on treatment, and moved out of state.

⁴ Includes patients who were alive at diagnosis, started on treatment, and moved out of the country; transnational referrals were provided for 264 (66.7%) TB patients who moved out of the country.

⁵ Includes patients who were alive at diagnosis, started on treatment, and did not indicate having moved.

Note: There may be differences in the way jurisdictions determine treatment completion for patients who moved out of the country; some reporting jurisdictions may be classifying all patients who moved out of the country as 'other' for reason therapy stopped.

Table 28. Deaths Prior to Tuberculosis Diagnosis or During Tuberculosis Therapy by Age Group: United States, 2011

Age Group	Total		Dead at Diagnosis				Died During Therapy ¹			
	Total Deaths Reported	Deaths Related to TB Disease or Therapy ²	Total Dead at Diagnosis		TB a Cause of Death		Total Died During Therapy		Unrelated to TB	
	No.	No. (%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Total	928	337 (36.3)	244	88 (36.1)	104	(42.6)	684	249 (36.4)	307	(44.9)
0-4	5	4 (80.0)	3	2 (66.7)	1	(33.3)	2	2 (100.0)	0	(0.0)
5-14	1	1 (100.0)	1	1 (100.0)	0	(0.0)	0	0 ...	0	...
15-24	13	6 (46.2)	5	2 (40.0)	2	(40.0)	8	4 (50.0)	2	(25.0)
25-44	99	49 (49.5)	33	14 (42.4)	10	(30.3)	66	35 (53.0)	23	(34.8)
45-64	298	103 (34.6)	76	26 (34.2)	34	(44.7)	222	77 (34.7)	104	(46.8)
65+	512	174 (34.0)	126	43 (34.1)	57	(45.2)	386	131 (33.9)	178	(46.1)

¹ Among patients alive at diagnosis. Excludes 16 patients who died during therapy but did not start on therapy or unknown whether or not therapy was started.² Includes patients who were dead at diagnosis or died during therapy, for which TB or TB therapy was indicated as a cause of death.³ Six patient deaths during therapy were related to TB therapy.**Note:** Ellipses indicate data not available.

Table 29. Sputum Culture Conversion by Age Group: United States, 2011

Age Group	Total Sputum Culture Positive ¹	Sputum Culture Conversion Documented ²		Sputum Culture Conversion Not Documented ³		Sputum Culture Conversion Unknown		Reason Sputum Culture Conversion Not Documented											
		No.	(%)	No.	(%)	No.	(%)	Can't Produce Sputum	Sputum Not Collected		Died		Refused		Lost to Follow-up		Other	Unknown	
									No.	(%)	No.	(%)	No.	(%)	No.	(%)			No.
Total	5650	4869 (86.2)	697 (12.3)	84 (1.5)	59 (8.5)	154 (22.1)	253 (36.3)	5 (0.7)	40 (5.7)	159 (22.8)	27 (3.9)								
0-4	9	2 (22.2)	7 (77.8)	0 (0.0)	1 (14.3)	4 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (28.6)	0 (0.0)								
5-14	42	38 (90.5)	4 (9.5)	0 (0.0)	0 (0.0)	2 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (50.0)	0 (0.0)								
15-24	619	558 (90.1)	50 (8.1)	11 (1.8)	8 (16.0)	21 (42.0)	2 (4.0)	0 (0.0)	2 (4.0)	13 (26.0)	4 (8.0)								
25-44	1902	1684 (88.5)	190 (10.0)	28 (1.5)	20 (10.5)	50 (26.3)	27 (14.2)	1 (0.5)	14 (7.4)	67 (35.3)	11 (5.8)								
45-64	1892	1640 (86.7)	220 (11.6)	32 (1.7)	16 (7.3)	44 (20.0)	86 (39.1)	2 (0.9)	18 (8.2)	46 (20.9)	8 (3.6)								
65+	1186	947 (79.8)	226 (19.1)	13 (1.1)	14 (6.2)	33 (14.6)	138 (61.1)	2 (0.9)	6 (2.7)	29 (12.8)	4 (1.8)								

¹ Among persons who were alive at diagnosis and had positive sputum culture

² Among persons who had sputum culture conversion documented at any time.

³ Among persons who were alive at diagnosis, had positive culture, and did not have documented culture conversion (excludes patients with unknown culture conversion).

Morbidity Tables Reporting Areas, 2013

Table 30. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2013 and 2012

Reporting Area	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2013
	2013	2012	2013	2012	2013	2012	
United States	9,582	9,940	3.0	3.2	--	--	316,128,839
Alabama	108	134	2.2	2.8	21	18	4,833,722
Alaska	71	66	9.7	9.0	1	1	735,132
Arizona	184	211	2.8	3.2	15	12	6,626,624
Arkansas	72	70	2.4	2.4	18	24	2,959,373
California	2,171	2,189	5.7	5.8	3	3	38,332,521
Colorado	74	64	1.4	1.2	36	43	5,268,367
Connecticut	62	74	1.7	2.1	29	29	3,596,080
Delaware	19	28	2.1	3.1	26	14	925,749
District of Columbia ¹	38	37	5.9	5.8	--	--	646,449
Florida	652	678	3.3	3.5	8	9	19,552,860
Georgia	340	357	3.4	3.6	7	8	9,992,167
Hawaii	115	117	8.2	8.4	2	2	1,404,054
Idaho	11	15	0.7	0.9	48	45	1,612,136
Illinois	327	347	2.5	2.7	17	20	12,882,135
Indiana	94	102	1.4	1.6	34	34	6,570,902
Iowa	47	46	1.5	1.5	33	36	3,090,416
Kansas	36	42	1.2	1.5	39	38	2,893,957
Kentucky	59	78	1.3	1.8	37	32	4,395,295
Louisiana	139	148	3.0	3.2	11	13	4,625,470
Maine	15	17	1.1	1.3	42	41	1,328,302
Maryland	176	224	3.0	3.8	13	6	5,928,814
Massachusetts	201	216	3.0	3.3	12	11	6,692,824
Michigan	141	149	1.4	1.5	35	35	9,895,622
Minnesota	151	162	2.8	3.0	14	16	5,420,380
Mississippi	65	81	2.2	2.7	25	19	2,991,207
Missouri	104	89	1.7	1.5	30	37	6,044,171
Montana	6	5	0.6	0.5	49	49	1,015,165
Nebraska	21	22	1.1	1.2	43	44	1,868,516
Nevada	92	84	3.3	3.0	9	15	2,790,136
New Hampshire	15	9	1.1	0.7	41	46	1,323,459
New Jersey	319	302	3.6	3.4	6	10	8,899,339
New Mexico	50	40	2.4	1.9	19	30	2,085,287
New York	872	864	4.4	4.4	5	5	19,651,127
North Carolina	216	211	2.2	2.2	22	28	9,848,060
North Dakota	12	26	1.7	3.7	32	7	723,393
Ohio	148	149	1.3	1.3	38	40	11,570,808
Oklahoma	69	88	1.8	2.3	28	25	3,850,568
Oregon	73	61	1.9	1.6	27	33	3,930,065
Pennsylvania	214	234	1.7	1.8	31	31	12,773,801
Rhode Island	27	23	2.6	2.2	16	27	1,051,511
South Carolina	112	122	2.3	2.6	20	22	4,774,839
South Dakota	9	19	1.1	2.3	44	26	844,877
Tennessee	142	163	2.2	2.5	23	23	6,495,978
Texas	1,222	1,234	4.6	4.7	4	4	26,448,193
Utah	33	37	1.1	1.3	40	39	2,900,872
Vermont	5	4	0.8	0.6	46	47	626,630
Virginia	180	235	2.2	2.9	24	17	8,260,405
Washington	210	185	3.0	2.7	10	21	6,971,406
West Virginia	13	8	0.7	0.4	47	50	1,854,304
Wisconsin	50	71	0.9	1.2	45	42	5,742,713
Wyoming	0	3	...	0.5	50	48	582,658
American Samoa ^{1,2}	2	1	3.7	1.8	--	--	54,719
Fed. States of Micronesia ^{1,2}	130	173	122.5	162.5	--	--	106,104
Guam ^{1,2}	48	68	29.9	42.5	--	--	160,378
Marshall Islands ^{1,2}	153	147	219.4	214.7	--	--	69,747
N. Mariana Islands ^{1,2}	16	21	31.3	40.9	--	--	51,170
Puerto Rico ^{1,2}	50	71	1.4	1.9	--	--	3,645,648
Republic of Palau ^{1,2}	6	4	28.4	19.0	--	--	21,108
U.S. Virgin Islands ^{1,2}	2	3	1.9	2.8	--	--	104,737

¹ Not ranked with the states. See Table 31 for District of Columbia ranking among states.

² Not included in U.S. totals.

Note: Denominators for computing 2012 and 2013 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2013 (<http://www.census.gov/popest/data/national/totals/2013/index.html>) (accessed July 15, 2014); for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/population/international/data/idb/informationGateway.php>) (accessed July 15, 2014). Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #4.

Table 31. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by Number of Cases: United States and the District of Columbia, 2013 and 2012

Reporting Area	2013		2012		2012–2013 % Change		Overall Rank by 2013 Rate
	No.	Rate	No.	Rate	No.	Rate	
Total	9,582	3.0	9,940	3.2	-3.6	-4.3	...
>= 500 cases in 2013							
California	2,171	5.7	2,189	5.8	-0.8	-1.7	3
Texas	1,222	4.6	1,234	4.7	-1.0	-2.4	4
New York ¹	872	4.4	864	4.4	0.9	0.5	5
Florida	652	3.3	678	3.5	-3.8	-5.0	8
100 - 499 cases in 2013							
Georgia	340	3.4	357	3.6	-4.8	-5.5	7
Illinois	327	2.5	347	2.7	-5.8	-5.9	17
New Jersey	319	3.6	302	3.4	5.6	5.3	6
North Carolina	216	2.2	211	2.2	2.4	1.3	22
Pennsylvania	214	1.7	234	1.8	-8.5	-8.6	31
Washington	210	3.0	185	2.7	13.5	12.3	10
Massachusetts	201	3.0	216	3.3	-6.9	-7.6	12
Arizona	184	2.8	211	3.2	-12.8	-13.8	15
Virginia	180	2.2	235	2.9	-23.4	-24.1	24
Maryland	176	3.0	224	3.8	-21.4	-22.0	13
Minnesota	151	2.8	162	3.0	-6.8	-7.5	14
Ohio	148	1.3	149	1.3	-0.7	-0.9	38
Tennessee	142	2.2	163	2.5	-12.9	-13.4	23
Michigan	141	1.4	149	1.5	-5.4	-5.5	35
Louisiana	139	3.0	148	3.2	-6.1	-6.6	11
Hawaii	115	8.2	117	8.4	-1.7	-2.7	2
South Carolina	112	2.3	122	2.6	-8.2	-9.2	20
Alabama	108	2.2	134	2.8	-19.4	-19.7	21
Missouri	104	1.7	89	1.5	16.9	16.5	30
< 100 cases in 2013							
Indiana	94	1.4	102	1.6	-7.8	-8.3	34
Nevada	92	3.3	84	3.1	9.5	8.1	9
Colorado	74	1.4	64	1.2	15.6	13.9	36
Oregon	73	1.9	61	1.6	19.7	18.7	27
Arkansas	72	2.4	70	2.4	2.9	2.5	18
Alaska	71	9.7	66	9.0	7.6	6.9	1
Oklahoma	69	1.8	88	2.3	-21.6	-22.3	28
Mississippi	65	2.2	81	2.7	-19.8	-19.9	25
Connecticut	62	1.7	74	2.1	-16.2	-16.3	29
Kentucky	59	1.3	78	1.8	-24.4	-24.6	37
New Mexico	50	2.4	40	1.9	25.0	24.9	19
Wisconsin	50	0.9	71	1.2	-29.6	-29.8	45
Iowa	47	1.5	46	1.5	2.2	1.7	33
District of Columbia	38	5.9	37	5.8	2.7	0.6	--
Kansas	36	1.2	42	1.5	-14.3	-14.6	39
Utah	33	1.1	37	1.3	-10.8	-12.2	40
Rhode Island	27	2.6	23	2.2	17.4	17.3	16
Nebraska	21	1.1	22	1.2	-4.5	-5.2	43
Delaware	19	2.1	28	3.1	-32.1	-32.8	26
Maine	15	1.1	17	1.3	-11.8	-11.8	42
New Hampshire	15	1.1	9	0.7	66.7	66.4	41
West Virginia	13	0.7	8	0.4	62.5	62.6	47
North Dakota	12	1.7	26	3.7	-53.8	-55.2	32
Idaho	11	0.7	15	0.9	-26.7	-27.4	48
South Dakota	9	1.1	19	2.3	-52.6	-53.2	44
Montana	6	0.6	5	0.5	20.0	18.9	49
Vermont	5	0.8	4	0.6	25.0	24.9	46
Wyoming	0	0.0	3	0.5	-100.0	-100.0	50

¹ Includes New York City.

Note: Denominators for computing 2012 and 2013 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2013 (<http://www.census.gov/popest/data/national/totals/2013/index.html>) (accessed July 15, 2014).

See Table 30 for ranking of states without the District of Columbia.

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Table 32. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2013

Reporting Area	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9,582	297	(3.1)	188	(2.0)	978	(10.2)	2,960	(30.9)	2,965	(30.9)	2,191	(22.9)	3	(0.0)
Alabama	108	5	(4.6)	2	(1.9)	11	(10.2)	27	(25.0)	32	(29.6)	31	(28.7)	0	(0.0)
Alaska	71	6	(8.5)	4	(5.6)	11	(15.5)	17	(23.9)	22	(31.0)	11	(15.5)	0	(0.0)
Arizona	184	3	(1.6)	4	(2.2)	31	(16.8)	60	(32.6)	45	(24.5)	41	(22.3)	0	(0.0)
Arkansas	72	1	(1.4)	0	(0.0)	7	(9.7)	23	(31.9)	16	(22.2)	25	(34.7)	0	(0.0)
California	2,171	58	(2.7)	32	(1.5)	184	(8.5)	550	(25.3)	666	(30.7)	679	(31.3)	2	(0.1)
Colorado	74	2	(2.7)	0	(0.0)	8	(10.8)	24	(32.4)	19	(25.7)	21	(28.4)	0	(0.0)
Connecticut	62	1	(1.6)	0	(0.0)	3	(4.8)	27	(43.5)	19	(30.6)	12	(19.4)	0	(0.0)
Delaware	19	1	(5.3)	2	(10.5)	2	(10.5)	8	(42.1)	2	(10.5)	4	(21.1)	0	(0.0)
District of Columbia	38	3	(7.9)	1	(2.6)	3	(7.9)	18	(47.4)	9	(23.7)	4	(10.5)	0	(0.0)
Florida	652	17	(2.6)	10	(1.5)	54	(8.3)	208	(31.9)	247	(37.9)	116	(17.8)	0	(0.0)
Georgia	340	17	(5.0)	10	(2.9)	22	(6.5)	122	(35.9)	115	(33.8)	53	(15.6)	1	(0.3)
Hawaii	115	1	(0.9)	3	(2.6)	12	(10.4)	24	(20.9)	39	(33.9)	36	(31.3)	0	(0.0)
Idaho	11	0	(0.0)	1	(9.1)	2	(18.2)	2	(18.2)	3	(27.3)	3	(27.3)	0	(0.0)
Illinois	327	11	(3.4)	5	(1.5)	37	(11.3)	99	(30.3)	99	(30.3)	76	(23.2)	0	(0.0)
Indiana	94	2	(2.1)	2	(2.1)	13	(13.8)	18	(19.1)	37	(39.4)	22	(23.4)	0	(0.0)
Iowa	47	0	(0.0)	1	(2.1)	7	(14.9)	21	(44.7)	11	(23.4)	7	(14.9)	0	(0.0)
Kansas	36	4	(11.1)	2	(5.6)	4	(11.1)	10	(27.8)	7	(19.4)	9	(25.0)	0	(0.0)
Kentucky	59	0	(0.0)	2	(3.4)	7	(11.9)	19	(32.2)	14	(23.7)	17	(28.8)	0	(0.0)
Louisiana	139	13	(9.4)	2	(1.4)	14	(10.1)	26	(18.7)	60	(43.2)	24	(17.3)	0	(0.0)
Maine	15	1	(6.7)	1	(6.7)	0	(0.0)	4	(26.7)	4	(26.7)	5	(33.3)	0	(0.0)
Maryland	176	7	(4.0)	2	(1.1)	15	(8.5)	66	(37.5)	60	(34.1)	26	(14.8)	0	(0.0)
Massachusetts	201	2	(1.0)	1	(0.5)	32	(15.9)	78	(38.8)	44	(21.9)	44	(21.9)	0	(0.0)
Michigan	141	0	(0.0)	2	(1.4)	14	(9.9)	38	(27.0)	51	(36.2)	36	(25.5)	0	(0.0)
Minnesota	151	3	(2.0)	4	(2.6)	24	(15.9)	60	(39.7)	33	(21.9)	27	(17.9)	0	(0.0)
Mississippi	65	2	(3.1)	1	(1.5)	3	(4.6)	10	(15.4)	28	(43.1)	21	(32.3)	0	(0.0)
Missouri	104	7	(6.7)	0	(0.0)	9	(8.7)	22	(21.2)	39	(37.5)	27	(26.0)	0	(0.0)
Montana	6	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)	3	(50.0)	2	(33.3)	0	(0.0)
Nebraska	21	0	(0.0)	0	(0.0)	3	(14.3)	10	(47.6)	7	(33.3)	1	(4.8)	0	(0.0)
Nevada	92	15	(16.3)	1	(1.1)	7	(7.6)	27	(29.3)	25	(27.2)	17	(18.5)	0	(0.0)
New Hampshire	15	0	(0.0)	0	(0.0)	3	(20.0)	7	(46.7)	4	(26.7)	1	(6.7)	0	(0.0)
New Jersey	319	9	(2.8)	4	(1.3)	28	(8.8)	107	(33.5)	100	(31.3)	71	(22.3)	0	(0.0)

Table 32. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2013

Reporting Area	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	50	0	(0.0)	0	(0.0)	2	(4.0)	13	(26.0)	15	(30.0)	20	(40.0)	0	(0.0)
New York	872	11	(1.3)	11	(1.3)	94	(10.8)	329	(37.7)	242	(27.8)	185	(21.2)	0	(0.0)
North Carolina	216	9	(4.2)	6	(2.8)	20	(9.3)	82	(38.0)	62	(28.7)	37	(17.1)	0	(0.0)
North Dakota	12	0	(0.0)	3	(25.0)	0	(0.0)	4	(33.3)	3	(25.0)	2	(16.7)	0	(0.0)
Ohio	148	1	(0.7)	6	(4.1)	14	(9.5)	49	(33.1)	40	(27.0)	38	(25.7)	0	(0.0)
Oklahoma	69	3	(4.3)	1	(1.4)	13	(18.8)	9	(13.0)	32	(46.4)	11	(15.9)	0	(0.0)
Oregon	73	4	(5.5)	1	(1.4)	9	(12.3)	19	(26.0)	20	(27.4)	20	(27.4)	0	(0.0)
Pennsylvania	214	3	(1.4)	4	(1.9)	28	(13.1)	75	(35.0)	62	(29.0)	42	(19.6)	0	(0.0)
Rhode Island	27	1	(3.7)	1	(3.7)	1	(3.7)	9	(33.3)	4	(14.8)	11	(40.7)	0	(0.0)
South Carolina	112	3	(2.7)	10	(8.9)	4	(3.6)	38	(33.9)	32	(28.6)	25	(22.3)	0	(0.0)
South Dakota	9	0	(0.0)	0	(0.0)	1	(11.1)	3	(33.3)	4	(44.4)	1	(11.1)	0	(0.0)
Tennessee	142	10	(7.0)	5	(3.5)	14	(9.9)	46	(32.4)	35	(24.6)	32	(22.5)	0	(0.0)
Texas	1,222	54	(4.4)	23	(1.9)	150	(12.3)	364	(29.8)	425	(34.8)	206	(16.9)	0	(0.0)
Utah	33	2	(6.1)	1	(3.0)	3	(9.1)	15	(45.5)	7	(21.2)	5	(15.2)	0	(0.0)
Vermont	5	1	(20.0)	0	(0.0)	1	(20.0)	3	(60.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	180	0	(0.0)	9	(5.0)	16	(8.9)	77	(42.8)	44	(24.4)	34	(18.9)	0	(0.0)
Washington	210	4	(1.9)	4	(1.9)	27	(12.9)	73	(34.8)	59	(28.1)	43	(20.5)	0	(0.0)
West Virginia	13	0	(0.0)	0	(0.0)	1	(7.7)	3	(23.1)	7	(53.8)	2	(15.4)	0	(0.0)
Wisconsin	50	0	(0.0)	4	(8.0)	10	(20.0)	16	(32.0)	12	(24.0)	8	(16.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...
American Samoa ¹	2	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ¹	130	10	(7.7)	15	(11.5)	30	(23.1)	39	(30.0)	29	(22.3)	6	(4.6)	1	(0.8)
Guam ¹	48	7	(14.6)	4	(8.3)	5	(10.4)	10	(20.8)	10	(20.8)	12	(25.0)	0	(0.0)
Marshall Islands ¹	153	13	(8.5)	16	(10.5)	21	(13.7)	51	(33.3)	48	(31.4)	4	(2.6)	0	(0.0)
N. Mariana Islands ¹	16	1	(6.3)	0	(0.0)	2	(12.5)	4	(25.0)	7	(43.8)	2	(12.5)	0	(0.0)
Puerto Rico ¹	50	0	(0.0)	0	(0.0)	4	(8.0)	11	(22.0)	24	(48.0)	11	(22.0)	0	(0.0)
Republic of Palau ¹	6	0	(0.0)	0	(0.0)	0	(0.0)	2	(33.3)	3	(50.0)	1	(16.7)	0	(0.0)
U.S. Virgin Islands ¹	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	1	(50.0)

¹Not included in U.S. totals.

Table 33. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2013

Reporting Area	Total Cases	Hispanic or Latino ¹		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race ²		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9,582	2,699	(28.2)	126	(1.3)	3,005	(31.4)	2,096	(21.9)	60	(0.6)	1,429	(14.9)	149	(1.6)	18	(0.2)
Alabama	108	18	(16.7)	0	(0.0)	5	(4.6)	51	(47.2)	0	(0.0)	34	(31.5)	0	(0.0)	0	(0.0)
Alaska	71	1	(1.4)	53	(74.6)	13	(18.3)	0	(0.0)	0	(0.0)	2	(2.8)	0	(0.0)	2	(2.8)
Arizona	184	104	(56.5)	19	(10.3)	26	(14.1)	10	(5.4)	0	(0.0)	25	(13.6)	0	(0.0)	0	(0.0)
Arkansas	72	12	(16.7)	0	(0.0)	7	(9.7)	21	(29.2)	5	(6.9)	27	(37.5)	0	(0.0)	0	(0.0)
California	2,171	784	(36.1)	3	(0.1)	957	(44.1)	135	(6.2)	7	(0.3)	181	(8.3)	102	(4.7)	2	(0.1)
Colorado	74	24	(32.4)	0	(0.0)	19	(25.7)	19	(25.7)	0	(0.0)	10	(13.5)	2	(2.7)	0	(0.0)
Connecticut	62	17	(27.4)	0	(0.0)	25	(40.3)	9	(14.5)	0	(0.0)	11	(17.7)	0	(0.0)	0	(0.0)
Delaware	19	7	(36.8)	0	(0.0)	5	(26.3)	4	(21.1)	0	(0.0)	3	(15.8)	0	(0.0)	0	(0.0)
District of Columbia	38	3	(7.9)	0	(0.0)	3	(7.9)	29	(76.3)	0	(0.0)	3	(7.9)	0	(0.0)	0	(0.0)
Florida	652	180	(27.6)	2	(0.3)	89	(13.7)	242	(37.1)	1	(0.2)	137	(21.0)	1	(0.2)	0	(0.0)
Georgia	340	56	(16.5)	2	(0.6)	72	(21.2)	170	(50.0)	0	(0.0)	38	(11.2)	2	(0.6)	0	(0.0)
Hawaii	115	0	(0.0)	1	(0.9)	88	(76.5)	2	(1.7)	14	(12.2)	2	(1.7)	8	(7.0)	0	(0.0)
Idaho	11	4	(36.4)	1	(9.1)	2	(18.2)	0	(0.0)	0	(0.0)	4	(36.4)	0	(0.0)	0	(0.0)
Illinois	327	93	(28.4)	0	(0.0)	119	(36.4)	77	(23.5)	0	(0.0)	37	(11.3)	0	(0.0)	1	(0.3)
Indiana	94	8	(8.5)	0	(0.0)	33	(35.1)	20	(21.3)	0	(0.0)	33	(35.1)	0	(0.0)	0	(0.0)
Iowa	47	6	(12.8)	0	(0.0)	18	(38.3)	8	(17.0)	1	(2.1)	11	(23.4)	3	(6.4)	0	(0.0)
Kansas	36	9	(25.0)	0	(0.0)	16	(44.4)	2	(5.6)	1	(2.8)	8	(22.2)	0	(0.0)	0	(0.0)
Kentucky	59	8	(13.6)	0	(0.0)	11	(18.6)	12	(20.3)	0	(0.0)	28	(47.5)	0	(0.0)	0	(0.0)
Louisiana	139	15	(10.8)	0	(0.0)	15	(10.8)	61	(43.9)	0	(0.0)	48	(34.5)	0	(0.0)	0	(0.0)
Maine	15	1	(6.7)	0	(0.0)	1	(6.7)	6	(40.0)	0	(0.0)	7	(46.7)	0	(0.0)	0	(0.0)
Maryland	176	23	(13.1)	0	(0.0)	51	(29.0)	76	(43.2)	2	(1.1)	24	(13.6)	0	(0.0)	0	(0.0)
Massachusetts	201	31	(15.4)	0	(0.0)	67	(33.3)	58	(28.9)	1	(0.5)	43	(21.4)	1	(0.5)	0	(0.0)
Michigan	141	13	(9.2)	0	(0.0)	50	(35.5)	38	(27.0)	2	(1.4)	33	(23.4)	2	(1.4)	3	(2.1)
Minnesota	151	16	(10.6)	4	(2.6)	55	(36.4)	60	(39.7)	0	(0.0)	16	(10.6)	0	(0.0)	0	(0.0)
Mississippi	65	11	(16.9)	0	(0.0)	5	(7.7)	37	(56.9)	0	(0.0)	12	(18.5)	0	(0.0)	0	(0.0)
Missouri	104	4	(3.8)	1	(1.0)	29	(27.9)	27	(26.0)	6	(5.8)	37	(35.6)	0	(0.0)	0	(0.0)
Montana	6	0	(0.0)	3	(50.0)	0	(0.0)	1	(16.7)	0	(0.0)	1	(16.7)	0	(0.0)	1	(16.7)
Nebraska	21	9	(42.9)	0	(0.0)	5	(23.8)	1	(4.8)	0	(0.0)	4	(19.0)	1	(4.8)	1	(4.8)
Nevada	92	30	(32.6)	0	(0.0)	33	(35.9)	12	(13.0)	0	(0.0)	16	(17.4)	0	(0.0)	1	(1.1)
New Hampshire	15	3	(20.0)	0	(0.0)	7	(46.7)	3	(20.0)	0	(0.0)	2	(13.3)	0	(0.0)	0	(0.0)
New Jersey	319	109	(34.2)	0	(0.0)	122	(38.2)	54	(16.9)	0	(0.0)	34	(10.7)	0	(0.0)	0	(0.0)

Table 33. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2013

Reporting Area	Total Cases	Hispanic or Latino ¹		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race ²		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	50	25	(50.0)	7	(14.0)	11	(22.0)	0	(0.0)	1	(2.0)	6	(12.0)	0	(0.0)	0	(0.0)
New York	872	225	(25.8)	2	(0.2)	374	(42.9)	178	(20.4)	1	(0.1)	80	(9.2)	8	(0.9)	4	(0.5)
North Carolina	216	39	(18.1)	10	(4.6)	49	(22.7)	84	(38.9)	0	(0.0)	26	(12.0)	8	(3.7)	0	(0.0)
North Dakota	12	1	(8.3)	3	(25.0)	0	(0.0)	3	(25.0)	0	(0.0)	5	(41.7)	0	(0.0)	0	(0.0)
Ohio	148	10	(6.8)	0	(0.0)	39	(26.4)	48	(32.4)	0	(0.0)	49	(33.1)	1	(0.7)	1	(0.7)
Oklahoma	69	13	(18.8)	8	(11.6)	10	(14.5)	6	(8.7)	3	(4.3)	25	(36.2)	4	(5.8)	0	(0.0)
Oregon	73	22	(30.1)	0	(0.0)	26	(35.6)	7	(9.6)	1	(1.4)	17	(23.3)	0	(0.0)	0	(0.0)
Pennsylvania	214	27	(12.6)	0	(0.0)	89	(41.6)	58	(27.1)	0	(0.0)	40	(18.7)	0	(0.0)	0	(0.0)
Rhode Island	27	6	(22.2)	0	(0.0)	9	(33.3)	8	(29.6)	0	(0.0)	4	(14.8)	0	(0.0)	0	(0.0)
South Carolina	112	11	(9.8)	0	(0.0)	6	(5.4)	67	(59.8)	2	(1.8)	26	(23.2)	0	(0.0)	0	(0.0)
South Dakota	9	1	(11.1)	4	(44.4)	1	(11.1)	2	(22.2)	0	(0.0)	0	(0.0)	1	(11.1)	0	(0.0)
Tennessee	142	16	(11.3)	0	(0.0)	21	(14.8)	66	(46.5)	0	(0.0)	39	(27.5)	0	(0.0)	0	(0.0)
Texas	1,222	626	(51.2)	0	(0.0)	195	(16.0)	227	(18.6)	0	(0.0)	170	(13.9)	2	(0.2)	2	(0.2)
Utah	33	13	(39.4)	0	(0.0)	8	(24.2)	5	(15.2)	2	(6.1)	5	(15.2)	0	(0.0)	0	(0.0)
Vermont	5	0	(0.0)	0	(0.0)	4	(80.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)
Virginia	180	28	(15.6)	0	(0.0)	74	(41.1)	57	(31.7)	0	(0.0)	21	(11.7)	0	(0.0)	0	(0.0)
Washington	210	30	(14.3)	3	(1.4)	112	(53.3)	26	(12.4)	9	(4.3)	28	(13.3)	2	(1.0)	0	(0.0)
West Virginia	13	0	(0.0)	0	(0.0)	2	(15.4)	1	(7.7)	1	(7.7)	8	(61.5)	1	(7.7)	0	(0.0)
Wisconsin	50	7	(14.0)	0	(0.0)	27	(54.0)	8	(16.0)	0	(0.0)	8	(16.0)	0	(0.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
American Samoa ³	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)
Fed. States of Micronesia ³	130	0	(0.0)	0	(0.0)	2	(1.5)	0	(0.0)	123	(94.6)	0	(0.0)	2	(1.5)	3	(2.3)
Guam ³	48	0	(0.0)	0	(0.0)	17	(35.4)	0	(0.0)	29	(60.4)	1	(2.1)	0	(0.0)	1	(2.1)
Marshall Islands ³	153	4	(2.6)	0	(0.0)	1	(0.7)	0	(0.0)	145	(94.8)	0	(0.0)	0	(0.0)	3	(2.0)
N. Mariana Islands ³	16	0	(0.0)	0	(0.0)	5	(31.3)	0	(0.0)	9	(56.3)	0	(0.0)	0	(0.0)	2	(12.5)
Puerto Rico ³	50	46	(92.0)	0	(0.0)	2	(4.0)	2	(4.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Republic of Palau ³	6	0	(0.0)	0	(0.0)	3	(50.0)	0	(0.0)	2	(33.3)	0	(0.0)	0	(0.0)	1	(16.7)
U.S. Virgin Islands ³	2	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)

¹ Persons of Hispanic origin may be of any race or multiple race.

² Indicates two or more races reported for a person.

³ Not included in U.S. totals.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.
See Technical Notes.

Table 34. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons¹: Reporting Areas, 2013

Reporting Area	Total Cases	U.S.-born Persons		Foreign-born Persons ¹		Unknown Origin	
		No.	(%)	No.	(%)	No.	(%)
United States	9,582	3,375	(35.2)	6,193	(64.6)	14	(0.1)
Alabama	108	87	(80.6)	21	(19.4)	0	(0.0)
Alaska	71	56	(78.9)	15	(21.1)	0	(0.0)
Arizona	184	48	(26.1)	136	(73.9)	0	(0.0)
Arkansas	72	54	(75.0)	18	(25.0)	0	(0.0)
California	2,171	473	(21.8)	1,691	(77.9)	7	(0.3)
Colorado	74	16	(21.6)	58	(78.4)	0	(0.0)
Connecticut	62	15	(24.2)	47	(75.8)	0	(0.0)
Delaware	19	9	(47.4)	10	(52.6)	0	(0.0)
District of Columbia	38	12	(31.6)	26	(68.4)	0	(0.0)
Florida	652	288	(44.2)	364	(55.8)	0	(0.0)
Georgia	340	168	(49.4)	172	(50.6)	0	(0.0)
Hawaii	115	32	(27.8)	83	(72.2)	0	(0.0)
Idaho	11	4	(36.4)	7	(63.6)	0	(0.0)
Illinois	327	113	(34.6)	214	(65.4)	0	(0.0)
Indiana	94	43	(45.7)	51	(54.3)	0	(0.0)
Iowa	47	15	(31.9)	32	(68.1)	0	(0.0)
Kansas	36	12	(33.3)	24	(66.7)	0	(0.0)
Kentucky	59	31	(52.5)	28	(47.5)	0	(0.0)
Louisiana	139	108	(77.7)	31	(22.3)	0	(0.0)
Maine	15	8	(53.3)	7	(46.7)	0	(0.0)
Maryland	176	46	(26.1)	130	(73.9)	0	(0.0)
Massachusetts	201	43	(21.4)	158	(78.6)	0	(0.0)
Michigan	141	56	(39.7)	83	(58.9)	2	(1.4)
Minnesota	151	29	(19.2)	122	(80.8)	0	(0.0)
Mississippi	65	49	(75.4)	16	(24.6)	0	(0.0)
Missouri	104	58	(55.8)	46	(44.2)	0	(0.0)
Montana	6	6	(100.0)	0	(0.0)	0	(0.0)
Nebraska	21	6	(28.6)	13	(61.9)	2	(9.5)
Nevada	92	33	(35.9)	59	(64.1)	0	(0.0)
New Hampshire	15	1	(6.7)	14	(93.3)	0	(0.0)
New Jersey	319	74	(23.2)	245	(76.8)	0	(0.0)
New Mexico	50	18	(36.0)	32	(64.0)	0	(0.0)
New York	872	152	(17.4)	719	(82.5)	1	(0.1)
North Carolina	216	114	(52.8)	102	(47.2)	0	(0.0)
North Dakota	12	8	(66.7)	4	(33.3)	0	(0.0)
Ohio	148	68	(45.9)	80	(54.1)	0	(0.0)
Oklahoma	69	48	(69.6)	19	(27.5)	2	(2.9)
Oregon	73	21	(28.8)	52	(71.2)	0	(0.0)
Pennsylvania	214	74	(34.6)	140	(65.4)	0	(0.0)
Rhode Island	27	5	(18.5)	22	(81.5)	0	(0.0)
South Carolina	112	93	(83.0)	19	(17.0)	0	(0.0)
South Dakota	9	6	(66.7)	3	(33.3)	0	(0.0)
Tennessee	142	101	(71.1)	41	(28.9)	0	(0.0)
Texas	1,222	549	(44.9)	673	(55.1)	0	(0.0)
Utah	33	7	(21.2)	26	(78.8)	0	(0.0)
Vermont	5	1	(20.0)	4	(80.0)	0	(0.0)
Virginia	180	33	(18.3)	147	(81.7)	0	(0.0)
Washington	210	53	(25.2)	157	(74.8)	0	(0.0)
West Virginia	13	10	(76.9)	3	(23.1)	0	(0.0)
Wisconsin	50	21	(42.0)	29	(58.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...

¹Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Surveillance Slide #16.

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Table 35. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Top 7 Countries of Birth: Reporting Areas, 2013

Reporting Area		Total Cases		Country of Origin																		
				Mexico		Philippines		India		Vietnam		China		Haiti		Guatemala		All Others ²		Unknown or Missing		
				No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
United States				6,193	1,244	(20.1)	783	(12.6)	495	(8.0)	456	(7.4)	377	(6.1)	213	(3.4)	172	(2.8)	2,442	(39.4)	11	(0.2)
Alabama	21	7	(33.3)	0	(0.0)	2	(9.5)	0	(0.0)	1	(4.8)	7	(33.3)	0	(0.0)	4	(19.0)	0	(0.0)			
Alaska	15	1	(6.7)	7	(46.7)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)	0	(0.0)	6	(40.0)	0	(0.0)			
Arizona	136	73	(53.7)	9	(6.6)	3	(2.2)	4	(2.9)	2	(1.5)	10	(7.4)	0	(0.0)	35	(25.7)	0	(0.0)			
Arkansas	18	5	(27.8)	1	(5.6)	3	(16.7)	0	(0.0)	1	(5.6)	1	(5.6)	0	(0.0)	7	(38.9)	0	(0.0)			
California	1,691	453	(26.8)	380	(22.5)	93	(5.5)	199	(11.8)	137	(8.1)	54	(3.2)	1	(0.1)	374	(22.1)	0	(0.0)			
Colorado	58	19	(32.8)	1	(1.7)	3	(5.2)	0	(0.0)	2	(3.4)	0	(0.0)	0	(0.0)	33	(56.9)	0	(0.0)			
Connecticut	47	0	(0.0)	3	(6.4)	10	(21.3)	0	(0.0)	1	(2.1)	4	(8.5)	2	(4.3)	27	(57.4)	0	(0.0)			
Delaware	10	1	(10.0)	1	(10.0)	3	(30.0)	0	(0.0)	0	(0.0)	2	(20.0)	0	(0.0)	3	(30.0)	0	(0.0)			
District of Columbia	26	1	(3.8)	1	(3.8)	0	(0.0)	0	(0.0)	1	(3.8)	1	(3.8)	0	(0.0)	22	(84.6)	0	(0.0)			
Florida	364	42	(11.5)	19	(5.2)	21	(5.8)	20	(5.5)	6	(1.6)	23	(6.3)	88	(24.2)	145	(39.8)	0	(0.0)			
Georgia	172	30	(17.4)	3	(1.7)	25	(14.5)	16	(9.3)	2	(1.2)	9	(5.2)	1	(0.6)	82	(47.7)	4	(2.3)			
Hawaii	83	0	(0.0)	65	(78.3)	0	(0.0)	1	(1.2)	1	(1.2)	0	(0.0)	0	(0.0)	16	(19.3)	0	(0.0)			
Idaho	7	3	(42.9)	1	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(42.9)	0	(0.0)			
Illinois	214	61	(28.5)	29	(13.6)	31	(14.5)	8	(3.7)	18	(8.4)	1	(0.5)	2	(0.9)	64	(29.9)	0	(0.0)			
Indiana	51	7	(13.7)	6	(11.8)	5	(9.8)	1	(2.0)	2	(3.9)	1	(2.0)	0	(0.0)	29	(56.9)	0	(0.0)			
Iowa	32	5	(15.6)	1	(3.1)	7	(21.9)	2	(6.3)	4	(12.5)	0	(0.0)	0	(0.0)	13	(40.6)	0	(0.0)			
Kansas	24	7	(29.2)	2	(8.3)	3	(12.5)	1	(4.2)	0	(0.0)	0	(0.0)	0	(0.0)	11	(45.8)	0	(0.0)			
Kentucky	28	3	(10.7)	2	(7.1)	2	(7.1)	0	(0.0)	1	(3.6)	5	(17.9)	0	(0.0)	15	(53.6)	0	(0.0)			
Louisiana	31	4	(12.9)	2	(6.5)	0	(0.0)	0	(0.0)	7	(22.6)	1	(3.2)	0	(0.0)	16	(51.6)	0	(0.0)			
Maine	7	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(100.0)	0	(0.0)			
Maryland	130	4	(3.1)	6	(4.6)	15	(11.5)	3	(2.3)	2	(1.5)	4	(3.1)	5	(3.8)	91	(70.0)	0	(0.0)			
Massachusetts	158	0	(0.0)	3	(1.9)	11	(7.0)	11	(7.0)	17	(10.8)	7	(4.4)	16	(10.1)	93	(58.9)	0	(0.0)			
Michigan	83	4	(4.8)	7	(8.4)	20	(24.1)	7	(8.4)	4	(4.8)	2	(2.4)	0	(0.0)	39	(47.0)	0	(0.0)			
Minnesota	122	4	(3.3)	4	(3.3)	4	(3.3)	7	(5.7)	1	(0.8)	4	(3.3)	0	(0.0)	98	(80.3)	0	(0.0)			
Mississippi	16	5	(31.3)	0	(0.0)	2	(12.5)	1	(6.3)	2	(12.5)	3	(18.8)	0	(0.0)	3	(18.8)	0	(0.0)			
Missouri	46	1	(2.2)	3	(6.5)	7	(15.2)	9	(19.6)	1	(2.2)	1	(2.2)	0	(0.0)	24	(52.2)	0	(0.0)			
Montana	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)			

Table 35. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Top 7 Countries of Birth: Reporting Areas, 2013

Reporting Area	Total Cases	Country of Origin													
		Mexico		Philippines		India		Vietnam		China		Haiti		Guatemala	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Nebraska	13	3	(23.1)	0	(0.0)	1	(7.7)	2	(15.4)	0	(0.0)	2	(15.4)	0	(0.0)
Nevada	59	17	(28.8)	23	(39.0)	0	(0.0)	0	(0.0)	3	(5.1)	1	(1.7)	0	(0.0)
New Hampshire	14	3	(21.4)	1	(7.1)	1	(7.1)	1	(7.1)	1	(7.1)	0	(0.0)	0	(0.0)
New Jersey	245	12	(4.9)	29	(11.8)	50	(20.4)	9	(3.7)	8	(3.3)	5	(2.0)	5	(2.0)
New Mexico	32	18	(56.3)	6	(18.8)	0	(0.0)	3	(9.4)	1	(3.1)	0	(0.0)	0	(0.0)
New York	719	47	(6.5)	55	(7.6)	37	(5.1)	6	(0.8)	118	(16.4)	18	(2.5)	42	(5.8)
North Carolina	102	15	(14.7)	9	(8.8)	14	(13.7)	13	(12.7)	1	(1.0)	5	(4.9)	0	(0.0)
North Dakota	4	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	80	3	(3.8)	3	(3.8)	14	(17.5)	3	(3.8)	1	(1.3)	2	(2.5)	1	(1.3)
Oklahoma	19	8	(42.1)	0	(0.0)	0	(0.0)	0	(0.0)	2	(10.5)	1	(5.3)	0	(0.0)
Oregon	52	12	(23.1)	7	(13.5)	2	(3.8)	5	(9.6)	2	(3.8)	1	(1.9)	1	(1.9)
Pennsylvania	140	6	(4.3)	7	(5.0)	26	(18.6)	12	(8.6)	9	(6.4)	3	(2.1)	5	(3.6)
Rhode Island	22	0	(0.0)	0	(0.0)	1	(4.5)	1	(4.5)	2	(9.1)	3	(13.6)	1	(4.5)
South Carolina	19	3	(15.8)	1	(5.3)	1	(5.3)	1	(5.3)	1	(5.3)	2	(10.5)	1	(5.3)
South Dakota	3	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	41	9	(22.0)	0	(0.0)	6	(14.6)	3	(7.3)	1	(2.4)	3	(7.3)	0	(0.0)
Texas	673	312	(46.4)	28	(4.2)	38	(5.6)	54	(8.0)	9	(1.3)	21	(3.1)	1	(0.1)
Utah	26	7	(26.9)	2	(7.7)	2	(7.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Vermont	4	0	(0.0)	0	(0.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	147	6	(4.1)	16	(10.9)	14	(9.5)	20	(13.6)	4	(2.7)	2	(1.4)	0	(0.0)
Washington	157	18	(11.5)	37	(23.6)	12	(7.6)	24	(15.3)	6	(3.8)	4	(2.5)	0	(0.0)
West Virginia	3	0	(0.0)	1	(33.3)	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	29	3	(10.3)	2	(6.9)	4	(13.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wyoming	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor outlying and Pacific islands.

² Includes 143 countries.

Note: See Surveillance Slide #19.

Table 36. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Immigration Status at First Entry: Reporting Areas, 2013

Reporting Area	Total Cases	Asylee or Parolee		Employment Visa		Family/Fiance Visa		Immigrant Visa		Refugee		Student Visa		Tourist Visa		Other Immigration Status ²		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	6193	32	(0.5)	124	(2.0)	155	(2.5)	1440	(23.3)	396	(6.4)	149	(2.4)	121	(2.0)	1460	(23.6)	1717	(27.7)
Alabama	21	0	(0.0)	2	(9.5)	1	(4.8)	2	(9.5)	1	(4.8)	2	(9.5)	0	(0.0)	8	(38.1)	2	(9.5)
Alaska	15	0	(0.0)	0	(0.0)	0	(0.0)	2	(13.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	13	(86.7)
Arizona	136	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arkansas	18	0	(0.0)	0	(0.0)	3	(16.7)	1	(5.6)	0	(0.0)	2	(11.1)	0	(0.0)	10	(55.6)	0	(0.0)
California	1691	9	(0.5)	33	(2.0)	60	(3.5)	739	(43.7)	59	(3.5)	34	(2.0)	58	(3.4)	400	(23.7)	297	(17.6)
Colorado	58	1	(1.7)	2	(3.4)	2	(3.4)	23	(39.7)	16	(27.6)	1	(1.7)	1	(1.7)	8	(13.8)	4	(6.9)
Connecticut	47	0	(0.0)	7	(14.9)	2	(4.3)	17	(36.2)	2	(4.3)	2	(4.3)	6	(12.8)	11	(23.4)	0	(0.0)
Delaware	10	0	(0.0)	2	(20.0)	1	(10.0)	2	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(50.0)	0	(0.0)
District of Columbia	26	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(3.8)	0	(0.0)	0	(0.0)	23	(88.5)
Florida	364	7	(1.9)	21	(5.8)	9	(2.5)	74	(20.3)	9	(2.5)	6	(1.6)	2	(0.5)	63	(17.3)	173	(47.5)
Georgia	172	2	(1.2)	5	(2.9)	17	(9.9)	47	(27.3)	29	(16.9)	7	(4.1)	5	(2.9)	52	(30.2)	8	(4.7)
Hawaii	83	0	(0.0)	0	(0.0)	0	(0.0)	32	(38.6)	1	(1.2)	2	(2.4)	1	(1.2)	0	(0.0)	46	(55.4)
Idaho	7	0	(0.0)	1	(14.3)	0	(0.0)	1	(14.3)	2	(28.6)	1	(14.3)	0	(0.0)	0	(0.0)	2	(28.6)
Illinois	214	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	214	(100.0)
Indiana	51	0	(0.0)	0	(0.0)	0	(0.0)	13	(25.5)	14	(27.5)	1	(2.0)	0	(0.0)	0	(0.0)	23	(45.1)
Iowa	32	1	(3.1)	5	(15.6)	0	(0.0)	13	(40.6)	4	(12.5)	5	(15.6)	0	(0.0)	3	(9.4)	1	(3.1)
Kansas	24	0	(0.0)	3	(12.5)	0	(0.0)	7	(29.2)	7	(29.2)	3	(12.5)	1	(4.2)	3	(12.5)	0	(0.0)
Kentucky	28	0	(0.0)	0	(0.0)	0	(0.0)	4	(14.3)	6	(21.4)	1	(3.6)	0	(0.0)	15	(53.6)	0	(0.0)
Louisiana	31	0	(0.0)	0	(0.0)	1	(3.2)	4	(12.9)	1	(3.2)	0	(0.0)	0	(0.0)	9	(29.0)	14	(45.2)
Maine	7	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)	1	(14.3)	1	(14.3)	0	(0.0)	2	(28.6)	2	(28.6)
Maryland	130	2	(1.5)	5	(3.8)	10	(7.7)	49	(37.7)	15	(11.5)	11	(8.5)	9	(6.9)	16	(12.3)	13	(10.0)
Massachusetts	158	2	(1.3)	1	(0.6)	2	(1.3)	5	(3.2)	6	(3.8)	0	(0.0)	3	(1.9)	2	(1.3)	137	(86.7)
Michigan	83	0	(0.0)	3	(3.6)	0	(0.0)	26	(31.3)	9	(10.8)	6	(7.2)	3	(3.6)	18	(21.7)	14	(16.9)
Minnesota	122	1	(0.8)	2	(1.6)	9	(7.4)	21	(17.2)	61	(50.0)	8	(6.6)	7	(5.7)	10	(8.2)	3	(2.5)
Mississippi	16	0	(0.0)	2	(12.5)	1	(6.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)	12	(75.0)
Missouri	46	0	(0.0)	0	(0.0)	0	(0.0)	4	(8.7)	2	(4.3)	6	(13.0)	1	(2.2)	2	(4.3)	14	(30.4)
Montana	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
Nebraska	13	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(23.1)	1	(7.7)	0	(0.0)	3	(23.1)	6	(46.2)

Table 36. (Con't) Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Immigration Status at First Entry: Reporting Areas, 2013

Reporting Area	Total Cases	Asylee or Parolee		Employment Visa		Family/Fiance Visa		Immigrant Visa		Refugee		Student Visa		Tourist Visa		Other Immigration Status ²		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Nevada	59	0	(0.0)	0	(0.0)	1	(1.7)	45	(76.3)	3	(5.1)	0	(0.0)	2	(3.4)	4	(6.8)	4	(6.8)
New Hampshire	14	0	(0.0)	0	(0.0)	0	(0.0)	1	(7.1)	1	(7.1)	1	(7.1)	0	(0.0)	1	(7.1)	10	(71.4)
New Jersey	245	0	(0.0)	10	(4.1)	1	(0.4)	141	(57.6)	1	(0.4)	1	(0.4)	7	(2.9)	61	(24.9)	23	(9.4)
New Mexico	32	0	(0.0)	0	(0.0)	0	(0.0)	1	(3.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(3.1)	30	(93.8)
New York State ³	168	1	(0.6)	1	(0.6)	5	(3.0)	28	(16.7)	30	(17.9)	6	(3.6)	0	(0.0)	96	(57.1)	0	(0.0)
New York City	551	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Carolina	102	1	(1.0)	3	(2.9)	3	(2.9)	12	(11.8)	9	(8.8)	1	(1.0)	0	(0.0)	33	(32.4)	38	(37.3)
North Dakota	4	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)	1	(25.0)	1	(25.0)
Ohio	80	0	(0.0)	2	(2.5)	3	(3.8)	7	(8.8)	11	(13.8)	4	(5.0)	1	(1.3)	1	(1.3)	51	(63.8)
Oklahoma	19	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(21.1)	2	(10.5)	0	(0.0)	1	(5.3)	12	(63.2)
Oregon	52	1	(1.9)	0	(0.0)	4	(7.7)	10	(19.2)	9	(17.3)	3	(5.8)	1	(1.9)	4	(7.7)	20	(38.5)
Pennsylvania	140	2	(1.4)	4	(2.9)	8	(5.7)	52	(37.1)	25	(17.9)	9	(6.4)	8	(5.7)	24	(17.1)	8	(5.7)
Rhode Island	22	1	(4.5)	0	(0.0)	0	(0.0)	2	(9.1)	1	(4.5)	1	(4.5)	1	(4.5)	1	(4.5)	15	(68.2)
South Carolina	19	0	(0.0)	0	(0.0)	1	(5.3)	3	(15.8)	2	(10.5)	1	(5.3)	1	(5.3)	1	(5.3)	9	(47.4)
South Dakota	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	2	(66.7)
Tennessee	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Texas	673	0	(0.0)	6	(0.9)	7	(1.0)	38	(5.6)	30	(4.5)	15	(2.2)	2	(0.3)	575	(85.4)	0	(0.0)
Utah	26	0	(0.0)	2	(7.7)	0	(0.0)	8	(30.8)	7	(26.9)	3	(11.5)	0	(0.0)	6	(23.1)	0	(0.0)
Vermont	4	1	(25.0)	0	(0.0)	1	(25.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	147	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Washington	157	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	156	(99.4)
West Virginia	3	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)
Wisconsin	29	0	(0.0)	2	(6.9)	1	(3.4)	4	(13.8)	9	(31.0)	1	(3.4)	1	(3.4)	9	(31.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor outlying and Pacific islands.

² Other immigration status includes (but is not limited to) foreign-born persons who were not required to obtain a visa or persons with no official immigration status (i.e. undocumented).

³ Excludes New York City.

NOTE: Arizona, Tennessee, Virginia, and New York City do not collect immigration status at first entry to the U.S. due to directives or policies that prohibit that activity. Ellipses indicate data are not available.

Table 37. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Number of Years in the United States: Reporting Areas, 2013

Reporting Area	Total Cases	<1 Year		1–4		5–9		10–19		≥20		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	6,193	949	(15.3)	994	(16.1)	865	(14.0)	1,235	(19.9)	1,588	(25.6)	562	(9.1)
Alabama	21	2	(9.5)	1	(4.8)	10	(47.6)	6	(28.6)	1	(4.8)	1	(4.8)
Alaska	15	1	(6.7)	3	(20.0)	4	(26.7)	2	(13.3)	3	(20.0)	2	(13.3)
Arizona	136	50	(36.8)	16	(11.8)	9	(6.6)	26	(19.1)	30	(22.1)	5	(3.7)
Arkansas	18	5	(27.8)	5	(27.8)	1	(5.6)	5	(27.8)	2	(11.1)	0	(0.0)
California	1,691	151	(8.9)	178	(10.5)	169	(10.0)	337	(19.9)	599	(35.4)	257	(15.2)
Colorado	58	13	(22.4)	9	(15.5)	10	(17.2)	7	(12.1)	11	(19.0)	8	(13.8)
Connecticut	47	7	(14.9)	7	(14.9)	11	(23.4)	10	(21.3)	12	(25.5)	0	(0.0)
Delaware	10	2	(20.0)	3	(30.0)	1	(10.0)	2	(20.0)	2	(20.0)	0	(0.0)
District of Columbia	26	5	(19.2)	10	(38.5)	5	(19.2)	2	(7.7)	4	(15.4)	0	(0.0)
Florida	364	73	(20.1)	54	(14.8)	55	(15.1)	76	(20.9)	92	(25.3)	14	(3.8)
Georgia	172	36	(20.9)	30	(17.4)	27	(15.7)	42	(24.4)	35	(20.3)	2	(1.2)
Hawaii	83	11	(13.3)	9	(10.8)	11	(13.3)	13	(15.7)	25	(30.1)	14	(16.9)
Idaho	7	1	(14.3)	4	(57.1)	0	(0.0)	0	(0.0)	2	(28.6)	0	(0.0)
Illinois	214	35	(16.4)	20	(9.3)	32	(15.0)	46	(21.5)	79	(36.9)	2	(0.9)
Indiana	51	9	(17.6)	9	(17.6)	3	(5.9)	2	(3.9)	3	(5.9)	25	(49.0)
Iowa	32	3	(9.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	29	(90.6)
Kansas	24	2	(8.3)	7	(29.2)	5	(20.8)	7	(29.2)	3	(12.5)	0	(0.0)
Kentucky	28	11	(39.3)	2	(7.1)	7	(25.0)	6	(21.4)	2	(7.1)	0	(0.0)
Louisiana	31	6	(19.4)	5	(16.1)	3	(9.7)	8	(25.8)	9	(29.0)	0	(0.0)
Maine	7	4	(57.1)	0	(0.0)	1	(14.3)	1	(14.3)	1	(14.3)	0	(0.0)
Maryland	130	25	(19.2)	40	(30.8)	25	(19.2)	23	(17.7)	17	(13.1)	0	(0.0)
Massachusetts	158	34	(21.5)	41	(25.9)	27	(17.1)	31	(19.6)	22	(13.9)	3	(1.9)
Michigan	83	13	(15.7)	5	(6.0)	9	(10.8)	14	(16.9)	16	(19.3)	26	(31.3)
Minnesota	122	20	(16.4)	29	(23.8)	27	(22.1)	20	(16.4)	26	(21.3)	0	(0.0)
Mississippi	16	3	(18.8)	3	(18.8)	1	(6.3)	6	(37.5)	3	(18.8)	0	(0.0)
Missouri	46	11	(23.9)	8	(17.4)	4	(8.7)	10	(21.7)	13	(28.3)	0	(0.0)
Montana	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	13	2	(15.4)	0	(0.0)	4	(30.8)	3	(23.1)	2	(15.4)	2	(15.4)
Nevada	59	12	(20.3)	6	(10.2)	10	(16.9)	6	(10.2)	23	(39.0)	2	(3.4)
New Hampshire	14	1	(7.1)	2	(14.3)	4	(28.6)	5	(35.7)	2	(14.3)	0	(0.0)
New Jersey	245	25	(10.2)	40	(16.3)	38	(15.5)	57	(23.3)	49	(20.0)	36	(14.7)
New Mexico	32	8	(25.0)	2	(6.3)	4	(12.5)	6	(18.8)	9	(28.1)	3	(9.4)
New York	719	112	(15.6)	134	(18.6)	115	(16.0)	156	(21.7)	153	(21.3)	49	(6.8)
North Carolina	102	15	(14.7)	19	(18.6)	13	(12.7)	8	(7.8)	6	(5.9)	41	(40.2)
North Dakota	4	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(100.0)
Ohio	80	20	(25.0)	23	(28.8)	8	(10.0)	15	(18.8)	13	(16.3)	1	(1.3)
Oklahoma	19	1	(5.3)	3	(15.8)	2	(10.5)	3	(15.8)	1	(5.3)	9	(47.4)
Oregon	52	3	(5.8)	8	(15.4)	6	(11.5)	5	(9.6)	10	(19.2)	20	(38.5)
Pennsylvania	140	25	(17.9)	42	(30.0)	22	(15.7)	32	(22.9)	17	(12.1)	2	(1.4)
Rhode Island	22	4	(18.2)	7	(31.8)	2	(9.1)	3	(13.6)	6	(27.3)	0	(0.0)
South Carolina	19	4	(21.1)	2	(10.5)	7	(36.8)	4	(21.1)	1	(5.3)	1	(5.3)
South Dakota	3	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	0	(0.0)	0	(0.0)
Tennessee	41	9	(22.0)	6	(14.6)	14	(34.1)	8	(19.5)	4	(9.8)	0	(0.0)
Texas	673	121	(18.0)	116	(17.2)	91	(13.5)	144	(21.4)	201	(29.9)	0	(0.0)
Utah	26	7	(26.9)	7	(26.9)	3	(11.5)	4	(15.4)	5	(19.2)	0	(0.0)
Vermont	4	2	(50.0)	0	(0.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)
Virginia	147	28	(19.0)	38	(25.9)	26	(17.7)	25	(17.0)	30	(20.4)	0	(0.0)
Washington	157	13	(8.3)	33	(21.0)	30	(19.1)	40	(25.5)	37	(23.6)	4	(2.5)
West Virginia	3	1	(33.3)	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	29	3	(10.3)	7	(24.1)	7	(24.1)	5	(17.2)	7	(24.1)	0	(0.0)
Wyoming	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Table 38. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease: Reporting Areas, 2013

Reporting Area	Total Cases	Pulmonary ¹		Extrapulmonary ²		Pulmonary and Extrapulmonary Cases		
		No.	(%)	No.	(%)	Total ³	Miliary	No.
United States	9,582	6,683	(69.7)	1,994	(20.8)	895	(9.3)	353
Alabama	108	92	(85.2)	10	(9.3)	6	(5.6)	0
Alaska	71	63	(88.7)	5	(7.0)	3	(4.2)	1
Arizona	184	148	(80.4)	16	(8.7)	20	(10.9)	9
Arkansas	72	54	(75.0)	14	(19.4)	4	(5.6)	5
California	2,171	1,505	(69.3)	446	(20.5)	220	(10.1)	67
Colorado	74	49	(66.2)	18	(24.3)	7	(9.5)	8
Connecticut	62	36	(58.1)	15	(24.2)	11	(17.7)	3
Delaware	19	15	(78.9)	3	(15.8)	1	(5.3)	2
District of Columbia	38	25	(65.8)	10	(26.3)	3	(7.9)	0
Florida	652	506	(77.6)	107	(16.4)	39	(6.0)	31
Georgia	340	255	(75.0)	67	(19.7)	17	(5.0)	11
Hawaii	115	89	(77.4)	12	(10.4)	14	(12.2)	2
Idaho	11	6	(54.5)	4	(36.4)	1	(9.1)	0
Illinois	327	215	(65.7)	83	(25.4)	29	(8.9)	13
Indiana	94	69	(73.4)	17	(18.1)	8	(8.5)	4
Iowa	47	29	(61.7)	11	(23.4)	3	(6.4)	2
Kansas	36	28	(77.8)	7	(19.4)	1	(2.8)	0
Kentucky	59	45	(76.3)	12	(20.3)	2	(3.4)	0
Louisiana	139	117	(84.2)	16	(11.5)	6	(4.3)	5
Maine	15	9	(60.0)	5	(33.3)	1	(6.7)	1
Maryland	176	103	(58.5)	61	(34.7)	12	(6.8)	6
Massachusetts	201	126	(62.7)	57	(28.4)	18	(9.0)	9
Michigan	141	84	(59.6)	55	(39.0)	2	(1.4)	9
Minnesota	151	87	(57.6)	52	(34.4)	12	(7.9)	7
Mississippi	65	53	(81.5)	9	(13.8)	3	(4.6)	1
Missouri	104	75	(72.1)	21	(20.2)	8	(7.7)	3
Montana	6	3	(50.0)	2	(33.3)	1	(16.7)	1
Nebraska	21	17	(81.0)	3	(14.3)	1	(4.8)	1
Nevada	92	76	(82.6)	14	(15.2)	2	(2.2)	4
New Hampshire	15	6	(40.0)	8	(53.3)	1	(6.7)	2
New Jersey	319	200	(62.7)	72	(22.6)	47	(14.7)	17
New Mexico	50	35	(70.0)	15	(30.0)	0	(0.0)	0
New York	872	531	(60.9)	215	(24.7)	125	(14.3)	22
North Carolina	216	142	(65.7)	48	(22.2)	26	(12.0)	13
North Dakota	12	6	(50.0)	3	(25.0)	0	(0.0)	1
Ohio	148	93	(62.8)	36	(24.3)	19	(12.8)	7
Oklahoma	69	57	(82.6)	9	(13.0)	2	(2.9)	0
Oregon	73	46	(63.0)	18	(24.7)	9	(12.3)	2
Pennsylvania	214	147	(68.7)	54	(25.2)	13	(6.1)	12
Rhode Island	27	19	(70.4)	7	(25.9)	1	(3.7)	0
South Carolina	112	63	(56.3)	30	(26.8)	19	(17.0)	7
South Dakota	9	6	(66.7)	3	(33.3)	0	(0.0)	0
Tennessee	142	98	(69.0)	27	(19.0)	17	(12.0)	6
Texas	1,222	929	(76.0)	182	(14.9)	111	(9.1)	35
Utah	33	15	(45.5)	11	(33.3)	7	(21.2)	2
Vermont	5	3	(60.0)	2	(40.0)	0	(0.0)	0
Virginia	180	122	(67.8)	47	(26.1)	11	(6.1)	12
Washington	210	140	(66.7)	41	(19.5)	29	(13.8)	4
West Virginia	13	8	(61.5)	4	(30.8)	1	(7.7)	1
Wisconsin	50	38	(76.0)	10	(20.0)	2	(4.0)	5
Wyoming	0	0	...	0	...	0	...	0
American Samoa ⁴	2	2	(100.0)	0	(0.0)	0	(0.0)	2
Fed. States of Micronesia ⁴	130	115	(88.5)	10	(7.7)	4	(3.1)	12
Guam ⁴	48	40	(83.3)	4	(8.3)	4	(8.3)	7
Marshall Islands ⁴	153	125	(81.7)	26	(17.0)	2	(1.3)	3
N. Mariana Islands ⁴	16	16	(100.0)	0	(0.0)	0	(0.0)	0
Puerto Rico ⁴	50	46	(92.0)	4	(8.0)	0	(0.0)	0
Republic of Palau ⁴	6	6	(100.0)	0	(0.0)	0	(0.0)	0
U.S. Virgin Islands ⁴	2	2	(100.0)	0	(0.0)	0	(0.0)	0

¹ Includes cases with pulmonary listed as the only site of disease.

² Includes cases with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as site of disease.

³ Includes cases with evidence of miliary disease.

⁴ Not included in U.S. totals.

Note: 10 cases had missing and/or unknown site of disease.

Table 39. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2013

Reporting Area	Total Extrapulm. Cases ¹	Total Extrapulm. Sites ²	Site of Disease															
			Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Laryngeal		Other	
			No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	1,994	2,106	361	(17.1)	753	(35.8)	228	(10.8)	101	(4.8)	107	(5.1)	122	(5.8)	3	(0.1)	431	(20.5)
Alabama	10	10	2	(20.0)	2	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(10.0)	0	(0.0)	5	(50.0)
Alaska	5	6	2	(33.3)	0	(0.0)	1	(16.7)	1	(16.7)	1	(16.7)	0	(0.0)	0	(0.0)	1	(16.7)
Arizona	16	17	6	(35.3)	4	(23.5)	2	(11.8)	0	(0.0)	1	(5.9)	1	(5.9)	0	(0.0)	3	(17.6)
Arkansas	14	14	1	(7.1)	5	(35.7)	2	(14.3)	1	(7.1)	1	(7.1)	0	(0.0)	0	(0.0)	4	(28.6)
California	446	463	85	(18.4)	168	(36.3)	38	(8.2)	24	(5.2)	22	(4.8)	26	(5.6)	0	(0.0)	100	(21.6)
Colorado	18	18	1	(5.6)	4	(22.2)	2	(11.1)	0	(0.0)	1	(5.6)	0	(0.0)	0	(0.0)	10	(55.6)
Connecticut	15	16	1	(6.3)	8	(50.0)	1	(6.3)	1	(6.3)	1	(6.3)	2	(12.5)	0	(0.0)	2	(12.5)
Delaware	3	4	0	(0.0)	2	(50.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)
District of Columbia	10	10	1	(10.0)	5	(50.0)	2	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(20.0)
Florida	107	109	20	(18.3)	41	(37.6)	11	(10.1)	4	(3.7)	5	(4.6)	5	(4.6)	1	(0.9)	22	(20.2)
Georgia	67	73	13	(17.8)	23	(31.5)	6	(8.2)	6	(8.2)	4	(5.5)	5	(6.8)	0	(0.0)	16	(21.9)
Hawaii	12	12	2	(16.7)	5	(41.7)	2	(16.7)	1	(8.3)	0	(0.0)	1	(8.3)	0	(0.0)	1	(8.3)
Idaho	4	4	2	(50.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	83	86	18	(20.9)	27	(31.4)	5	(5.8)	3	(3.5)	4	(4.7)	3	(3.5)	1	(1.2)	25	(29.1)
Indiana	17	21	2	(9.5)	7	(33.3)	4	(19.0)	2	(9.5)	0	(0.0)	0	(0.0)	0	(0.0)	6	(28.6)
Iowa	11	11	2	(18.2)	5	(45.5)	2	(18.2)	1	(9.1)	0	(0.0)	1	(9.1)	0	(0.0)	0	(0.0)
Kansas	7	7	0	(0.0)	3	(42.9)	1	(14.3)	2	(28.6)	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)
Kentucky	12	13	4	(30.8)	3	(23.1)	2	(15.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(30.8)
Louisiana	16	16	2	(12.5)	6	(37.5)	1	(6.3)	0	(0.0)	3	(18.8)	0	(0.0)	0	(0.0)	4	(25.0)
Maine	5	5	2	(40.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(40.0)
Maryland	61	62	14	(22.6)	25	(40.3)	1	(1.6)	3	(4.8)	1	(1.6)	3	(4.8)	0	(0.0)	15	(24.2)
Massachusetts	57	59	9	(15.3)	24	(40.7)	4	(6.8)	2	(3.4)	5	(8.5)	6	(10.2)	0	(0.0)	9	(15.3)
Michigan	55	56	6	(10.7)	17	(30.4)	8	(14.3)	1	(1.8)	1	(1.8)	3	(5.4)	0	(0.0)	20	(35.7)
Minnesota	52	52	5	(9.6)	24	(46.2)	13	(25.0)	1	(1.9)	0	(0.0)	1	(1.9)	0	(0.0)	8	(15.4)
Mississippi	9	9	5	(55.6)	1	(11.1)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(22.2)
Missouri	21	23	6	(26.1)	2	(8.7)	3	(13.0)	0	(0.0)	1	(4.3)	1	(4.3)	0	(0.0)	10	(43.5)
Montana	2	2	1	(50.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	3	3	0	(0.0)	2	(66.7)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nevada	14	15	3	(20.0)	3	(20.0)	2	(13.3)	1	(6.7)	0	(0.0)	4	(26.7)	0	(0.0)	2	(13.3)
New Hampshire	8	8	0	(0.0)	4	(50.0)	1	(12.5)	2	(25.0)	1	(12.5)	0	(0.0)	0	(0.0)	0	(0.0)
New Jersey	72	76	15	(19.7)	32	(42.1)	9	(11.8)	2	(2.6)	6	(7.9)	7	(9.2)	0	(0.0)	5	(6.6)

Table 39. (Con't) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2013

Reporting Area	Total Extrapulm. Cases ¹	Total Extrapulm. Sites ²	Site of Disease															
			Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Laryngeal		Other	
			No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	15	15	3	(20.0)	1	(6.7)	4	(26.7)	2	(13.3)	0	(0.0)	1	(6.7)	1	(6.7)	3	(20.0)
New York	215	240	30	(12.5)	96	(40.0)	29	(12.1)	17	(7.1)	13	(5.4)	16	(6.7)	0	(0.0)	39	(16.3)
North Carolina	48	51	5	(9.8)	17	(33.3)	7	(13.7)	3	(5.9)	4	(7.8)	1	(2.0)	0	(0.0)	14	(27.5)
North Dakota	3	3	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	1	(33.3)
Ohio	36	40	6	(15.0)	13	(32.5)	9	(22.5)	2	(5.0)	2	(5.0)	1	(2.5)	0	(0.0)	7	(17.5)
Oklahoma	9	9	3	(33.3)	2	(22.2)	1	(11.1)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	2	(22.2)
Oregon	18	18	4	(22.2)	8	(44.4)	1	(5.6)	1	(5.6)	0	(0.0)	1	(5.6)	0	(0.0)	3	(16.7)
Pennsylvania	54	54	6	(11.1)	27	(50.0)	4	(7.4)	1	(1.9)	4	(7.4)	2	(3.7)	0	(0.0)	10	(18.5)
Rhode Island	7	7	1	(14.3)	3	(42.9)	0	(0.0)	0	(0.0)	2	(28.6)	1	(14.3)	0	(0.0)	0	(0.0)
South Carolina	30	33	7	(21.2)	17	(51.5)	3	(9.1)	0	(0.0)	2	(6.1)	1	(3.0)	0	(0.0)	3	(9.1)
South Dakota	3	3	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	1	(33.3)
Tennessee	27	28	8	(28.6)	12	(42.9)	1	(3.6)	0	(0.0)	1	(3.6)	0	(0.0)	0	(0.0)	6	(21.4)
Texas	182	204	32	(15.7)	55	(27.0)	31	(15.2)	11	(5.4)	12	(5.9)	21	(10.3)	0	(0.0)	42	(20.6)
Utah	11	12	1	(8.3)	5	(41.7)	1	(8.3)	1	(8.3)	0	(0.0)	1	(8.3)	0	(0.0)	3	(25.0)
Vermont	2	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	47	48	11	(22.9)	21	(43.8)	4	(8.3)	1	(2.1)	3	(6.3)	2	(4.2)	0	(0.0)	6	(12.5)
Washington	41	44	10	(22.7)	16	(36.4)	5	(11.4)	2	(4.5)	2	(4.5)	4	(9.1)	0	(0.0)	5	(11.4)
West Virginia	4	4	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)
Wisconsin	10	11	1	(9.1)	3	(27.3)	1	(9.1)	0	(0.0)	1	(9.1)	0	(0.0)	0	(0.0)	5	(45.5)
Wyoming	0	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia ³	10	10	3	(30.0)	4	(40.0)	1	(10.0)	0	(0.0)	0	(0.0)	2	(20.0)	0	(0.0)	0	(0.0)
Guam ³	4	4	0	(0.0)	1	(25.0)	0	(0.0)	1	(25.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)
Marshall Islands ³	26	27	12	(44.4)	9	(33.3)	1	(3.7)	0	(0.0)	0	(0.0)	5	(18.5)	0	(0.0)	0	(0.0)
N. Mariana Islands ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerto Rico ³	4	4	2	(50.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)
Republic of Palau ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
U.S. Virgin Islands ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

¹ Excludes cases with pulmonary site of disease.

² Patient may have more than one extrapulmonary site of disease.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.
See Technical Notes.

Table 40. Tuberculosis Risk Factors¹: Reporting Areas, 2013

Reporting Area	Total	MDR Patient Contact		Missed Contact		Infectious TB Patient Contact		Incomplete LTBI therapy		Diabetes Mellitus		Renal Disease		TNF- α Inhibitors		Post-organ Transplantation		Immunosuppression		Other		None		Missing ²	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9582	20	(0.2)	54	(0.6)	736	(7.7)	237	(2.5)	1409	(14.7)	184	(1.9)	58	(0.6)	52	(0.5)	424	(4.4)	2037	(21.3)	4880	(50.9)	258	(2.7)
Alabama	108	0	(0.0)	2	(1.9)	19	(17.6)	6	(5.6)	11	(10.2)	0	(0.0)	1	(0.9)	1	(0.9)	10	(9.3)	8	(7.4)	57	(52.8)	2	(1.9)
Alaska	71	0	(0.0)	0	(0.0)	30	(42.3)	1	(1.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(7.0)	35	(49.3)	0	(0.0)
Arizona	184	0	(0.0)	1	(0.5)	7	(3.8)	4	(2.2)	33	(17.9)	6	(3.3)	1	(0.5)	3	(1.6)	8	(4.3)	22	(12.0)	119	(64.7)	0	(0.0)
Arkansas	72	0	(0.0)	2	(2.8)	8	(11.1)	4	(5.6)	7	(9.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	9	(12.5)	45	(62.5)	0	(0.0)
California	2171	4	(0.2)	5	(0.2)	123	(5.7)	25	(1.2)	460	(21.2)	69	(3.2)	16	(0.7)	14	(0.6)	94	(4.3)	661	(30.4)	901	(41.5)	33	(1.5)
Colorado	74	0	(0.0)	0	(0.0)	0	(0.0)	4	(5.4)	11	(14.9)	1	(1.4)	0	(0.0)	1	(1.4)	5	(6.8)	4	(5.4)	52	(70.3)	0	(0.0)
Connecticut	62	0	(0.0)	1	(1.6)	0	(0.0)	4	(6.5)	4	(6.5)	1	(1.6)	0	(0.0)	0	(0.0)	1	(1.6)	8	(12.9)	43	(69.4)	0	(0.0)
Delaware	19	0	(0.0)	0	(0.0)	4	(21.1)	0	(0.0)	2	(10.5)	0	(0.0)	1	(5.3)	0	(0.0)	3	(15.8)	10	(52.6)	1	(5.3)	0	(0.0)
District of Columbia	38	0	(0.0)	1	(2.6)	1	(2.6)	1	(2.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.6)	2	(5.3)	32	(84.2)	0	(0.0)
Florida	652	1	(0.2)	6	(0.9)	73	(11.2)	17	(2.6)	75	(11.5)	11	(1.7)	1	(0.2)	2	(0.3)	53	(8.1)	169	(25.9)	281	(43.1)	0	(0.0)
Georgia	340	0	(0.0)	4	(1.2)	25	(7.4)	11	(3.2)	36	(10.6)	4	(1.2)	1	(0.3)	1	(0.3)	10	(2.9)	61	(17.9)	217	(63.8)	3	(0.9)
Hawaii	115	0	(0.0)	0	(0.0)	6	(5.2)	6	(5.2)	39	(33.9)	3	(2.6)	1	(0.9)	0	(0.0)	7	(6.1)	20	(17.4)	46	(40.0)	0	(0.0)
Idaho	11	0	(0.0)	0	(0.0)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(9.1)	6	(54.5)	3	(27.3)
Illinois	327	0	(0.0)	1	(0.3)	29	(8.9)	9	(2.8)	41	(12.5)	6	(1.8)	2	(0.6)	3	(0.9)	22	(6.7)	31	(9.5)	161	(49.2)	38	(11.6)
Indiana	94	0	(0.0)	2	(2.1)	10	(10.6)	7	(7.4)	11	(11.7)	1	(1.1)	1	(1.1)	1	(1.1)	4	(4.3)	20	(21.3)	46	(48.9)	0	(0.0)
Iowa	47	0	(0.0)	2	(4.3)	3	(6.4)	2	(4.3)	2	(4.3)	0	(0.0)	1	(2.1)	0	(0.0)	1	(2.1)	0	(0.0)	29	(61.7)	9	(19.1)
Kansas	36	0	(0.0)	0	(0.0)	5	(13.9)	2	(5.6)	6	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(5.6)	22	(61.1)	0	(0.0)
Kentucky	59	0	(0.0)	0	(0.0)	4	(6.8)	3	(5.1)	8	(13.6)	1	(1.7)	0	(0.0)	0	(0.0)	3	(5.1)	18	(30.5)	26	(44.1)	0	(0.0)
Louisiana	139	0	(0.0)	1	(0.7)	10	(7.2)	2	(1.4)	11	(7.9)	0	(0.0)	0	(0.0)	0	(0.0)	5	(3.6)	33	(23.7)	79	(56.8)	0	(0.0)
Maine	15	0	(0.0)	0	(0.0)	2	(13.3)	0	(0.0)	2	(13.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	5	(33.3)	6	(40.0)	0	(0.0)
Maryland	176	0	(0.0)	1	(0.6)	15	(8.5)	4	(2.3)	23	(13.1)	5	(2.8)	2	(1.1)	0	(0.0)	7	(4.0)	13	(7.4)	112	(63.6)	2	(1.1)
Massachusetts	201	1	(0.5)	6	(3.0)	9	(4.5)	2	(1.0)	10	(5.0)	2	(1.0)	1	(0.5)	0	(0.0)	0	(0.0)	41	(20.4)	105	(52.2)	38	(18.9)
Michigan	141	0	(0.0)	1	(0.7)	6	(4.3)	4	(2.8)	21	(14.9)	0	(0.0)	1	(0.7)	1	(0.7)	4	(2.8)	38	(27.0)	0	(0.0)	72	(51.1)
Minnesota	151	0	(0.0)	0	(0.0)	4	(2.6)	11	(7.3)	13	(8.6)	3	(2.0)	0	(0.0)	1	(0.7)	7	(4.6)	69	(45.7)	58	(38.4)	2	(1.3)
Mississippi	65	0	(0.0)	0	(0.0)	5	(7.7)	3	(4.6)	9	(13.8)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.5)	57	(87.7)	6	(9.2)	0	(0.0)
Missouri	104	0	(0.0)	1	(1.0)	27	(26.0)	0	(0.0)	15	(14.4)	3	(2.9)	0	(0.0)	0	(0.0)	9	(8.7)	12	(11.5)	48	(46.2)	0	(0.0)
Montana	6	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(66.7)	0	(0.0)	2	(33.3)
Nebraska	21	0	(0.0)	1	(4.8)	4	(19.0)	0	(0.0)	1	(4.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	11	(52.4)	2	(9.5)	4	(19.0)
Nevada	92	0	(0.0)	0	(0.0)	18	(19.6)	0	(0.0)	16	(17.4)	2	(2.2)	0	(0.0)	0	(0.0)	1	(1.1)	7	(7.6)	51	(55.4)	0	(0.0)
New Hampshire	15	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	4	(26.7)	9	(60.0)	0	(0.0)
New Jersey	319	0	(0.0)	0	(0.0)	12	(3.8)	4	(1.3)	35	(11.0)	2	(0.6)	2	(0.6)	3	(0.9)	13	(4.1)	38	(11.9)	223	(69.9)	0	(0.0)
New Mexico	50	0	(0.0)	0	(0.0)	2	(4.0)	1	(2.0)	8	(16.0)	4	(8.0)	1	(2.0)	1	(2.0)	0	(0.0)	11	(22.0)	23	(46.0)	1	(2.0)

Table 40. (Con't) Tuberculosis Risk Factors¹: Reporting Areas, 2013

Reporting Area	Total	MDR Patient Contact		Missed Contact		Infectious TB Patient Contact		Incomplete LTBI therapy		Diabetes Mellitus		Renal Disease		TNF-α Inhibitors		Post-organ Transplantation		Immuno-suppression		Other		None		Missing²	
		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State³	216	0	(0.0)	0	(0.0)	13	(6.0)	8	(3.7)	22	(10.2)	3	(1.4)	2	(0.9)	0	(0.0)	8	(3.7)	15	(6.9)	146	(67.6)	3	(1.4)
New York City	656	1	(0.2)	3	(0.5)	23	(3.5)	14	(2.1)	92	(14.0)	16	(2.4)	0	(0.0)	6	(0.9)	25	(3.8)	51	(7.8)	454	(69.2)	5	(0.8)
North Carolina	216	2	(0.9)	1	(0.5)	22	(10.2)	25	(11.6)	32	(14.8)	4	(1.9)	5	(2.3)	2	(0.9)	19	(8.8)	43	(19.9)	105	(48.6)	23	(10.6)
North Dakota	12	0	(0.0)	0	(0.0)	4	(33.3)	1	(8.3)	1	(8.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(25.0)	4	(33.3)	1	(8.3)
Ohio	148	0	(0.0)	1	(0.7)	5	(3.4)	6	(4.1)	10	(6.8)	1	(0.7)	1	(0.7)	1	(0.7)	9	(6.1)	23	(15.5)	95	(64.2)	0	(0.0)
Oklahoma	69	0	(0.0)	3	(4.3)	14	(20.3)	3	(4.3)	7	(10.1)	0	(0.0)	0	(0.0)	2	(2.9)	3	(4.3)	7	(10.1)	42	(60.9)	0	(0.0)
Oregon	73	0	(0.0)	0	(0.0)	8	(11.0)	1	(1.4)	8	(11.0)	0	(0.0)	1	(1.4)	2	(2.7)	6	(8.2)	7	(9.6)	46	(63.0)	1	(1.4)
Pennsylvania	214	0	(0.0)	0	(0.0)	6	(2.8)	12	(5.6)	23	(10.7)	3	(1.4)	2	(0.9)	1	(0.5)	8	(3.7)	46	(21.5)	117	(54.7)	8	(3.7)
Rhode Island	27	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(3.7)	1	(3.7)	1	(3.7)	0	(0.0)	1	(3.7)	2	(7.4)	21	(77.8)	0	(0.0)
South Carolina	112	0	(0.0)	2	(1.8)	16	(14.3)	3	(2.7)	12	(10.7)	3	(2.7)	0	(0.0)	0	(0.0)	3	(2.7)	12	(10.7)	67	(59.8)	1	(0.9)
South Dakota	9	0	(0.0)	0	(0.0)	0	(0.0)	2	(22.2)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)	1	(11.1)	5	(55.6)	0	(0.0)
Tennessee	142	0	(0.0)	2	(1.4)	23	(16.2)	8	(5.6)	19	(13.4)	4	(2.8)	1	(0.7)	3	(2.1)	14	(9.9)	18	(12.7)	64	(45.1)	0	(0.0)
Texas	1222	1	(0.1)	3	(0.2)	111	(9.1)	12	(1.0)	206	(16.9)	17	(1.4)	6	(0.5)	1	(0.1)	38	(3.1)	314	(25.7)	604	(49.4)	0	(0.0)
Utah	33	0	(0.0)	0	(0.0)	3	(9.1)	1	(3.0)	4	(12.1)	1	(3.0)	0	(0.0)	1	(3.0)	3	(9.1)	1	(3.0)	21	(63.6)	0	(0.0)
Vermont	5	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(80.0)	0	(0.0)	0	(0.0)
Virginia	180	0	(0.0)	0	(0.0)	7	(3.9)	0	(0.0)	22	(12.2)	3	(1.7)	2	(1.1)	1	(0.6)	6	(3.3)	27	(15.0)	120	(66.7)	1	(0.6)
Washington	210	0	(0.0)	1	(0.5)	15	(7.1)	2	(1.0)	32	(15.2)	3	(1.4)	4	(1.9)	0	(0.0)	8	(3.8)	47	(22.4)	106	(50.5)	4	(1.9)
West Virginia	13	0	(0.0)	0	(0.0)	1	(7.7)	0	(0.0)	2	(15.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(30.8)	5	(38.5)	2	(15.4)
Wisconsin	50	10	(20.0)	0	(0.0)	2	(4.0)	1	(2.0)	5	(10.0)	1	(2.0)	0	(0.0)	0	(0.0)	0	(0.0)	18	(36.0)	17	(34.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
American Samoa⁴	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)
Fed. States of Micronesia⁴	130	1	(0.8)	2	(1.5)	68	(52.3)	0	(0.0)	7	(5.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	16	(12.3)	22	(16.9)	17	(13.1)
Guam⁴	48	0	(0.0)	0	(0.0)	8	(16.7)	0	(0.0)	12	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.1)	2	(4.2)	21	(43.8)	4	(8.3)
Marshall Islands⁴	153	2	(1.3)	1	(0.7)	23	(15.0)	1	(0.7)	47	(30.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(1.3)	77	(50.3)	5	(3.3)
N. Mariana Islands⁴	16	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	9	(56.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(43.8)	0	(0.0)
Puerto Rico⁴	50	0	(0.0)	1	(2.0)	1	(2.0)	0	(0.0)	7	(14.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	11	(22.0)	33	(66.0)	0	(0.0)
Republic of Palau⁴	6	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(50.0)	0	(0.0)
U.S. Virgin Islands⁴	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)

¹ Includes the number of risk factors reported (which may be more than one per case) and the number of cases with no information on additional risk factors. The sum of risk factors is greater than the total number of cases because more than one risk factor may be selected per case.

² None of the options for additional risk factors was selected.

³ Excludes New York City

⁴ Not included in U.S. totals.

Table 41. Primary Reason for Tuberculosis Evaluation¹: Reporting Areas, 2013

Reporting Area	Total	TB Symptoms		Abnormal Chest Radiograph		Contact Investigation		Targeted Testing		Health Care Worker		Administrative Testing		Immigrant Medical Exam		Incidental Lab Result		Unknown/Missing	
		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)		No. (%)	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9582	5532	(57.7)	1936	(20.2)	444	(4.6)	313	(3.3)	26	(0.3)	75	(0.8)	218	(2.3)	954	(10.0)	84	(0.9)
Alabama	108	52	(48.1)	35	(32.4)	6	(5.6)	1	(0.9)	0	(0.0)	0	(0.0)	0	(0.0)	12	(11.1)	2	(1.9)
Alaska	71	27	(38.0)	8	(11.3)	18	(25.4)	12	(16.9)	0	(0.0)	1	(1.4)	0	(0.0)	2	(2.8)	3	(4.2)
Arizona	184	97	(52.7)	21	(11.4)	3	(1.6)	38	(20.7)	0	(0.0)	1	(0.5)	4	(2.2)	17	(9.2)	3	(1.6)
Arkansas	72	21	(29.2)	35	(48.6)	1	(1.4)	1	(1.4)	0	(0.0)	0	(0.0)	0	(0.0)	14	(19.4)	0	(0.0)
California	2171	1403	(64.6)	374	(17.2)	78	(3.6)	64	(2.9)	6	(0.3)	13	(0.6)	47	(2.2)	173	(8.0)	13	(0.6)
Colorado	74	59	(79.7)	8	(10.8)	0	(0.0)	4	(5.4)	0	(0.0)	0	(0.0)	2	(2.7)	1	(1.4)	0	(0.0)
Connecticut	62	53	(85.5)	3	(4.8)	0	(0.0)	2	(3.2)	0	(0.0)	0	(0.0)	2	(3.2)	2	(3.2)	0	(0.0)
Delaware	19	8	(42.1)	5	(26.3)	4	(21.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.3)	1	(5.3)	0	(0.0)
District of Columbia	38	26	(68.4)	8	(21.1)	1	(2.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(7.9)	0	(0.0)
Florida	652	227	(34.8)	230	(35.3)	17	(2.6)	5	(0.8)	1	(0.2)	1	(0.2)	9	(1.4)	162	(24.8)	0	(0.0)
Georgia	340	194	(57.1)	77	(22.6)	12	(3.5)	8	(2.4)	1	(0.3)	0	(0.0)	17	(5.0)	27	(7.9)	4	(1.2)
Hawaii	115	63	(54.8)	16	(13.9)	1	(0.9)	0	(0.0)	2	(1.7)	10	(8.7)	6	(5.2)	17	(14.8)	0	(0.0)
Idaho	11	6	(54.5)	3	(27.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(18.2)	0	(0.0)
Illinois	327	168	(51.4)	79	(24.2)	11	(3.4)	2	(0.6)	0	(0.0)	3	(0.9)	18	(5.5)	43	(13.1)	3	(0.9)
Indiana	94	44	(46.8)	33	(35.1)	0	(0.0)	5	(5.3)	2	(2.1)	0	(0.0)	0	(0.0)	10	(10.6)	0	(0.0)
Iowa	47	30	(63.8)	12	(25.5)	0	(0.0)	0	(0.0)	0	(0.0)	4	(8.5)	0	(0.0)	1	(2.1)	0	(0.0)
Kansas	36	26	(72.2)	3	(8.3)	2	(5.6)	1	(2.8)	0	(0.0)	0	(0.0)	0	(0.0)	3	(8.3)	1	(2.8)
Kentucky	59	30	(50.8)	19	(32.2)	2	(3.4)	0	(0.0)	0	(0.0)	0	(0.0)	2	(3.4)	6	(10.2)	0	(0.0)
Louisiana	139	83	(59.7)	29	(20.9)	13	(9.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	13	(9.4)	1	(0.7)
Maine	15	10	(66.7)	1	(6.7)	2	(13.3)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)
Maryland	176	107	(60.8)	37	(21.0)	8	(4.5)	3	(1.7)	0	(0.0)	2	(1.1)	3	(1.7)	14	(8.0)	2	(1.1)
Massachusetts	201	155	(77.1)	28	(13.9)	2	(1.0)	1	(0.5)	0	(0.0)	7	(3.5)	2	(1.0)	6	(3.0)	0	(0.0)
Michigan	141	81	(57.4)	39	(27.7)	0	(0.0)	5	(3.5)	0	(0.0)	0	(0.0)	1	(0.7)	13	(9.2)	2	(1.4)
Minnesota	151	124	(82.1)	4	(2.6)	4	(2.6)	5	(3.3)	2	(1.3)	4	(2.6)	8	(5.3)	0	(0.0)	0	(0.0)
Mississippi	65	38	(58.5)	14	(21.5)	1	(1.5)	2	(3.1)	1	(1.5)	1	(1.5)	2	(3.1)	6	(9.2)	0	(0.0)
Missouri	104	70	(67.3)	17	(16.3)	9	(8.7)	1	(1.0)	0	(0.0)	0	(0.0)	2	(1.9)	5	(4.8)	0	(0.0)
Montana	6	6	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	21	17	(81.0)	1	(4.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(9.5)	0	(0.0)	1	(4.8)
Nevada	92	25	(27.2)	34	(37.0)	16	(17.4)	2	(2.2)	0	(0.0)	1	(1.1)	6	(6.5)	8	(8.7)	0	(0.0)
New Hampshire	15	10	(66.7)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)	3	(20.0)	0	(0.0)
New Jersey	319	169	(53.0)	80	(25.1)	10	(3.1)	2	(0.6)	0	(0.0)	3	(0.9)	5	(1.6)	50	(15.7)	0	(0.0)
New Mexico	50	34	(68.0)	12	(24.0)	1	(2.0)	1	(2.0)	0	(0.0)	0	(0.0)	2	(4.0)	0	(0.0)	0	(0.0)

Table 41. (Con't) Primary Reason for Tuberculosis Evaluation¹: Reporting Areas, 2013

Reporting Area	Total	TB Symptoms		Abnormal Chest Radiograph		Contact Investigation		Targeted Testing		Health Care Worker		Administrative Testing		Immigrant Medical Exam		Incidental Lab Result		Unknown/ Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State ²	216	111	(51.4)	48	(22.2)	6	(2.8)	1	(0.5)	0	(0.0)	2	(0.9)	6	(2.8)	34	(15.7)	8	(3.7)
New York City	656	383	(58.4)	135	(20.6)	6	(0.9)	5	(0.8)	0	(0.0)	4	(0.6)	15	(2.3)	94	(14.3)	14	(2.1)
North Carolina	216	77	(35.6)	64	(29.6)	13	(6.0)	2	(0.9)	0	(0.0)	2	(0.9)	7	(3.2)	51	(23.6)	0	(0.0)
North Dakota	12	1	(8.3)	0	(0.0)	3	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(25.0)	5	(41.7)
Ohio	148	67	(45.3)	59	(39.9)	3	(2.0)	1	(0.7)	0	(0.0)	2	(1.4)	4	(2.7)	12	(8.1)	0	(0.0)
Oklahoma	69	23	(33.3)	11	(15.9)	6	(8.7)	2	(2.9)	0	(0.0)	1	(1.4)	3	(4.3)	11	(15.9)	12	(17.4)
Oregon	73	59	(80.8)	4	(5.5)	5	(6.8)	1	(1.4)	1	(1.4)	0	(0.0)	2	(2.7)	0	(0.0)	1	(1.4)
Pennsylvania	214	130	(60.7)	48	(22.4)	4	(1.9)	8	(3.7)	0	(0.0)	0	(0.0)	8	(3.7)	14	(6.5)	2	(0.9)
Rhode Island	27	10	(37.0)	8	(29.6)	0	(0.0)	2	(7.4)	1	(3.7)	3	(11.1)	1	(3.7)	2	(7.4)	0	(0.0)
South Carolina	112	35	(31.3)	43	(38.4)	15	(13.4)	3	(2.7)	0	(0.0)	0	(0.0)	1	(0.9)	15	(13.4)	0	(0.0)
South Dakota	9	4	(44.4)	3	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(22.2)	0	(0.0)
Tennessee	142	64	(45.1)	43	(30.3)	15	(10.6)	0	(0.0)	1	(0.7)	1	(0.7)	2	(1.4)	16	(11.3)	0	(0.0)
Texas	1222	771	(63.1)	131	(10.7)	121	(9.9)	118	(9.7)	4	(0.3)	3	(0.2)	17	(1.4)	57	(4.7)	0	(0.0)
Utah	33	17	(51.5)	9	(27.3)	1	(3.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(6.1)	4	(12.1)	0	(0.0)
Vermont	5	2	(40.0)	1	(20.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)
Virginia	180	148	(82.2)	16	(8.9)	3	(1.7)	3	(1.7)	2	(1.1)	3	(1.7)	2	(1.1)	3	(1.7)	0	(0.0)
Washington	210	137	(65.2)	30	(14.3)	11	(5.2)	1	(0.5)	2	(1.0)	2	(1.0)	5	(2.4)	16	(7.6)	6	(2.9)
West Virginia	13	7	(53.8)	4	(30.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(15.4)	0	(0.0)
Wisconsin	50	23	(46.0)	13	(26.0)	9	(18.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.0)	4	(8.0)	0	(0.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
American Samoa ³	2	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ³	130	51	(39.2)	21	(16.2)	52	(40.0)	1	(0.8)	0	(0.0)	0	(0.0)	0	(0.0)	3	(2.3)	2	(1.5)
Guam ³	48	22	(45.8)	13	(27.1)	9	(18.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(6.3)	1	(2.1)
Marshall Islands ³	153	130	(85.0)	8	(5.2)	13	(8.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.7)	1	(0.7)
N. Mariana Islands ³	16	15	(93.8)	1	(6.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico ³	50	21	(42.0)	23	(46.0)	0	(0.0)	1	(2.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(10.0)	0	(0.0)
Republic of Palau ³	6	5	(83.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)
U.S. Virgin Islands ³	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)

¹ Each TB patient has only one primary reason for TB evaluation.

² Excludes New York City.

³ Not included in U.S. totals.

Table 42. Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities,¹ Age ≥ 15: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Cases Reported As Residents of Correctional Facilities ²	
		No.	(%)	No.	(%)
United States	9094	9053	(99.5)	359	(4.0)
Alabama	101	101	(100.0)	1	(1.0)
Alaska	61	59	(96.7)	1	(1.7)
Arizona	177	177	(100.0)	45	(25.4)
Arkansas	71	71	(100.0)	3	(4.2)
California	2079	2074	(99.8)	72	(3.5)
Colorado	72	72	(100.0)	2	(2.8)
Connecticut	61	61	(100.0)	0	(0.0)
Delaware	16	16	(100.0)	0	(0.0)
District of Columbia	34	34	(100.0)	0	(0.0)
Florida	625	625	(100.0)	28	(4.5)
Georgia	312	312	(100.0)	9	(2.9)
Hawaii	111	111	(100.0)	1	(0.9)
Idaho	10	10	(100.0)	0	(0.0)
Illinois	311	310	(99.7)	4	(1.3)
Indiana	90	90	(100.0)	0	(0.0)
Iowa	46	46	(100.0)	0	(0.0)
Kansas	30	30	(100.0)	1	(3.3)
Kentucky	57	57	(100.0)	2	(3.5)
Louisiana	124	123	(99.2)	5	(4.1)
Maine	13	12	(92.3)	0	(0.0)
Maryland	167	167	(100.0)	0	(0.0)
Massachusetts	198	198	(100.0)	3	(1.5)
Michigan	139	133	(95.7)	3	(2.3)
Minnesota	144	144	(100.0)	0	(0.0)
Mississippi	62	62	(100.0)	3	(4.8)
Missouri	97	97	(100.0)	2	(2.1)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	0	(0.0)
Nevada	76	75	(98.7)	2	(2.7)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	306	306	(100.0)	5	(1.6)
New Mexico	50	50	(100.0)	5	(10.0)
New York State ⁵	209	208	(99.5)	3	(1.4)
New York City	641	631	(98.4)	9	(1.4)
North Carolina	201	201	(100.0)	6	(3.0)
North Dakota	9	7	(77.8)	0	(0.0)
Ohio	141	141	(100.0)	0	(0.0)
Oklahoma	65	55	(84.6)	3	(5.5)
Oregon	68	67	(98.5)	2	(3.0)
Pennsylvania	207	207	(100.0)	6	(2.9)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	99	99	(100.0)	4	(4.0)
South Dakota	9	9	(100.0)	0	(0.0)
Tennessee	127	127	(100.0)	7	(5.5)
Texas	1145	1145	(100.0)	116	(10.1)
Utah	30	30	(100.0)	0	(0.0)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	171	(100.0)	0	(0.0)
Washington	202	202	(100.0)	4	(2.0)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	46	46	(100.0)	1	(2.2)
Wyoming	0	0	...	0	...
American Samoa ⁶	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ⁶	104	103	(99.0)	0	(0.0)
Guam ⁶	37	37	(100.0)	0	(0.0)
Marshall Islands ⁶	124	124	(100.0)	0	(0.0)
N. Mariana Islands ⁶	15	15	(100.0)	0	(0.0)
Puerto Rico ⁶	50	50	(100.0)	0	(0.0)
Republic of Palau ⁶	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ⁶	1	0	(0.0)	0	...

Table 42. (Con't) Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities,¹ Age ≥ 15: Reporting Areas, 2013

Federal Prison		State Prison		Local Jail		Juvenile Facility ³		Other Type of Facility		Unknown/Missing		Cases with Information on ICE Custody ⁴		Cases Under ICE Custody	
No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
51	(14.2)	47	(13.1)	179	(49.9)	6	(1.7)	69	(19.2)	7	(1.9)	352	(98.1)	131	(37.2)
0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
1	(2.2)	1	(2.2)	30	(66.7)	3	(6.7)	10	(22.2)	0	(0.0)	45	(100.0)	34	(75.6)
0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	1	(33.3)	0	(0.0)	3	(100.0)	0	(0.0)
16	(22.2)	5	(6.9)	42	(58.3)	2	(2.8)	7	(9.7)	0	(0.0)	72	(100.0)	19	(26.4)
0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	1	(50.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
1	(3.6)	7	(25.0)	12	(42.9)	0	(0.0)	8	(28.6)	0	(0.0)	28	(100.0)	10	(35.7)
0	(0.0)	4	(44.4)	4	(44.4)	0	(0.0)	1	(11.1)	0	(0.0)	9	(100.0)	2	(22.2)
0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	1	(25.0)	3	(75.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	1	(100.0)
1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
1	(20.0)	2	(40.0)	1	(20.0)	0	(0.0)	1	(20.0)	0	(0.0)	5	(100.0)	2	(40.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	2	(66.7)	0	(0.0)	3	(100.0)	1	(33.3)
0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	1	(33.3)	2	(66.7)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	1	(33.3)
0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
1	(50.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
2	(40.0)	2	(40.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	5	(100.0)	3	(60.0)
0	(0.0)	2	(40.0)	2	(40.0)	0	(0.0)	1	(20.0)	0	(0.0)	5	(100.0)	4	(80.0)
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	3	(100.0)	0	(0.0)
2	(22.2)	0	(0.0)	5	(55.6)	0	(0.0)	0	(0.0)	2	(22.2)	5	(55.6)	1	(20.0)
1	(16.7)	4	(66.7)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	1	(33.3)
2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
1	(16.7)	0	(0.0)	5	(83.3)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	2	(33.3)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
2	(50.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	0	(0.0)	6	(85.7)	1	(14.3)	0	(0.0)	0	(0.0)	7	(100.0)	0	(0.0)
14	(12.1)	12	(10.3)	53	(45.7)	0	(0.0)	37	(31.9)	0	(0.0)	116	(100.0)	48	(41.4)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
1	(25.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)	3	(75.0)	1	(33.3)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...

¹ Resident of correctional facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Percent of those with known status.

³ Excludes youth who are under 15 years of age.

⁴ Immigration and Customs Enforcement (ICE) detainment among cases who were residents in correctional facilities.

⁵ Excludes New York City.

⁶ Not included in U.S. totals.

Note: Ellipses indicate data not available.

See Surveillance Slide #28.

**Table 43. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15:
Reporting Areas, 2013**

Reporting Area	Total Cases	Cases with Information on Homeless Status		Cases Reported As Being Homeless ²	
		No.	(%)	No.	(%)
United States	9,094	9,019	(99.2)	514	(5.7)
Alabama	101	100	(99.0)	6	(6.0)
Alaska	61	58	(95.1)	9	(15.5)
Arizona	177	164	(92.7)	17	(10.4)
Arkansas	71	71	(100.0)	11	(15.5)
California	2,079	2,070	(99.6)	129	(6.2)
Colorado	72	71	(98.6)	6	(8.5)
Connecticut	61	61	(100.0)	3	(4.9)
Delaware	16	16	(100.0)	0	(0.0)
District of Columbia	34	34	(100.0)	1	(2.9)
Florida	625	620	(99.2)	55	(8.9)
Georgia	312	312	(100.0)	26	(8.3)
Hawaii	111	110	(99.1)	6	(5.5)
Idaho	10	10	(100.0)	1	(10.0)
Illinois	311	310	(99.7)	14	(4.5)
Indiana	90	90	(100.0)	10	(11.1)
Iowa	46	46	(100.0)	3	(6.5)
Kansas	30	30	(100.0)	1	(3.3)
Kentucky	57	57	(100.0)	3	(5.3)
Louisiana	124	124	(100.0)	11	(8.9)
Maine	13	13	(100.0)	1	(7.7)
Maryland	167	166	(99.4)	5	(3.0)
Massachusetts	198	198	(100.0)	4	(2.0)
Michigan	139	136	(97.8)	8	(5.9)
Minnesota	144	144	(100.0)	4	(2.8)
Mississippi	62	62	(100.0)	3	(4.8)
Missouri	97	97	(100.0)	1	(1.0)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	0	(0.0)
Nevada	76	74	(97.4)	5	(6.8)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	306	306	(100.0)	4	(1.3)
New Mexico	50	50	(100.0)	3	(6.0)
New York State ³	209	202	(96.7)	6	(3.0)
New York City	641	633	(98.8)	15	(2.4)
North Carolina	201	200	(99.5)	12	(6.0)
North Dakota	9	7	(77.8)	1	(14.3)
Ohio	141	141	(100.0)	5	(3.5)
Oklahoma	65	52	(80.0)	3	(5.8)
Oregon	68	66	(97.1)	2	(3.0)
Pennsylvania	207	207	(100.0)	4	(1.9)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	99	99	(100.0)	8	(8.1)
South Dakota	9	9	(100.0)	0	(0.0)
Tennessee	127	127	(100.0)	9	(7.1)
Texas	1,145	1,145	(100.0)	75	(6.6)
Utah	30	30	(100.0)	1	(3.3)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	171	(100.0)	8	(4.7)
Washington	202	200	(99.0)	12	(6.0)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	46	46	(100.0)	2	(4.3)
Wyoming	0	0	--	0	--
American Samoa ⁴	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	104	103	(99.0)	3	(2.9)
Guam ⁴	37	37	(100.0)	0	(0.0)
Marshall Islands ⁴	124	124	(100.0)	1	(0.8)
N. Mariana Islands ⁴	15	15	(100.0)	1	(6.7)
Puerto Rico ⁴	50	50	(100.0)	3	(6.0)
Republic of Palau ⁴	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	1	1	(100.0)	0	(0.0)

¹ Homeless within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Percent of those with known status.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

See Surveillance Slide #29

**Table 44. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,¹
Age ≥15: Reporting Areas, 2013**

Reporting Area	Total Cases	Cases with Information on Residence in Long-term Care Facilities		Cases Reported As Residents of Long-term Care Facilities ²	
		No.	(%)	No.	(%)
United States	9,094	9,047	(99.5)	191	(2.1)
Alabama	101	101	(100.0)	2	(2.0)
Alaska	61	58	(95.1)	2	(3.4)
Arizona	177	177	(100.0)	4	(2.3)
Arkansas	71	71	(100.0)	0	(0.0)
California	2,079	2,076	(99.9)	51	(2.5)
Colorado	72	72	(100.0)	1	(1.4)
Connecticut	61	61	(100.0)	4	(6.6)
Delaware	16	16	(100.0)	1	(6.3)
District of Columbia	34	34	(100.0)	1	(2.9)
Florida	625	625	(100.0)	6	(1.0)
Georgia	312	311	(99.7)	2	(0.6)
Hawaii	111	111	(100.0)	3	(2.7)
Idaho	10	10	(100.0)	0	(0.0)
Illinois	311	309	(99.4)	8	(2.6)
Indiana	90	90	(100.0)	3	(3.3)
Iowa	46	45	(97.8)	0	(0.0)
Kansas	30	30	(100.0)	0	(0.0)
Kentucky	57	57	(100.0)	3	(5.3)
Louisiana	124	124	(100.0)	3	(2.4)
Maine	13	12	(92.3)	3	(25.0)
Maryland	167	167	(100.0)	2	(1.2)
Massachusetts	198	198	(100.0)	2	(1.0)
Michigan	139	132	(95.0)	4	(3.0)
Minnesota	144	144	(100.0)	2	(1.4)
Mississippi	62	62	(100.0)	4	(6.5)
Missouri	97	97	(100.0)	1	(1.0)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	0	(0.0)
Nevada	76	75	(98.7)	0	(0.0)
New Hampshire	15	15	(100.0)	0	(0.0)
New Jersey	306	306	(100.0)	8	(2.6)
New Mexico	50	50	(100.0)	1	(2.0)
New York State ³	209	207	(99.0)	4	(1.9)
New York City	641	630	(98.3)	8	(1.3)
North Carolina	201	201	(100.0)	3	(1.5)
North Dakota	9	7	(77.8)	0	(0.0)
Ohio	141	141	(100.0)	4	(2.8)
Oklahoma	65	55	(84.6)	1	(1.8)
Oregon	68	67	(98.5)	2	(3.0)
Pennsylvania	207	205	(99.0)	7	(3.4)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	99	99	(100.0)	3	(3.0)
South Dakota	9	9	(100.0)	0	(0.0)
Tennessee	127	127	(100.0)	9	(7.1)
Texas	1,145	1,145	(100.0)	20	(1.7)
Utah	30	30	(100.0)	0	(0.0)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	171	(100.0)	4	(2.3)
Washington	202	202	(100.0)	3	(1.5)
West Virginia	13	13	(100.0)	1	(7.7)
Wisconsin	46	46	(100.0)	1	(2.2)
Wyoming	0	0	--	0	--
American Samoa ⁴	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	104	102	(98.1)	0	(0.0)
Guam ⁴	37	37	(100.0)	0	(0.0)
Marshall Islands ⁴	124	123	(99.2)	0	(0.0)
N. Mariana Islands ⁴	15	14	(93.3)	0	(0.0)
Puerto Rico ⁴	50	50	(100.0)	2	(4.0)
Republic of Palau ⁴	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	1	1	(100.0)	0	(0.0)

¹ Resident of long-term care facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Percent of those with known status.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 45. Tuberculosis Cases and Percentages by Injecting Drug Use,¹ Age ≥15: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Cases Reporting Injecting Drug Use	
		No.	(%)	No.	(%)
United States	9,094	8,966	(98.6)	142	(1.6)
Alabama	101	99	(98.0)	1	(1.0)
Alaska	61	57	(93.4)	0	(0.0)
Arizona	177	165	(93.2)	14	(8.5)
Arkansas	71	71	(100.0)	1	(1.4)
California	2,079	2,055	(98.8)	32	(1.6)
Colorado	72	71	(98.6)	1	(1.4)
Connecticut	61	60	(98.4)	1	(1.7)
Delaware	16	16	(100.0)	0	(0.0)
District of Columbia	34	34	(100.0)	0	(0.0)
Florida	625	619	(99.0)	9	(1.5)
Georgia	312	308	(98.7)	4	(1.3)
Hawaii	111	103	(92.8)	0	(0.0)
Idaho	10	10	(100.0)	0	(0.0)
Illinois	311	300	(96.5)	4	(1.3)
Indiana	90	90	(100.0)	1	(1.1)
Iowa	46	46	(100.0)	0	(0.0)
Kansas	30	30	(100.0)	0	(0.0)
Kentucky	57	57	(100.0)	0	(0.0)
Louisiana	124	123	(99.2)	5	(4.1)
Maine	13	13	(100.0)	0	(0.0)
Maryland	167	167	(100.0)	1	(0.6)
Massachusetts	198	198	(100.0)	3	(1.5)
Michigan	139	135	(97.1)	1	(0.7)
Minnesota	144	144	(100.0)	1	(0.7)
Mississippi	62	62	(100.0)	0	(0.0)
Missouri	97	97	(100.0)	0	(0.0)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	21	19	(90.5)	0	(0.0)
Nevada	76	75	(98.7)	1	(1.3)
New Hampshire	15	15	(100.0)	0	(0.0)
New Jersey	306	306	(100.0)	3	(1.0)
New Mexico	50	48	(96.0)	1	(2.1)
New York State ²	209	199	(95.2)	2	(1.0)
New York City	641	632	(98.6)	6	(0.9)
North Carolina	201	201	(100.0)	1	(0.5)
North Dakota	9	6	(66.7)	--	--
Ohio	141	141	(100.0)	5	(3.5)
Oklahoma	65	59	(90.8)	1	(1.7)
Oregon	68	65	(95.6)	1	(1.5)
Pennsylvania	207	204	(98.6)	1	(0.5)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	99	96	(97.0)	1	(1.0)
South Dakota	9	9	(100.0)	0	(0.0)
Tennessee	127	127	(100.0)	0	(0.0)
Texas	1,145	1,145	(100.0)	35	(3.1)
Utah	30	30	(100.0)	0	(0.0)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	169	(98.8)	2	(1.2)
Washington	202	196	(97.0)	3	(1.5)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	46	46	(100.0)	0	(0.0)
Wyoming	0	0	--	0	--
American Samoa ³	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ³	104	103	(99.0)	0	(0.0)
Guam ³	37	37	(100.0)	0	(0.0)
Marshall Islands ³	124	124	(100.0)	1	(0.8)
N. Mariana Islands ³	15	15	(100.0)	0	(0.0)
Puerto Rico ³	50	50	(100.0)	10	(20.0)
Republic of Palau ³	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ³	1	1	(100.0)	0	(0.0)

¹ Injecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 46. Tuberculosis Cases and Percentages by Noninjecting Drug Use,¹ Age ≥15: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Cases Reporting Noninjecting Drug Use	
		No.	(%)	No.	(%)
United States	9,094	8,956	(98.5)	633	(7.1)
Alabama	101	99	(98.0)	12	(12.1)
Alaska	61	56	(91.8)	7	(12.5)
Arizona	177	163	(92.1)	29	(17.8)
Arkansas	71	71	(100.0)	5	(7.0)
California	2,079	2,051	(98.7)	141	(6.9)
Colorado	72	71	(98.6)	3	(4.2)
Connecticut	61	60	(98.4)	1	(1.7)
Delaware	16	16	(100.0)	1	(6.3)
District of Columbia	34	34	(100.0)	0	(0.0)
Florida	625	619	(99.0)	55	(8.9)
Georgia	312	308	(98.7)	25	(8.1)
Hawaii	111	103	(92.8)	0	(0.0)
Idaho	10	10	(100.0)	0	(0.0)
Illinois	311	299	(96.1)	23	(7.7)
Indiana	90	90	(100.0)	9	(10.0)
Iowa	46	46	(100.0)	1	(2.2)
Kansas	30	30	(100.0)	1	(3.3)
Kentucky	57	57	(100.0)	5	(8.8)
Louisiana	124	123	(99.2)	16	(13.0)
Maine	13	13	(100.0)	2	(15.4)
Maryland	167	167	(100.0)	4	(2.4)
Massachusetts	198	198	(100.0)	10	(5.1)
Michigan	139	133	(95.7)	6	(4.5)
Minnesota	144	144	(100.0)	3	(2.1)
Mississippi	62	62	(100.0)	1	(1.6)
Missouri	97	97	(100.0)	6	(6.2)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	21	20	(95.2)	1	(5.0)
Nevada	76	75	(98.7)	4	(5.3)
New Hampshire	15	15	(100.0)	0	(0.0)
New Jersey	306	306	(100.0)	15	(4.9)
New Mexico	50	48	(96.0)	3	(6.3)
New York State ²	209	200	(95.7)	6	(3.0)
New York City	641	632	(98.6)	27	(4.3)
North Carolina	201	201	(100.0)	23	(11.4)
North Dakota	9	6	(66.7)	--	--
Ohio	141	141	(100.0)	11	(7.8)
Oklahoma	65	59	(90.8)	6	(10.2)
Oregon	68	65	(95.6)	5	(7.7)
Pennsylvania	207	204	(98.6)	3	(1.5)
Rhode Island	25	25	(100.0)	1	(4.0)
South Carolina	99	96	(97.0)	10	(10.4)
South Dakota	9	9	(100.0)	0	(0.0)
Tennessee	127	127	(100.0)	16	(12.6)
Texas	1,145	1,145	(100.0)	122	(10.7)
Utah	30	30	(100.0)	0	(0.0)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	169	(98.8)	6	(3.6)
Washington	202	195	(96.5)	6	(3.1)
West Virginia	13	12	(92.3)	1	(8.3)
Wisconsin	46	46	(100.0)	0	(0.0)
Wyoming	0	0	--	0	--
American Samoa ³	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ³	104	103	(99.0)	28	(27.2)
Guam ³	37	37	(100.0)	0	(0.0)
Marshall Islands ³	124	124	(100.0)	1	(0.8)
N. Mariana Islands ³	15	15	(100.0)	0	(0.0)
Puerto Rico ³	50	50	(100.0)	7	(14.0)
Republic of Palau ³	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ³	1	1	(100.0)	0	(0.0)

¹ Noninjecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 47. Tuberculosis Cases and Percentages by Excess Alcohol Use,¹ Age ≥15: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Cases Reporting Excess Alcohol Use	
		No.	(%)	No.	(%)
United States	9,094	8,930	(98.2)	982	(11.0)
Alabama	101	100	(99.0)	23	(23.0)
Alaska	61	55	(90.2)	19	(34.5)
Arizona	177	161	(91.0)	21	(13.0)
Arkansas	71	71	(100.0)	10	(14.1)
California	2,079	2,054	(98.8)	172	(8.4)
Colorado	72	71	(98.6)	7	(9.9)
Connecticut	61	60	(98.4)	5	(8.3)
Delaware	16	16	(100.0)	0	(0.0)
District of Columbia	34	34	(100.0)	1	(2.9)
Florida	625	620	(99.2)	96	(15.5)
Georgia	312	308	(98.7)	35	(11.4)
Hawaii	111	103	(92.8)	9	(8.7)
Idaho	10	10	(100.0)	1	(10.0)
Illinois	311	300	(96.5)	32	(10.7)
Indiana	90	90	(100.0)	13	(14.4)
Iowa	46	46	(100.0)	6	(13.0)
Kansas	30	30	(100.0)	0	(0.0)
Kentucky	57	57	(100.0)	9	(15.8)
Louisiana	124	122	(98.4)	28	(23.0)
Maine	13	13	(100.0)	2	(15.4)
Maryland	167	167	(100.0)	9	(5.4)
Massachusetts	198	198	(100.0)	13	(6.6)
Michigan	139	134	(96.4)	12	(9.0)
Minnesota	144	144	(100.0)	8	(5.6)
Mississippi	62	62	(100.0)	9	(14.5)
Missouri	97	97	(100.0)	15	(15.5)
Montana	6	6	(100.0)	3	(50.0)
Nebraska	21	18	(85.7)	3	(16.7)
Nevada	76	75	(98.7)	8	(10.7)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	306	306	(100.0)	18	(5.9)
New Mexico	50	48	(96.0)	7	(14.6)
New York State ²	209	196	(93.8)	21	(10.7)
New York City	641	618	(96.4)	10	(1.6)
North Carolina	201	201	(100.0)	22	(10.9)
North Dakota	9	5	(55.6)	--	--
Ohio	141	141	(100.0)	19	(13.5)
Oklahoma	65	47	(72.3)	--	--
Oregon	68	66	(97.1)	3	(4.5)
Pennsylvania	207	204	(98.6)	12	(5.9)
Rhode Island	25	25	(100.0)	1	(4.0)
South Carolina	99	97	(98.0)	22	(22.7)
South Dakota	9	9	(100.0)	3	(33.3)
Tennessee	127	127	(100.0)	23	(18.1)
Texas	1,145	1,145	(100.0)	205	(17.9)
Utah	30	30	(100.0)	1	(3.3)
Vermont	4	4	(100.0)	0	(0.0)
Virginia	171	169	(98.8)	13	(7.7)
Washington	202	197	(97.5)	12	(6.1)
West Virginia	13	12	(92.3)	2	(16.7)
Wisconsin	46	46	(100.0)	4	(8.7)
Wyoming	0	0	--	0	--
American Samoa ³	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ³	104	103	(99.0)	5	(4.9)
Guam ³	37	37	(100.0)	2	(5.4)
Marshall Islands ³	124	123	(99.2)	14	(11.4)
N. Mariana Islands ³	15	15	(100.0)	0	(0.0)
Puerto Rico ³	50	50	(100.0)	5	(10.0)
Republic of Palau ³	6	6	(100.0)	1	(16.7)
U.S. Virgin Islands ³	1	1	(100.0)	0	(0.0)

¹ Excess alcohol use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 48. Tuberculosis Cases and Percentages by Primary Occupation, Age ≥15: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on Occupation		Percentage of Cases by Occupation ¹						
		No.	(%)	Unemployed	Health Care Worker	Correctional Employee	Migrant Worker	Retired	Not Seeking Employment	Other
United States	9,094	8,922	(98.1)	(27.4)	(4.0)	(0.1)	(1.5)	(16.4)	(16.0)	(34.5)
Alabama	101	100	(99.0)	(13.0)	(3.0)	(0.0)	(2.0)	(24.0)	(32.0)	(26.0)
Alaska	61	57	(93.4)	(38.6)	(0.0)	(0.0)	(7.0)	(10.5)	(22.8)	(21.1)
Arizona	177	159	(89.8)	(21.4)	(3.1)	(0.0)	(4.4)	(23.3)	(13.8)	(34.0)
Arkansas	71	71	(100.0)	(18.3)	(5.6)	(1.4)	(0.0)	(33.8)	(8.5)	(32.4)
California	2,079	2,060	(99.1)	(21.7)	(4.0)	(0.1)	(2.7)	(24.5)	(15.0)	(31.9)
Colorado	72	72	(100.0)	(9.7)	(2.8)	(0.0)	(1.4)	(16.7)	(34.7)	(34.7)
Connecticut	61	61	(100.0)	(8.2)	(6.6)	(0.0)	(0.0)	(19.7)	(11.5)	(54.1)
Delaware	16	16	(100.0)	(31.3)	(0.0)	(0.0)	(6.3)	(18.8)	(12.5)	(31.3)
District of Columbia	34	34	(100.0)	(64.7)	(5.9)	(0.0)	(0.0)	(11.8)	(0.0)	(17.6)
Florida	625	602	(96.3)	(68.9)	(1.7)	(0.0)	(1.5)	(3.7)	(2.3)	(21.9)
Georgia	312	310	(99.4)	(37.1)	(1.9)	(0.6)	(1.0)	(9.7)	(11.9)	(37.7)
Hawaii	111	107	(96.4)	(14.0)	(4.7)	(0.0)	(1.9)	(26.2)	(14.0)	(39.3)
Idaho	10	10	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(30.0)	(10.0)	(60.0)
Illinois	311	292	(93.9)	(24.0)	(4.1)	(0.0)	(1.0)	(19.9)	(14.4)	(36.6)
Indiana	90	90	(100.0)	(15.6)	(4.4)	(0.0)	(0.0)	(16.7)	(28.9)	(34.4)
Iowa	46	46	(100.0)	(6.5)	(0.0)	(0.0)	(0.0)	(15.2)	(23.9)	(54.3)
Kansas	30	30	(100.0)	(16.7)	(0.0)	(0.0)	(0.0)	(20.0)	(30.0)	(33.3)
Kentucky	57	57	(100.0)	(14.0)	(7.0)	(0.0)	(0.0)	(12.3)	(31.6)	(35.1)
Louisiana	124	118	(95.2)	(28.0)	(1.7)	(0.0)	(1.7)	(12.7)	(12.7)	(43.2)
Maine	13	12	(92.3)	(8.3)	(0.0)	(0.0)	(0.0)	(50.0)	(8.3)	(33.3)
Maryland	167	167	(100.0)	(15.6)	(3.6)	(0.0)	(0.0)	(10.2)	(22.2)	(48.5)
Massachusetts	198	198	(100.0)	(26.3)	(4.0)	(0.0)	(0.0)	(17.7)	(14.6)	(37.4)
Michigan	139	124	(89.2)	(77.4)	(0.8)	(0.0)	(1.6)	(0.0)	(0.0)	(20.2)
Minnesota	144	144	(100.0)	(9.0)	(10.4)	(0.0)	(0.0)	(10.4)	(36.1)	(34.0)
Mississippi	62	62	(100.0)	(35.5)	(1.6)	(0.0)	(0.0)	(21.0)	(11.3)	(30.6)
Missouri	97	97	(100.0)	(27.8)	(2.1)	(0.0)	(0.0)	(28.9)	(15.5)	(25.8)
Montana	6	6	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(33.3)	(50.0)	(16.7)
Nebraska	21	19	(90.5)	(5.3)	(0.0)	(0.0)	(5.3)	(5.3)	(15.8)	(68.4)
Nevada	76	76	(100.0)	(9.2)	(6.6)	(0.0)	(0.0)	(18.4)	(15.8)	(50.0)
New Hampshire	15	15	(100.0)	(26.7)	(20.0)	(0.0)	(0.0)	(6.7)	(6.7)	(40.0)
New Jersey	306	306	(100.0)	(22.9)	(5.9)	(0.0)	(1.3)	(15.7)	(20.6)	(33.7)
New Mexico	50	50	(100.0)	(16.0)	(0.0)	(0.0)	(2.0)	(22.0)	(40.0)	(20.0)
New York State ²	209	191	(91.4)	(25.7)	(7.3)	(0.0)	(1.0)	(18.8)	(10.5)	(36.6)
New York City	641	635	(99.1)	(39.8)	(5.2)	(0.0)	(0.9)	(13.2)	(3.1)	(37.6)
North Carolina	201	201	(100.0)	(30.8)	(2.0)	(1.0)	(1.5)	(17.9)	(7.5)	(39.3)
North Dakota	9	0	(0.0)	--	--	--	--	--	--	--
Ohio	141	141	(100.0)	(22.7)	(5.7)	(0.0)	(1.4)	(18.4)	(18.4)	(33.3)
Oklahoma	65	50	(76.9)	(32.0)	(4.0)	(0.0)	(0.0)	(14.0)	(8.0)	(42.0)
Oregon	68	68	(100.0)	(20.6)	(5.9)	(0.0)	(2.9)	(22.1)	(13.2)	(35.3)
Pennsylvania	207	200	(96.6)	(22.5)	(5.0)	(0.0)	(0.0)	(20.0)	(21.5)	(31.0)
Rhode Island	25	24	(96.0)	(8.3)	(8.3)	(0.0)	(0.0)	(29.2)	(33.3)	(20.8)
South Carolina	99	98	(99.0)	(27.6)	(5.1)	(0.0)	(1.0)	(16.3)	(11.2)	(38.8)
South Dakota	9	9	(100.0)	(0.0)	(11.1)	(0.0)	(11.1)	(0.0)	(66.7)	(11.1)
Tennessee	127	127	(100.0)	(27.6)	(1.6)	(0.0)	(3.9)	(16.5)	(17.3)	(33.1)
Texas	1,145	1,145	(100.0)	(26.1)	(3.9)	(0.4)	(0.9)	(10.0)	(22.1)	(36.6)
Utah	30	30	(100.0)	(26.7)	(6.7)	(0.0)	(0.0)	(13.3)	(23.3)	(30.0)
Vermont	4	4	(100.0)	(0.0)	(25.0)	(0.0)	(0.0)	(0.0)	(25.0)	(50.0)
Virginia	171	171	(100.0)	(10.5)	(2.9)	(0.0)	(0.0)	(13.5)	(23.4)	(49.7)
Washington	202	201	(99.5)	(5.5)	(7.5)	(0.0)	(4.0)	(12.9)	(32.8)	(37.3)
West Virginia	13	13	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(15.4)	(23.1)	(61.5)
Wisconsin	46	46	(100.0)	(4.3)	(6.5)	(0.0)	(2.2)	(0.0)	(47.8)	(39.1)
Wyoming	0	0	--	--	--	--	--	--	--	--
American Samoa ³	2	2	(100.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Fed. States of Micronesia ³	104	98	(94.2)	(55.1)	(0.0)	(0.0)	(1.0)	(1.0)	(31.6)	(11.2)
Guam ³	37	36	(97.3)	(25.0)	(0.0)	(0.0)	(0.0)	(13.9)	(25.0)	(36.1)
Marshall Islands ³	124	124	(100.0)	(54.8)	(2.4)	(0.8)	(0.8)	(0.0)	(20.2)	(21.0)
N. Mariana Islands ³	15	15	(100.0)	(0.0)	(0.0)	(0.0)	(33.3)	(6.7)	(60.0)	(0.0)
Puerto Rico ³	50	50	(100.0)	(42.0)	(4.0)	(0.0)	(0.0)	(14.0)	(14.0)	(26.0)
Republic of Palau ³	6	6	(100.0)	(33.3)	(0.0)	(0.0)	(33.3)	(16.7)	(0.0)	(16.7)
U.S. Virgin Islands ³	1	1	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)

¹ Occupation within past 12 months of TB diagnosis. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥75% of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

**Table 49. Tuberculosis Cases and Percentages by Initial Drug Regimen:
Reporting Areas, 2013**

Reporting Area	Total Cases	Cases in Persons Alive at Diagnosis	Cases with Information on Initial Drug Regimen ¹		Percentage of Cases in Persons with Initial Drug Regimen ^{2,3}		
			No.	(%)	IR	IRZ	IRZE ³
United States	9,582	9,357	9,271	(99.1)	(0.5)	(2.4)	(84.6)
Alabama	108	103	103	(100.0)	(0.0)	(3.9)	(77.7)
Alaska	71	71	69	(97.2)	(1.4)	(0.0)	(94.2)
Arizona	184	179	176	(98.3)	(0.6)	(1.1)	(94.3)
Arkansas	72	71	70	(98.6)	(1.4)	(18.6)	(78.6)
California	2,171	2,125	2,105	(99.1)	(0.2)	(1.1)	(90.8)
Colorado	74	73	72	(98.6)	(2.8)	(2.8)	(72.2)
Connecticut	62	59	59	(100.0)	(0.0)	(0.0)	(15.3)
Delaware	19	19	19	(100.0)	(0.0)	(15.8)	(78.9)
District of Columbia	38	38	36	(94.7)	(0.0)	(0.0)	(100.0)
Florida	652	633	632	(99.8)	(0.3)	(2.2)	(87.7)
Georgia	340	327	325	(99.4)	(0.9)	(3.1)	(37.2)
Hawaii	115	114	113	(99.1)	(0.0)	(2.7)	(89.4)
Idaho	11	11	11	(100.0)	(0.0)	(9.1)	(45.5)
Illinois	327	321	314	(97.8)	(0.6)	(6.1)	(84.4)
Indiana	94	90	90	(100.0)	(0.0)	(3.3)	(95.6)
Iowa	47	47	47	(100.0)	(0.0)	(4.3)	(89.4)
Kansas	36	36	36	(100.0)	(0.0)	(8.3)	(88.9)
Kentucky	59	58	58	(100.0)	(0.0)	(0.0)	(79.3)
Louisiana	139	135	135	(100.0)	(1.5)	(5.2)	(89.6)
Maine	15	14	14	(100.0)	(0.0)	(14.3)	(85.7)
Maryland	176	175	175	(100.0)	(1.1)	(4.6)	(86.9)
Massachusetts	201	198	189	(95.5)	(2.1)	(1.1)	(78.3)
Michigan	141	138	135	(97.8)	(0.7)	(2.2)	(52.6)
Minnesota	151	150	150	(100.0)	(0.0)	(2.0)	(88.7)
Mississippi	65	60	60	(100.0)	(0.0)	(3.3)	(86.7)
Missouri	104	102	102	(100.0)	(0.0)	(3.9)	(81.4)
Montana	6	6	6	(100.0)	(0.0)	(0.0)	(100.0)
Nebraska	21	21	21	(100.0)	(0.0)	(4.8)	(61.9)
Nevada	92	89	89	(100.0)	(0.0)	(2.2)	(91.0)
New Hampshire	15	15	15	(100.0)	(0.0)	(6.7)	(73.3)
New Jersey	319	314	314	(100.0)	(0.3)	(2.2)	(89.2)
New Mexico	50	46	45	(97.8)	(6.7)	(2.2)	(86.7)
New York State ⁴	216	216	215	(99.5)	(0.0)	(3.7)	(83.7)
New York City	656	650	646	(99.4)	(0.2)	(0.8)	(89.9)
North Carolina	216	206	205	(99.5)	(0.0)	(1.5)	(82.0)
North Dakota	12	9	9	(100.0)	(0.0)	(0.0)	(66.7)
Ohio	148	145	145	(100.0)	(0.0)	(0.0)	(95.2)
Oklahoma	69	67	66	(98.5)	(6.1)	(6.1)	(80.3)
Oregon	73	73	72	(98.6)	(0.0)	(6.9)	(81.9)
Pennsylvania	214	212	209	(98.6)	(0.0)	(0.0)	(64.1)
Rhode Island	27	26	26	(100.0)	(3.8)	(0.0)	(92.3)
South Carolina	112	107	106	(99.1)	(0.9)	(10.4)	(82.1)
South Dakota	9	9	9	(100.0)	(0.0)	(0.0)	(55.6)
Tennessee	142	136	136	(100.0)	(0.0)	(3.7)	(80.9)
Texas	1,222	1,183	1,167	(98.6)	(0.6)	(2.5)	(90.2)
Utah	33	33	32	(97.0)	(0.0)	(0.0)	(93.8)
Vermont	5	5	5	(100.0)	(0.0)	(20.0)	(60.0)
Virginia	180	173	173	(100.0)	(0.0)	(0.0)	(94.8)
Washington	210	206	204	(99.0)	(1.0)	(2.9)	(83.3)
West Virginia	13	13	13	(100.0)	(0.0)	(0.0)	(69.2)
Wisconsin	50	50	48	(96.0)	(2.1)	(2.1)	(60.4)
Wyoming	0	0	0	--	--	--	--
American Samoa ⁵	2	2	2	(100.0)	(0.0)	(0.0)	(100.0)
Fed. States of Micronesia ⁵	130	127	127	(100.0)	(0.0)	(0.0)	(99.2)
Guam ⁵	48	47	47	(100.0)	(0.0)	(12.8)	(10.6)
Marshall Islands ⁵	153	153	153	(100.0)	(0.0)	(0.0)	(97.4)
N. Mariana Islands ⁵	16	16	0	(0.0)	--	--	--
Puerto Rico ⁵	50	47	47	(100.0)	(0.0)	(0.0)	(100.0)
Republic of Palau ⁵	6	6	6	(100.0)	(0.0)	(0.0)	(100.0)
U.S. Virgin Islands ⁵	2	2	2	(100.0)	(0.0)	(0.0)	(100.0)

¹ Includes persons who were alive at diagnosis and started on one or more drug.

² Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

³ I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol. Cases with other drugs prescribed in addition to these regimens are excluded.

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Excluding cases with no information on drug regimen, 53 (0.57%) persons were not started on any drugs, 2 (0.02%) were started on one drug, and 1152 (12.36%) had an initial multiple drug regimen other than IR, IRZ, or IRZE.

Table 50. Culture-Positive Tuberculosis Cases and Percentages with Drug-Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2013

Reporting Area	Total Culture Positive Cases	Cases with Initial Drug-Susceptibility Testing Performed ¹		Resistance ²			
				Isoniazid ¹		Isoniazid and Rifampin ¹	
		No.	(%)	No.	(%)	No.	(%)
United States	7,358	7,108	(96.6)	653	(9.2)	95	(1.3)
Alabama	83	83	(100.0)	4	(4.8)	1	(1.2)
Alaska	55	54	(98.2)	5	(9.3)	0	(0.0)
Arizona	154	154	(100.0)	17	(11.0)	1	(0.6)
Arkansas	52	51	(98.1)	1	(2.0)	0	(0.0)
California	1,759	1,705	(96.9)	182	(10.7)	27	(1.6)
Colorado	48	48	(100.0)	2	(4.2)	0	(0.0)
Connecticut	51	47	(92.2)	7	(14.9)	1	(2.1)
Delaware	13	8	(61.5)	--	--	--	--
District of Columbia	26	24	(92.3)	4	(16.7)	1	(4.2)
Florida	514	484	(94.2)	37	(7.6)	9	(1.9)
Georgia	235	229	(97.4)	23	(10.0)	2	(0.9)
Hawaii	92	90	(97.8)	11	(12.2)	0	(0.0)
Idaho	9	9	(100.0)	0	(0.0)	0	(0.0)
Illinois	240	232	(96.7)	24	(10.3)	3	(1.3)
Indiana	73	72	(98.6)	8	(11.1)	0	(0.0)
Iowa	36	32	(88.9)	3	(9.4)	0	(0.0)
Kansas	32	31	(96.9)	2	(6.5)	1	(3.2)
Kentucky	47	47	(100.0)	2	(4.3)	0	(0.0)
Louisiana	117	92	(78.6)	5	(5.4)	1	(1.1)
Maine	8	8	(100.0)	0	(0.0)	0	(0.0)
Maryland	123	123	(100.0)	13	(10.6)	2	(1.6)
Massachusetts	153	149	(97.4)	18	(12.1)	7	(4.7)
Michigan	98	94	(95.9)	3	(3.2)	0	(0.0)
Minnesota	116	113	(97.4)	13	(11.5)	0	(0.0)
Mississippi	49	47	(95.9)	1	(2.1)	0	(0.0)
Missouri	72	72	(100.0)	6	(8.3)	0	(0.0)
Montana	6	6	(100.0)	1	(16.7)	0	(0.0)
Nebraska	14	14	(100.0)	0	(0.0)	0	(0.0)
Nevada	63	59	(93.7)	5	(8.5)	0	(0.0)
New Hampshire	15	14	(93.3)	2	(14.3)	0	(0.0)
New Jersey	256	253	(98.8)	29	(11.5)	5	(2.0)
New Mexico	39	39	(100.0)	5	(12.8)	1	(2.6)
New York State ³	157	155	(98.7)	7	(4.5)	1	(0.6)
New York City	472	455	(96.4)	47	(10.3)	7	(1.5)
North Carolina	164	161	(98.2)	13	(8.1)	5	(3.1)
North Dakota	6	0	(0.0)	--	--	--	--
Ohio	119	119	(100.0)	6	(5.0)	3	(2.5)
Oklahoma	49	44	(89.8)	2	(4.5)	0	(0.0)
Oregon	55	55	(100.0)	2	(3.6)	1	(1.8)
Pennsylvania	168	157	(93.5)	13	(8.3)	3	(1.9)
Rhode Island	13	13	(100.0)	0	(0.0)	0	(0.0)
South Carolina	79	76	(96.2)	5	(6.6)	0	(0.0)
South Dakota	6	5	(83.3)	0	(0.0)	0	(0.0)
Tennessee	102	99	(97.1)	6	(6.1)	1	(1.0)
Texas	921	894	(97.1)	61	(6.8)	5	(0.6)
Utah	24	24	(100.0)	0	(0.0)	0	(0.0)
Vermont	3	3	(100.0)	1	(33.3)	1	(33.3)
Virginia	139	135	(97.1)	16	(11.9)	1	(0.7)
Washington	177	174	(98.3)	22	(12.6)	2	(1.1)
West Virginia	12	12	(100.0)	3	(25.0)	0	(0.0)
Wisconsin	44	44	(100.0)	15	(34.1)	3	(6.8)
Wyoming	0	0	--	0	--	0	--
American Samoa ⁴	2	1	(50.0)	--	--	--	--
Fed. States of Micronesia ⁴	57	40	(70.2)	--	--	--	--
Guam ⁴	25	25	(100.0)	3	(12.0)	0	(0.0)
Marshall Islands ⁴	64	58	(90.6)	2	(3.4)	1	(1.7)
N. Mariana Islands ⁴	15	10	(66.7)	--	--	--	--
Puerto Rico ⁴	45	43	(95.6)	4	(9.3)	1	(2.3)
Republic of Palau ⁴	6	0	(0.0)	--	--	--	--
U.S. Virgin Islands ⁴	2	1	(50.0)	--	--	--	--

¹ Patients tested to at least isoniazid and rifampin

² Isolates may be resistant to other drugs. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 51. Tuberculosis Cases and Percentages by HIV Status: Reporting Areas, 2013

Reporting Area	Total Cases	Cases with Information on HIV Status ¹		Cases in Persons with HIV-Positive Results ²	
		No.	(%)	No.	(%)
United States	9,364	8,283	(88.5)	543	(6.6)
Alabama	103	98	(95.1)	2	(2.0)
Alaska	71	57	(80.3)	0	(0.0)
Arizona	179	171	(95.5)	10	(5.8)
Arkansas	71	60	(84.5)	3	(5.0)
California	2,125	1,904	(89.6)	75	(3.9)
Colorado	73	72	(98.6)	7	(9.7)
Connecticut	59	52	(88.1)	9	(17.3)
Delaware	19	13	(68.4)	0	(0.0)
District of Columbia	38	37	(97.4)	8	(21.6)
Florida	633	562	(88.8)	80	(14.2)
Georgia	328	307	(93.6)	39	(12.7)
Hawaii	114	111	(97.4)	0	(0.0)
Idaho	11	9	(81.8)	0	(0.0)
Illinois	321	276	(86.0)	16	(5.8)
Indiana	90	70	(77.8)	2	(2.9)
Iowa	47	35	(74.5)	1	(2.9)
Kansas	36	33	(91.7)	0	(0.0)
Kentucky	58	55	(94.8)	2	(3.6)
Louisiana	135	117	(86.7)	3	(2.6)
Maine	14	11	(78.6)	0	(0.0)
Maryland	175	168	(96.0)	15	(8.9)
Massachusetts	198	121	(61.1)	12	(9.9)
Michigan	139	120	(86.3)	7	(5.8)
Minnesota	150	144	(96.0)	4	(2.8)
Mississippi	60	58	(96.7)	7	(12.1)
Missouri	102	86	(84.3)	2	(2.3)
Montana	6	6	(100.0)	1	(16.7)
Nebraska	21	19	(90.5)	0	(0.0)
Nevada	89	86	(96.6)	2	(2.3)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	314	265	(84.4)	24	(9.1)
New Mexico	46	39	(84.8)	1	(2.6)
New York State ³	216	179	(82.9)	14	(7.8)
New York City	650	540	(83.1)	39	(7.2)
North Carolina	206	206	(100.0)	13	(6.3)
North Dakota	12	12	(100.0)	0	(0.0)
Ohio	145	124	(85.5)	10	(8.1)
Oklahoma	67	62	(92.5)	0	(0.0)
Oregon	73	63	(86.3)	1	(1.6)
Pennsylvania	212	164	(77.4)	15	(9.1)
Rhode Island	26	20	(76.9)	2	(10.0)
South Carolina	107	93	(86.9)	12	(12.9)
South Dakota	9	7	(77.8)	0	(0.0)
Tennessee	136	127	(93.4)	10	(7.9)
Texas	1,183	1,060	(89.6)	78	(7.4)
Utah	33	31	(93.9)	1	(3.2)
Vermont	5	0	(0.0)	0	—
Virginia	173	170	(98.3)	10	(5.9)
Washington	208	190	(91.3)	5	(2.6)
West Virginia	13	12	(92.3)	0	(0.0)
Wisconsin	50	46	(92.0)	0	(0.0)
Wyoming	0	0	—	0	—
American Samoa ⁴	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	127	108	(85.0)	0	(0.0)
Guam ⁴	47	34	(72.3)	—	—
Marshall Islands ⁴	153	117	(76.5)	1	(0.9)
N. Mariana Islands ⁴	16	12	(75.0)	0	(0.0)
Puerto Rico ⁴	47	44	(93.6)	7	(15.9)
Republic of Palau ⁴	6	6	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	2	2	(100.0)	0	(0.0)

¹ Includes only those cases in persons with negative, positive, or indeterminate HIV test results and those persons not dead at diagnosis.

² Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

See Technical Notes.

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Table 52. Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2013

Reporting Area	Nucleic Acid Amplification Test					Sputum Culture					Culture of Tissue or Other Fluids				
	Total ¹		Public Health Lab		Other Lab	Missing	Commercial Lab		Public Health Lab	Other Lab	Commercial Lab		Public Health Lab	Other Lab	Missing
	No.	(%)	(%)	(%)	(%)	(%)	No.	(%)	(%)	(%)	No.	(%)	(%)	(%)	(%)
United States	4821	(28.9)	(55.4)	(10.5)	(5.2)	(5.2)	7964	(26.9)	(51.2)	(14.3)	(7.7)	4402	(46.2)	(23.5)	(7.8)
Alabama	42	(21.4)	(78.6)	(0.0)	(0.0)	(0.0)	96	(8.3)	(89.6)	(1.0)	(1.0)	44	(25.0)	(63.6)	(9.1)
Alaska	40	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)	58	(0.0)	(100.0)	(0.0)	(0.0)	16	(0.0)	(100.0)	(0.0)
Arizona	91	(26.4)	(72.5)	(1.1)	(0.0)	(0.0)	166	(19.3)	(75.9)	(4.2)	(0.6)	77	(51.9)	(33.8)	(14.3)
Arkansas	59	(8.5)	(83.1)	(8.5)	(0.0)	(0.0)	68	(2.9)	(92.6)	(4.4)	(0.0)	24	(4.2)	(45.8)	(45.8)
California	1135	(37.2)	(52.5)	(8.5)	(1.8)	(1.8)	1889	(40.8)	(45.1)	(12.6)	(1.5)	956	(57.0)	(23.5)	(17.7)
Colorado	38	(10.5)	(28.9)	(34.2)	(26.3)	(26.3)	59	(8.5)	(28.8)	(25.4)	(37.3)	44	(9.1)	(4.5)	(47.7)
Connecticut	24	(70.8)	(29.2)	(0.0)	(0.0)	(0.0)	47	(42.6)	(57.4)	(0.0)	(0.0)	38	(52.6)	(47.4)	(0.0)
Delaware	7	(14.3)	(85.7)	(0.0)	(0.0)	(0.0)	10	(10.0)	(20.0)	(70.0)	(0.0)	8	(37.5)	(12.5)	(50.0)
District of Columbia	10	(80.0)	(20.0)	(0.0)	(0.0)	(0.0)	31	(93.5)	(3.2)	(3.2)	(0.0)	22	(95.5)	(0.0)	(4.5)
Florida	485	(12.8)	(82.3)	(4.9)	(0.0)	(0.0)	563	(16.0)	(81.2)	(2.8)	(0.0)	260	(44.6)	(47.3)	(8.1)
Georgia	175	(32.6)	(61.7)	(4.0)	(1.7)	(1.7)	286	(23.1)	(61.9)	(14.7)	(0.3)	140	(72.9)	(22.9)	(0.0)
Hawaii	45	(93.3)	(0.0)	(4.4)	(2.2)	(2.2)	103	(95.1)	(0.0)	(2.9)	(1.9)	41	(87.8)	(0.0)	(12.2)
Idaho	9	(44.4)	(55.6)	(0.0)	(0.0)	(0.0)	8	(25.0)	(62.5)	(12.5)	(0.0)	8	(37.5)	(50.0)	(12.5)
Illinois	144	(47.2)	(41.7)	(9.7)	(1.4)	(1.4)	258	(28.7)	(39.1)	(31.0)	(1.2)	169	(57.4)	(9.5)	(32.5)
Indiana	54	(16.7)	(72.2)	(11.1)	(0.0)	(0.0)	67	(16.4)	(71.6)	(11.9)	(0.0)	43	(48.8)	(9.3)	(41.9)
Iowa	34	(11.8)	(88.2)	(0.0)	(0.0)	(0.0)	33	(9.1)	(90.9)	(0.0)	(0.0)	21	(38.1)	(61.9)	(0.0)
Kansas	18	(33.3)	(55.6)	(5.6)	(5.6)	(5.6)	29	(24.1)	(75.9)	(0.0)	(0.0)	22	(45.5)	(45.5)	(4.5)
Kentucky	35	(22.9)	(77.1)	(0.0)	(0.0)	(0.0)	56	(7.1)	(85.7)	(7.1)	(0.0)	33	(39.4)	(39.4)	(21.2)
Louisiana	31	(19.4)	(51.6)	(12.9)	(16.1)	(16.1)	111	(43.2)	(45.9)	(9.0)	(1.8)	46	(65.2)	(8.7)	(26.1)
Maine	10	(10.0)	(90.0)	(0.0)	(0.0)	(0.0)	7	(0.0)	(100.0)	(0.0)	(0.0)	9	(0.0)	(100.0)	(0.0)
Maryland	101	(34.7)	(56.4)	(7.9)	(1.0)	(1.0)	160	(13.8)	(78.8)	(6.9)	(0.6)	97	(47.4)	(29.9)	(22.7)
Massachusetts	110	(5.5)	(62.7)	(0.0)	(31.8)	(31.8)	146	(26.7)	(39.7)	(0.0)	(33.6)	111	(45.0)	(29.7)	(0.0)
Michigan	66	(4.5)	(57.6)	(19.7)	(18.2)	(18.2)	88	(0.0)	(100.0)	(0.0)	(0.0)	60	(11.7)	(48.3)	(33.3)
Minnesota	51	(54.9)	(45.1)	(0.0)	(0.0)	(0.0)	105	(53.3)	(46.7)	(0.0)	(0.0)	90	(57.8)	(42.2)	(0.0)
Mississippi	50	(2.0)	(0.0)	(70.0)	(28.0)	(28.0)	60	(1.7)	(0.0)	(66.7)	(31.7)	26	(7.7)	(0.0)	(65.4)
Missouri	34	(26.5)	(70.6)	(0.0)	(2.9)	(2.9)	81	(18.5)	(79.0)	(0.0)	(2.5)	50	(60.0)	(32.0)	(0.0)
Montana	4	(25.0)	(75.0)	(0.0)	(0.0)	(0.0)	5	(0.0)	(100.0)	(0.0)	(0.0)	6	(0.0)	(83.3)	(16.7)
Nebraska	13	(23.1)	(61.5)	(15.4)	(0.0)	(0.0)	18	(11.1)	(61.1)	(27.8)	(0.0)	6	(0.0)	(50.0)	(33.3)
Nevada	44	(15.9)	(84.1)	(0.0)	(0.0)	(0.0)	74	(25.7)	(73.0)	(1.4)	(0.0)	24	(62.5)	(37.5)	(0.0)
New Hampshire	7	(57.1)	(42.9)	(0.0)	(0.0)	(0.0)	7	(57.1)	(28.6)	(0.0)	(14.3)	10	(60.0)	(40.0)	(0.0)
New Jersey	110	(64.5)	(5.5)	(30.0)	(0.0)	(0.0)	252	(27.4)	(33.7)	(38.5)	(0.4)	193	(38.9)	(5.2)	(56.0)
New Mexico	18	(61.1)	(38.9)	(0.0)	(0.0)	(0.0)	41	(65.9)	(34.1)	(0.0)	(0.0)	17	(100.0)	(0.0)	(0.0)

Table 52. (Con't) Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2013

Reporting Area	Nucleic Acid Amplification Test					Sputum Culture					Culture of Tissue or Other Fluids				
	Total ¹		Public		Missing	Commercial		Public	Other	Missing	Commercial		Public	Other	Missing
	No.	(%)	(%)	(%)	(%)	Lab	(%)	Health Lab	Lab	(%)	Lab	(%)	Health Lab	Lab	(%)
New York State ⁴	137	(25.5)	(41.6)	(5.8)	(27.0)		(29.1)	(30.7)	(7.8)	(32.4)		(38.7)	(23.5)	(7.6)	(30.3)
New York City	356	(9.6)	(52.0)	(23.9)	(14.6)		(7.1)	(9.0)	(42.9)	(41.0)		(6.3)	(7.6)	(49.8)	(36.3)
North Carolina	89	(42.7)	(57.3)	(0.0)	(0.0)		(19.2)	(72.3)	(8.5)	(0.0)		(54.2)	(15.9)	(29.9)	(0.0)
North Dakota	3	(0.0)	(0.0)	(0.0)	(100.0)		(33.3)	(33.3)	(0.0)	(33.3)		(60.0)	(0.0)	(0.0)	(40.0)
Ohio	69	(85.5)	(14.5)	(0.0)	(0.0)		(83.1)	(16.9)	(0.0)	(0.0)		(95.9)	(4.1)	(0.0)	(0.0)
Oklahoma	40	(7.5)	(92.5)	(0.0)	(0.0)		(4.2)	(95.8)	(0.0)	(0.0)		(41.4)	(58.6)	(0.0)	(0.0)
Oregon	47	(4.3)	(68.1)	(27.7)	(0.0)		(13.8)	(65.5)	(20.7)	(0.0)		(19.6)	(23.9)	(56.5)	(0.0)
Pennsylvania	58	(24.1)	(29.3)	(8.6)	(37.9)		(19.3)	(37.3)	(4.7)	(38.7)		(29.1)	(9.1)	(10.0)	(51.8)
Rhode Island	7	(0.0)	(100.0)	(0.0)	(0.0)		(0.0)	(89.5)	(5.3)	(5.3)		(5.6)	(77.8)	(11.1)	(5.6)
South Carolina	56	(30.4)	(62.5)	(7.1)	(0.0)		(12.7)	(69.6)	(17.7)	(0.0)		(33.3)	(29.8)	(36.8)	(0.0)
South Dakota	5	(0.0)	(100.0)	(0.0)	(0.0)		(0.0)	(85.7)	(14.3)	(0.0)		(0.0)	(66.7)	(33.3)	(0.0)
Tennessee	78	(46.2)	(43.6)	(9.0)	(1.3)		(22.5)	(71.3)	(6.2)	(0.0)		(64.8)	(18.5)	(16.7)	(0.0)
Texas	554	(26.5)	(47.8)	(21.1)	(4.5)		(14.7)	(53.0)	(21.4)	(10.8)		(34.5)	(18.6)	(39.3)	(7.6)
Utah	12	(41.7)	(58.3)	(0.0)	(0.0)		(48.1)	(51.9)	(0.0)	(0.0)		(94.4)	(5.6)	(0.0)	(0.0)
Vermont	2	(0.0)	(100.0)	(0.0)	(0.0)		(33.3)	(66.7)	(0.0)	(0.0)		(100.0)	(0.0)	(0.0)	(0.0)
Virginia	35	(40.0)	(54.3)	(5.7)	(0.0)		(21.9)	(70.4)	(4.7)	(3.0)		(40.0)	(43.5)	(12.9)	(3.5)
Washington	131	(37.4)	(61.8)	(0.0)	(0.8)		(54.7)	(39.7)	(0.6)	(5.0)		(88.4)	(6.3)	(2.1)	(3.2)
West Virginia	6	(16.7)	(83.3)	(0.0)	(0.0)		(25.0)	(62.5)	(12.5)	(0.0)		(85.7)	(14.3)	(0.0)	(0.0)
Wisconsin	42	(11.9)	(81.0)	(0.0)	(7.1)		(17.9)	(79.5)	(2.6)	(0.0)		(43.5)	(56.5)	(0.0)	(0.0)
Wyoming	0	...	...	...	...		...	...	...	...		...	...	...	...
American Samoa ⁵	0	...	...	...	...		(50.0)	(50.0)	(0.0)	(0.0)		...	...	...	...
Fed. States of Micronesia ⁵	42	(100.0)	(0.0)	(0.0)	(0.0)		(100.0)	(0.0)	(0.0)	(0.0)		(100.0)	(0.0)	(0.0)	(0.0)
Guam ⁵	6	(100.0)	(0.0)	(0.0)	(0.0)		(96.6)	(0.0)	(3.4)	(0.0)		(88.9)	(0.0)	(11.1)	(0.0)
Marshall Islands ⁵	6	(100.0)	(0.0)	(0.0)	(0.0)		(100.0)	(0.0)	(0.0)	(0.0)		...	...	...	...
N. Mariana Islands ⁵	0	...	...	...	...		(100.0)	(0.0)	(0.0)	(0.0)		...	...	...	...
Puerto Rico ⁵	20	(0.0)	(100.0)	(0.0)	(0.0)		(11.1)	(84.4)	(4.4)	(0.0)		(23.5)	(64.7)	(11.8)	(0.0)
Republic of Palau ⁵	0	...	...	...	...		(100.0)	(0.0)	(0.0)	(0.0)		...	...	...	...
U.S. Virgin Islands ⁵	1	(0.0)	(100.0)	(0.0)	(0.0)		(0.0)	(100.0)	(0.0)	(0.0)		...	...	...	...

¹ Number of patients with positive or negative NAA test results.

² Number of patients with positive or negative sputum culture test results.

³ Number of patients with positive or negative culture of tissue and other body fluid test results.

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Table 53. Tuberculosis Genotyping Surveillance Coverage¹: Reporting Areas, 2013

Reporting Area	Total Cases	Culture Positive Cases	Genotyped Cases	Genotype Surveillance Coverage ²
		No.	No.	(%)
United States	9,582	7,358	6,957	94.6
Alabama	108	83	82	98.8
Alaska	71	55	52	94.5
Arizona	184	154	152	98.7
Arkansas	72	52	51	98.1
California	2171	1,759	1,664	94.6
Colorado	74	48	48	100.0
Connecticut	62	51	50	98.0
District of Columbia	38	26	19	73.1
Delaware	19	13	9	69.2
Florida	652	514	512	99.6
Georgia	340	235	227	96.6
Hawaii	115	92	88	95.7
Idaho	11	9	9	100.0
Illinois	327	240	193	80.4
Indiana	94	73	73	100.0
Iowa	47	36	33	91.7
Kansas	36	32	29	90.6
Kentucky	59	47	47	100.0
Louisiana	139	117	65	55.6
Maine	15	8	7	87.5
Maryland	176	123	119	96.7
Massachusetts	201	153	143	93.5
Michigan	141	98	95	96.9
Minnesota	151	116	116	100.0
Mississippi	65	49	46	93.9
Missouri	104	72	69	95.8
Montana	6	6	5	83.3
Nebraska	21	14	13	92.9
Nevada	92	63	62	98.4
New Hampshire	15	15	15	100.0
New Jersey	319	256	255	99.6
New Mexico	50	39	39	100.0
New York	872	629	574	91.2
North Carolina	216	164	158	96.3
North Dakota	12	6	6	100.0
Ohio	148	119	116	97.5
Oklahoma	69	49	47	95.9
Oregon	73	55	55	100.0
Pennsylvania	214	168	159	94.6
Rhode Island	27	13	13	100.0
South Carolina	112	79	75	94.9
South Dakota	9	6	6	100.0
Tennessee	142	102	97	95.1
Texas	1222	921	884	96.0
Utah	33	24	24	100.0
Vermont	5	3	3	100.0
Virginia	180	139	133	95.7
Washington	210	177	167	94.4
West Virginia	13	12	11	91.7
Wisconsin	50	44	42	95.5
Wyoming	0	0	0	0.0
American Samoa ³	2	2	1	100.0
Fed State of Micronesia ³	130	57	54	94.7
Guam ³	48	25	4	16.0
Marshall Islands ³	153	64	59	92.2
N. Mariana Islands ³	16	15	13	86.7
Puerto Rico ³	50	45	41	91.1
Republic of Palau ³	6	6	4	66.7
U.S. Virgin Islands ³	2	2	0	0.0

¹ Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

² National TB Performance Indicator goal for national TB genotyping surveillance coverage is 94%.

³ Not included in U.S. totals.

See Technical Notes.

Table 54. County-based Tuberculosis Genotype Clusters¹ Based on GENType: Reporting Areas, 2011–2013

Reporting Area	Genotyped Cases	Genotype Surveillance Coverage ²	Clusters	Clustered Cases	Cluster Size	
	No.	(%)	No.	No.	Median	(Range)
United States	21,777	94.4	1,532	4,625	2	(2-70)
Alabama	306	98.7	34	99	2	(2-8)
Alaska	162	97.0	16	104	5	(2-16)
Arizona	507	98.8	36	94	2	(2-6)
Arkansas	146	98.6	6	22	4	(2-5)
California	5,012	93.5	423	1,292	2	(2-49)
Colorado	147	100.0	6	12	2	(2-2)
Connecticut	174	99.4	6	16	2	(2-4)
District of Columbia	79	79.0	5	13	3	(2-3)
Delaware	41	82.0	1	2	2	(2-2)
Florida	1,643	99.0	136	407	2	(2-70)
Georgia	713	98.5	64	181	2	(2-10)
Hawaii	248	96.5	19	56	2	(2-8)
Idaho	29	100.0	2	4	2	(2-2)
Illinois	637	83.8	45	128	2	(2-19)
Indiana	221	98.2	8	32	2	(2-11)
Iowa	92	92.0	2	4	2	(2-2)
Kansas	97	89.8	2	4	2	(2-2)
Kentucky	156	98.1	9	20	2	(2-3)
Louisiana	228	60.5	29	74	2	(2-4)
Maine	29	96.7	1	2	2	(2-2)
Maryland	443	98.4	15	36	2	(2-7)
Massachusetts	417	92.7	15	34	2	(2-4)
Michigan	317	97.8	14	52	2	(2-14)
Minnesota	338	99.1	16	44	2	(2-6)
Mississippi	177	97.8	10	33	3	(2-10)
Missouri	204	95.8	15	42	2	(2-5)
Montana	13	86.7	...	...	...	...
Nebraska	44	95.7	2	4	2	(2-2)
Nevada	182	96.3	11	26	2	(2-5)
New Hampshire	29	87.9	1	3	3	(3-3)
New Jersey	739	98.5	30	74	2	(2-8)
New Mexico	117	97.5	3	6	2	(2-2)
New York	1,832	94.0	110	282	2	(2-8)
North Carolina	498	96.3	41	117	2	(2-14)
North Dakota	23	95.8	1	9	9	(9-9)
Ohio	332	98.5	13	42	3	(2-6)
Oklahoma	177	95.2	20	48	2	(2-4)
Oregon	163	100.0	8	21	2	(2-5)
Pennsylvania	477	85.8	18	47	2	(2-5)
Rhode Island	52	100.0	3	7	2	(2-3)
South Carolina	237	87.8	20	63	2	(2-10)
South Dakota	26	100.0	1	2	2	(2-2)
Tennessee	309	95.4	18	70	2	(2-14)
Texas	2,731	95.2	231	828	2	(2-47)
Utah	76	100.0	4	8	2	(2-2)
Vermont	12	100.0	...	...	...	...
Virginia	471	96.5	21	52	2	(2-5)
Washington	480	95.8	27	70	2	(2-7)
West Virginia	30	93.8	1	2	2	(2-2)
Wisconsin	158	98.1	13	37	2	(2-8)
Wyoming	6	85.7	...	...	...	...

¹ Clusters are two or more cases with matching spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENType) within a county during the specified 3-year time period (Total number of clusters from 2011–2013=1,532)

² Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

Note: Ellipses indicate data not available.

See Technical Notes.

Morbidity Tables Reporting Areas, 2011

Table 55. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2011¹

Reporting Area	Total Cases	Cases in Persons Alive at Diagnosis	Cases with Information on Type of Health Care Provider		Percentage of Cases by Type of Health Care Provider ²		
			No.	(%)	Health Department	Private/Other	Both Health Dep't. and Private/Other
United States	10,509	10,264	10,063	(98.0)	(67.1)	(25.2)	(7.7)
Alabama	161	156	155	(99.4)	(85.8)	(9.7)	(4.5)
Alaska	67	65	65	(100.0)	(50.8)	(27.7)	(21.5)
Arizona	255	246	242	(98.4)	(60.3)	(29.8)	(9.9)
Arkansas	85	82	82	(100.0)	(81.7)	(17.1)	(1.2)
California	2,323	2,274	2,253	(99.1)	(54.5)	(37.2)	(8.3)
Colorado	70	68	67	(98.5)	(98.5)	(1.5)	(0.0)
Connecticut	83	81	81	(100.0)	(25.9)	(49.4)	(24.7)
Delaware	21	21	20	(95.2)	(85.0)	(15.0)	(0.0)
District of Columbia	55	55	47	(85.5)	(83.0)	(17.0)	(0.0)
Florida	754	737	731	(99.2)	(66.2)	(31.3)	(2.5)
Georgia	347	332	315	(94.9)	(79.7)	(17.1)	(3.2)
Hawaii	123	122	122	(100.0)	(69.7)	(28.7)	(1.6)
Idaho	12	12	12	(100.0)	(58.3)	(33.3)	(8.3)
Illinois	358	350	346	(98.9)	(38.7)	(16.2)	(45.1)
Indiana	100	98	98	(100.0)	(88.8)	(5.1)	(6.1)
Iowa	40	40	39	(97.5)	(5.1)	(94.9)	(0.0)
Kansas	36	34	30	(88.2)	(96.7)	(0.0)	(3.3)
Kentucky	70	69	66	(95.7)	(75.8)	(22.7)	(1.5)
Louisiana	167	164	155	(94.5)	(81.3)	(12.9)	(5.8)
Maine	9	8	8	(100.0)	(12.5)	(87.5)	(0.0)
Maryland	232	227	226	(99.6)	(89.8)	(9.7)	(0.4)
Massachusetts	195	190	170	(89.5)	(77.6)	(15.9)	(6.5)
Michigan	170	168	155	(92.3)	(78.1)	(21.9)	(0.0)
Minnesota	137	133	133	(100.0)	(59.4)	(38.3)	(2.3)
Mississippi	91	89	89	(100.0)	(94.4)	(3.4)	(2.2)
Missouri	97	94	88	(93.6)	(83.0)	(17.0)	(0.0)
Montana	8	8	6	(75.0)	(33.3)	(66.7)	(0.0)
Nebraska	23	23	22	(95.7)	(50.0)	(50.0)	(0.0)
Nevada	96	94	75	(79.8)	(90.7)	(9.3)	(0.0)
New Hampshire	11	11	10	(90.9)	(30.0)	(70.0)	(0.0)
New Jersey	331	322	322	(100.0)	(77.3)	(21.4)	(1.2)
New Mexico	49	46	44	(95.7)	(68.2)	(31.8)	(0.0)
New York State ³	221	218	218	(100.0)	(66.5)	(29.4)	(4.1)
New York City	684	669	668	(99.9)	(29.6)	(49.9)	(20.5)
North Carolina	244	235	235	(100.0)	(75.7)	(5.1)	(19.1)
North Dakota	7	7	4	(57.1)	--	--	--
Ohio	145	143	130	(90.9)	(81.5)	(16.2)	(2.3)
Oklahoma	94	89	89	(100.0)	(77.5)	(7.9)	(14.6)
Oregon	74	74	74	(100.0)	(47.3)	(27.0)	(25.7)
Pennsylvania	260	252	250	(99.2)	(84.4)	(14.0)	(1.6)
Rhode Island	27	27	26	(96.3)	(96.2)	(3.8)	(0.0)
South Carolina	140	134	133	(99.3)	(88.0)	(12.0)	(0.0)
South Dakota	15	15	15	(100.0)	(26.7)	(73.3)	(0.0)
Tennessee	156	149	137	(91.9)	(87.6)	(11.7)	(0.7)
Texas	1,317	1,292	1,283	(99.3)	(83.4)	(12.5)	(4.1)
Utah	34	34	34	(100.0)	(88.2)	(11.8)	(0.0)
Vermont	8	8	8	(100.0)	(87.5)	(12.5)	(0.0)
Virginia	221	219	219	(100.0)	(79.0)	(20.1)	(0.9)
Washington	199	195	189	(96.9)	(68.8)	(28.0)	(3.2)
West Virginia	13	12	11	(91.7)	(90.9)	(9.1)	(0.0)
Wisconsin	70	69	64	(92.8)	(90.6)	(3.1)	(6.3)
Wyoming	4	4	2	(50.0)	--	--	--
American Samoa ⁴	3	3	1	(33.3)	--	--	--
Fed. States of Micronesia ⁴	142	142	136	(95.8)	(100.0)	(0.0)	(0.0)
Guam ⁴	80	80	79	(98.8)	(98.7)	(0.0)	(1.3)
Marshall Islands ⁴	148	148	39	(26.4)	--	--	--
N. Mariana Islands ⁴	31	31	31	(100.0)	(100.0)	(0.0)	(0.0)
Puerto Rico ⁴	50	47	47	(100.0)	(76.6)	(21.3)	(2.1)
Republic of Palau ⁴	8	8	2	(25.0)	--	--	--
U.S. Virgin Islands ⁴	...	...	0	...	...	...	...

¹ Most recent year for which data are available.

² Health Department: All outpatient care provided by the state or local health department; Private/Other: All care (except contact investigation and dispensing of medication) provided by non-health department providers; Both Health Department and Private/Other: Both sectors involved in the care of the patient. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for $\geq 75\%$ of cases.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 56. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2011¹

Reporting Area	Total Cases	Cases with Initial Drug Regimen Prescribed ²	Cases with Information on Directly Observed Therapy		Percentage of Cases by Directly Observed Therapy ³	
			No.	(%)	DOT Only	Both DOT and Self-Administered
United States	10,509	10,203	9,855	(96.6)	(62.0)	(29.3)
Alabama	161	156	155	(99.4)	(45.2)	(54.2)
Alaska	67	64	56	(87.5)	(100.0)	(0.0)
Arizona	255	240	237	(98.8)	(74.7)	(20.7)
Arkansas	85	82	82	(100.0)	(29.3)	(29.3)
California	2,323	2,260	2,238	(99.0)	(49.6)	(38.5)
Colorado	70	68	68	(100.0)	(86.8)	(8.8)
Connecticut	83	81	81	(100.0)	(24.7)	(55.6)
Delaware	21	21	21	(100.0)	(28.6)	(61.9)
District of Columbia	55	54	42	(77.8)	(73.8)	(21.4)
Florida	754	736	734	(99.7)	(34.1)	(61.7)
Georgia	347	331	324	(97.9)	(85.2)	(11.4)
Hawaii	123	122	122	(100.0)	(53.3)	(38.5)
Idaho	12	12	12	(100.0)	(41.7)	(41.7)
Illinois	358	346	343	(99.1)	(40.8)	(44.9)
Indiana	100	98	98	(100.0)	(88.8)	(10.2)
Iowa	40	40	39	(97.5)	(66.7)	(25.6)
Kansas	36	34	34	(100.0)	(85.3)	(14.7)
Kentucky	70	69	69	(100.0)	(82.6)	(13.0)
Louisiana	167	161	157	(97.5)	(49.0)	(31.8)
Maine	9	8	8	(100.0)	(0.0)	(100.0)
Maryland	232	226	225	(99.6)	(80.4)	(17.3)
Massachusetts	195	190	189	(99.5)	(43.4)	(38.6)
Michigan	170	167	158	(94.6)	(63.9)	(36.1)
Minnesota	137	133	133	(100.0)	(85.7)	(14.3)
Mississippi	91	89	89	(100.0)	(82.0)	(18.0)
Missouri	97	92	91	(98.9)	(47.3)	(49.5)
Montana	8	8	8	(100.0)	(37.5)	(12.5)
Nebraska	23	23	22	(95.7)	(50.0)	(45.5)
Nevada	96	93	78	(83.9)	(92.3)	(6.4)
New Hampshire	11	11	11	(100.0)	(54.5)	(45.5)
New Jersey	331	318	318	(100.0)	(45.3)	(31.4)
New Mexico	49	46	45	(97.8)	(100.0)	(0.0)
New York State ⁴	221	218	217	(99.5)	(23.0)	(73.3)
New York City	684	665	445	(66.9)	--	--
North Carolina	244	235	235	(100.0)	(95.3)	(4.7)
North Dakota	7	7	7	(100.0)	(57.1)	(42.9)
Ohio	145	141	140	(99.3)	(74.3)	(18.6)
Oklahoma	94	89	89	(100.0)	(59.6)	(39.3)
Oregon	74	74	74	(100.0)	(89.2)	(9.5)
Pennsylvania	260	251	251	(100.0)	(70.5)	(20.3)
Rhode Island	27	27	27	(100.0)	(18.5)	(81.5)
South Carolina	140	134	134	(100.0)	(94.0)	(5.2)
South Dakota	15	15	15	(100.0)	(46.7)	(46.7)
Tennessee	156	149	147	(98.7)	(94.6)	(5.4)
Texas	1,317	1,280	1,272	(99.4)	(84.5)	(13.9)
Utah	34	34	34	(100.0)	(79.4)	(20.6)
Vermont	8	8	8	(100.0)	(62.5)	(12.5)
Virginia	221	217	207	(95.4)	(90.8)	(7.2)
Washington	199	195	185	(94.9)	(60.0)	(15.1)
West Virginia	13	12	12	(100.0)	(83.3)	(16.7)
Wisconsin	70	69	66	(95.7)	(40.9)	(57.6)
Wyoming	4	4	3	(75.0)	(0.0)	(66.7)
American Samoa ⁵	3	3	3	(100.0)	(66.7)	(33.3)
Fed. States of Micronesia ⁵	142	142	138	(97.2)	(87.0)	(10.9)
Guam ⁵	80	78	76	(97.4)	(98.7)	(1.3)
Marshall Islands ⁵	148	148	39	(26.4)	--	--
N. Mariana Islands ⁵	31	31	28	(90.3)	(96.4)	(3.6)
Puerto Rico ⁵	50	47	47	(100.0)	(74.5)	(2.1)
Republic of Palau ⁵	8	8	2	(25.0)	--	--
U.S. Virgin Islands ⁵	...	...	...	...	...	...

¹ Most recent year for which data are available.

² Includes persons alive at diagnosis with an initial drug regimen of one or more drugs prescribed.

³ Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for $\geq 75\%$ of cases.

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Ellipses indicate data not available.

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Table 57. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2011¹

Reporting Area	Cases with Initial Drug Regimen Prescribed ²	Completed Therapy		Did Not Complete Therapy									
		Adverse Event		Lost		Refused		Died ³		Unknown ⁴			
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)		
United States	10,203	8,912	(87.3)	28	(0.3)	124	(1.2)	68	(0.7)	684	(6.7)	387	(3.8)
Alabama	156	142	(91.0)	0	(0.0)	1	(0.6)	1	(0.6)	10	(6.4)	2	(1.3)
Alaska	64	38	(59.4)	0	(0.0)	1	(1.6)	0	(0.0)	6	(9.4)	19	(29.7)
Arizona	240	199	(82.9)	1	(0.4)	4	(1.7)	1	(0.4)	15	(6.3)	20	(8.3)
Arkansas	82	61	(74.4)	1	(1.2)	1	(1.2)	3	(3.7)	12	(14.6)	4	(4.9)
California	2,260	1,946	(86.1)	7	(0.3)	20	(0.9)	18	(0.8)	170	(7.5)	99	(4.4)
Colorado	68	62	(91.2)	0	(0.0)	2	(2.9)	0	(0.0)	3	(4.4)	1	(1.5)
Connecticut	81	75	(92.6)	0	(0.0)	0	(0.0)	0	(0.0)	6	(7.4)	0	(0.0)
Delaware	21	21	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
District of Columbia	54	47	(87.0)	0	(0.0)	1	(1.9)	0	(0.0)	3	(5.6)	3	(5.6)
Florida	736	654	(88.9)	0	(0.0)	7	(1.0)	1	(0.1)	56	(7.6)	18	(2.4)
Georgia	331	291	(87.9)	2	(0.6)	11	(3.3)	0	(0.0)	16	(4.8)	11	(3.3)
Hawaii	122	114	(93.4)	0	(0.0)	1	(0.8)	0	(0.0)	6	(4.9)	1	(0.8)
Idaho	12	11	(91.7)	1	(8.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	346	311	(89.9)	0	(0.0)	4	(1.2)	2	(0.6)	23	(6.6)	6	(1.7)
Indiana	98	89	(90.8)	1	(1.0)	1	(1.0)	1	(1.0)	4	(4.1)	2	(2.0)
Iowa	40	36	(90.0)	0	(0.0)	2	(5.0)	0	(0.0)	0	(0.0)	2	(5.0)
Kansas	34	32	(94.1)	0	(0.0)	0	(0.0)	0	(0.0)	2	(5.9)	0	(0.0)
Kentucky	69	58	(84.1)	0	(0.0)	1	(1.4)	1	(1.4)	8	(11.6)	1	(1.4)
Louisiana	161	137	(85.1)	2	(1.2)	7	(4.3)	1	(0.6)	10	(6.2)	4	(2.5)
Maine	8	5	(62.5)	1	(12.5)	0	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)
Maryland	226	207	(91.6)	1	(0.4)	3	(1.3)	0	(0.0)	11	(4.9)	4	(1.8)
Massachusetts	190	165	(86.8)	0	(0.0)	0	(0.0)	1	(0.5)	11	(5.8)	13	(6.8)
Michigan	167	144	(86.2)	0	(0.0)	6	(3.6)	3	(1.8)	8	(4.8)	6	(3.6)
Minnesota	133	114	(85.7)	0	(0.0)	0	(0.0)	3	(2.3)	6	(4.5)	10	(7.5)
Mississippi	89	73	(82.0)	0	(0.0)	0	(0.0)	0	(0.0)	13	(14.6)	3	(3.4)
Missouri	92	83	(90.2)	0	(0.0)	2	(2.2)	2	(2.2)	4	(4.3)	1	(1.1)
Montana	8	7	(87.5)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)
Nebraska	23	19	(82.6)	0	(0.0)	1	(4.3)	0	(0.0)	1	(4.3)	2	(8.7)
Nevada	93	73	(78.5)	0	(0.0)	0	(0.0)	0	(0.0)	6	(6.5)	14	(15.1)
New Hampshire	11	10	(90.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(9.1)	0	(0.0)
New Jersey	318	278	(87.4)	1	(0.3)	4	(1.3)	1	(0.3)	24	(7.5)	10	(3.1)
New Mexico	46	38	(82.6)	0	(0.0)	0	(0.0)	1	(2.2)	4	(8.7)	3	(6.5)

Table 57. (Con't) Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2011¹

Reporting Area	Cases with Initial Drug Regimen Prescribed ²	Completed Therapy		Did Not Complete Therapy						Died ³		Unknown ⁴	
		Adverse Event		Lost		Refused		Died ³		Unknown ⁴		Unknown ⁴	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State ⁵	218	197	(90.4)	0	(0.0)	2	(0.9)	15	(6.9)	4	(1.8)		
New York City	665	596	(89.6)	3	(0.5)	7	(1.1)	4	(0.6)	15	(2.3)		
North Carolina	235	218	(92.8)	0	(0.0)	1	(0.4)	0	(0.0)	2	(0.9)		
North Dakota	7	4	(57.1)	0	(0.0)	0	(0.0)	0	(0.0)	3	(42.9)		
Ohio	141	121	(85.8)	1	(0.7)	4	(2.8)	2	(1.4)	4	(2.8)		
Oklahoma	89	84	(94.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)		
Oregon	74	68	(91.9)	0	(0.0)	0	(0.0)	2	(2.7)	4	(5.4)	0	(0.0)
Pennsylvania	251	216	(86.1)	1	(0.4)	3	(1.2)	2	(0.8)	6	(2.4)		
Rhode Island	27	24	(88.9)	0	(0.0)	0	(0.0)	2	(7.4)	1	(3.7)	0	(0.0)
South Carolina	134	115	(85.8)	0	(0.0)	0	(0.0)	3	(2.2)	15	(11.2)	1	(0.7)
South Dakota	15	13	(86.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	1	(6.7)
Tennessee	149	134	(89.9)	2	(1.3)	0	(0.0)	0	(0.0)	10	(6.7)	3	(2.0)
Texas	1,280	1,110	(86.7)	2	(0.2)	27	(2.1)	8	(0.6)	74	(5.8)	59	(4.6)
Utah	34	32	(94.1)	0	(0.0)	0	(0.0)	0	(0.0)	2	(5.9)	0	(0.0)
Vermont	8	6	(75.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)
Virginia	217	194	(89.4)	1	(0.5)	1	(0.5)	1	(0.5)	13	(6.0)	7	(3.2)
Washington	195	164	(84.1)	0	(0.0)	0	(0.0)	2	(1.0)	15	(7.7)	14	(7.2)
West Virginia	12	10	(83.3)	0	(0.0)	0	(0.0)	0	(0.0)	2	(16.7)	0	(0.0)
Wisconsin	69	64	(92.8)	0	(0.0)	1	(1.4)	0	(0.0)	0	(0.0)	4	(5.8)
Wyoming	4	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(50.0)
American Samoa ⁶	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
Fed. States of Micronesia ⁶	142	125	(88.0)	2	(1.4)	0	(0.0)	3	(2.1)	5	(3.5)	7	(4.9)
Guam ⁶	78	71	(91.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(6.4)	2	(2.6)
Marshall Islands ⁶	148	31	(20.9)	0	(0.0)	2	(1.4)	1	(0.7)	3	(2.0)	111	(75.0)
N. Mariana Islands ⁶	31	25	(80.6)	0	(0.0)	0	(0.0)	1	(3.2)	1	(3.2)	4	(12.9)
Puerto Rico ⁶	47	36	(76.6)	0	(0.0)	0	(0.0)	1	(2.1)	10	(21.3)	0	(0.0)
Republic of Palau ⁶	8	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(100.0)
U.S. Virgin Islands ⁶	...	...	...	...	...	...	...	...	...	...	...	...	...

¹Most recent year for which data are available.

²Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia).

³ Died = Died of any cause.

⁴ Includes cases reported as Other, Missing, or Unknown.

⁵ Excludes New York City.

⁶ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 58. Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2011¹

Reporting Area	Total Cases with Therapy Extended ^{2,3}	Reasons Therapy Was Extended											
		Rifampin Resistant		Adverse Event		Non-adherence		Failure		Clinically Indicated		Other	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	733	72	(9.8)	163	(22.2)	121	(16.5)	7	(1.0)	310	(42.3)	192	(26.2)
Alabama	9	0	(0.0)	0	(0.0)	2	(22.2)	0	(0.0)	4	(44.4)	3	(33.3)
Alaska	6	3	(50.0)	2	(33.3)	2	(33.3)	0	(0.0)	2	(33.3)	1	(16.7)
Arizona	15	2	(13.3)	5	(33.3)	3	(20.0)	0	(0.0)	3	(20.0)	3	(20.0)
Arkansas	3	1	(33.3)	0	(0.0)	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)
California	232	24	(10.3)	65	(28.0)	30	(12.9)	1	(0.4)	94	(40.5)	66	(28.4)
Colorado	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Connecticut	8	1	(12.5)	3	(37.5)	1	(12.5)	0	(0.0)	4	(50.0)	6	(75.0)
Delaware	3	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	2	(66.7)
District of Columbia	5	0	(0.0)	3	(60.0)	3	(60.0)	0	(0.0)	0	(0.0)	1	(20.0)
Florida	59	2	(3.4)	5	(8.5)	12	(20.3)	0	(0.0)	34	(57.6)	10	(16.9)
Georgia	15	2	(13.3)	4	(26.7)	4	(26.7)	0	(0.0)	10	(66.7)	0	(0.0)
Hawaii	7	0	(0.0)	5	(71.4)	0	(0.0)	0	(0.0)	0	(0.0)	2	(28.6)
Idaho	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
Illinois	5	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(80.0)	1	(20.0)
Indiana	6	1	(16.7)	1	(16.7)	2	(33.3)	0	(0.0)	2	(33.3)	2	(33.3)
Iowa	5	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(100.0)	0	(0.0)
Kansas	2	0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
Kentucky	8	0	(0.0)	1	(12.5)	1	(12.5)	0	(0.0)	3	(37.5)	5	(62.5)
Louisiana	9	0	(0.0)	1	(11.1)	2	(22.2)	1	(11.1)	1	(11.1)	5	(55.6)
Maine	0	0	...	0	...	0	...	0	...	0	...	0	...
Maryland	11	1	(9.1)	3	(27.3)	2	(18.2)	1	(9.1)	5	(45.5)	2	(18.2)
Massachusetts	9	0	(0.0)	2	(22.2)	0	(0.0)	0	(0.0)	6	(66.7)	2	(22.2)
Michigan	2	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)
Minnesota	5	2	(40.0)	2	(40.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)
Mississippi	3	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)
Missouri	4	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)	2	(50.0)	0	(0.0)
Montana	0	0	...	0	...	0	...	0	...	0	...	0	...
Nebraska	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
Nevada	6	0	(0.0)	1	(16.7)	2	(33.3)	0	(0.0)	4	(66.7)	2	(33.3)
New Hampshire	0	0	...	0	...	0	...	0	...	0	...	0	...
New Jersey	19	6	(31.6)	4	(21.1)	3	(15.8)	0	(0.0)	3	(15.8)	3	(15.8)
New Mexico	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

Table 58. (Con't) Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2011¹

Reporting Area	Total Cases with Therapy Extended ^{2,3}	Reasons Therapy Was Extended									
		Rifampin Resistant		Adverse Event		Non-adherence		Failure		Clinically Indicated	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State ⁴	12	2	(16.7)	1	(8.3)	1	(8.3)	0	(0.0)	7	(58.3)
New York City	26	1	(3.8)	3	(11.5)	2	(7.7)	1	(3.8)	5	(19.2)
North Carolina	13	3	(23.1)	4	(30.8)	1	(7.7)	0	(0.0)	4	(30.8)
North Dakota	0	0	...	0	...	0	...	0	...	0	...
Ohio	6	0	(0.0)	2	(33.3)	3	(50.0)	0	(0.0)	2	(33.3)
Oklahoma	9	0	(0.0)	1	(11.1)	1	(11.1)	0	(0.0)	4	(44.4)
Oregon	6	1	(16.7)	0	(0.0)	1	(16.7)	1	(16.7)	2	(33.3)
Pennsylvania	30	3	(10.0)	13	(43.3)	7	(23.3)	0	(0.0)	13	(43.3)
Rhode Island	3	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	1	(33.3)
South Carolina	2	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)
South Dakota	0	0	...	0	...	0	...	0	...	0	...
Tennessee	5	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	5	(100.0)
Texas	125	8	(6.4)	13	(10.4)	24	(19.2)	0	(0.0)	70	(56.0)
Utah	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)
Vermont	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	17	2	(11.8)	7	(41.2)	0	(0.0)	0	(0.0)	2	(11.8)
Washington	9	2	(22.2)	0	(0.0)	3	(33.3)	1	(11.1)	1	(11.1)
West Virginia	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	5	2	(40.0)	1	(20.0)	1	(20.0)	0	(0.0)	1	(20.0)
Wyoming	0	0	...	0	...	0	...	0	...	0	...
American Samoa ⁵	0	0	...	0	...	0	...	0	...	0	...
Fed. States of Micronesia ⁵	3	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)
Guam ⁵	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Marshall Islands ⁵	0	0	...	0	...	0	...	0	...	0	...
N. Mariana Islands ⁵	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico ⁵	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Republic of Palau ⁵	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands ⁵	0	0	...	0	...	0	...	0	...	0	...

¹ Most recent year for which data are available.

² Among patients who were alive at diagnosis, started on treatment and had a duration of treatment greater than 365 days.

³ Patient may have more than 1 reason therapy was extended beyond 12 months (total reasons therapy extended may be greater than total patients with therapy extended).

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 59. Completion of Tuberculosis Therapy (COT) Cases and Percentages¹ by Hispanic Ethnicity and Non-Hispanic Race:
Reporting Areas, 2011²

Reporting Area		Total Cases ³		Non-Hispanic										Multiple Race		Unknown or Missing	
		Hispanic ⁴		American Indian or Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White					
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	8,499	2413	(89.1)	107	(78.5)	2514	(89.2)	1959	(90.1)	70	(84.3)	1313	(88.0)	111	(88.3)	12	(91.7)
Alabama	138	14	(92.9)	0	...	18	(94.4)	60	(93.3)	1	(100.0)	45	(93.3)	0	...	0	...
Alaska	53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arizona	166	76	(88.2)	13	(92.3)	33	(84.8)	17	(100.0)	0	...	27	(77.8)	0	...	0	...
Arkansas	67	5	(100.0)	1	(100.0)	8	(75.0)	26	(84.6)	5	(80.0)	22	(81.8)	0	...	0	...
California	1,876	682	(87.5)	3	(100.0)	825	(86.8)	117	(87.2)	22	(77.3)	153	(89.5)	73	(89.0)	1	(100.0)
Colorado	59	17	(94.1)	0	...	17	(100.0)	16	(100.0)	0	...	8	(87.5)	1	(100.0)	0	...
Connecticut	68	16	(87.5)	0	...	26	(100.0)	13	(92.3)	0	...	13	(92.3)	0	...	0	...
Delaware	17	1	(100.0)	0	...	5	(100.0)	8	(87.5)	0	...	3	(100.0)	0	...	0	...
District of Columbia	47	8	(87.5)	0	...	5	(100.0)	32	(75.0)	0	...	2	(100.0)	0	...	0	...
Florida	607	156	(93.6)	1	(100.0)	75	(94.7)	236	(92.8)	4	(100.0)	135	(91.1)	0	...	0	...
Georgia	277	49	(81.6)	0	...	53	(94.3)	134	(93.3)	0	...	41	(80.5)	0	...	0	...
Hawaii	110	1	(100.0)	0	...	88	(90.9)	1	(100.0)	19	(89.5)	0	...	1	(0.0)	0	...
Idaho	11	1	(100.0)	0	...	3	(66.7)	2	(100.0)	0	...	4	(75.0)	1	(100.0)	0	...
Illinois	280	82	(89.0)	0	...	87	(90.8)	67	(89.6)	0	...	44	(100.0)	0	...	0	...
Indiana	87	11	(90.9)	0	...	19	(100.0)	22	(81.8)	0	...	35	(88.6)	0	...	0	...
Iowa	33	6	(50.0)	0	...	11	(81.8)	7	(100.0)	0	...	7	(100.0)	2	(100.0)	0	...
Kansas	27	5	(60.0)	1	(100.0)	8	(100.0)	9	(88.9)	0	...	4	(100.0)	0	...	0	...
Kentucky	56	12	(91.7)	0	...	7	(71.4)	15	(93.3)	1	(0.0)	21	(76.2)	0	...	0	...
Louisiana	140	17	(82.4)	2	(50.0)	15	(86.7)	63	(87.3)	0	...	42	(76.2)	1	(100.0)	0	...
Maine	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maryland	194	40	(92.5)	0	...	64	(98.4)	71	(93.0)	0	...	19	(94.7)	0	...	0	...
Massachusetts	155	24	(87.5)	0	...	68	(79.4)	37	(86.5)	0	...	22	(90.9)	3	(66.7)	1	(100.0)
Michigan	140	12	(91.7)	1	(100.0)	43	(97.7)	45	(77.8)	1	(100.0)	38	(92.1)	0	...	0	...
Minnesota	101	11	(100.0)	1	(100.0)	27	(100.0)	52	(90.4)	0	...	10	(100.0)	0	...	0	...
Mississippi	73	7	(100.0)	0	...	6	(83.3)	45	(91.1)	0	...	15	(93.3)	0	...	0	...
Missouri	81	8	(100.0)	0	...	17	(94.1)	31	(87.1)	1	(100.0)	24	(91.7)	0	...	0	...
Montana	7	1	(100.0)	2	(100.0)	0	...	0	...	0	...	4	(100.0)	0	...	0	...
Nebraska	20	3	(66.7)	0	...	3	(100.0)	8	(75.0)	1	(100.0)	5	(100.0)	0	...	0	...
Nevada	82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
New Hampshire	10	0	...	0	...	2	(100.0)	3	(100.0)	0	...	5	(100.0)	0	...	0	...
New Jersey	253	84	(90.5)	0	...	83	(88.0)	58	(94.8)	0	...	28	(82.1)	0	...	0	...

Table 59. (Cont'd) Completion of Tuberculosis Therapy (COT) Cases and Percentages¹ by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2011²

Reporting Area	Total Cases ³	Hispanic ⁴		Non-Hispanic										Multiple Race		Unknown or Missing	
				American Indian or Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander		White								
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	38	25	(92.0)	7	(85.7)	1	(100.0)	3	(100.0)	0	...	2	(100.0)	0	...	0	...
New York State ⁵	188	56	(96.4)	0	...	61	(93.4)	36	(97.2)	0	...	33	(87.9)	2	(100.0)	0	...
New York City	565	162	(89.5)	0	...	222	(93.7)	116	(93.1)	0	...	52	(88.5)	6	(83.3)	7	(100.0)
North Carolina	200	39	(94.9)	7	(100.0)	35	(94.3)	71	(95.8)	1	(100.0)	35	(94.3)	12	(100.0)	0	...
North Dakota	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ohio	118	7	(85.7)	0	...	32	(100.0)	39	(87.2)	0	...	39	(82.1)	1	(0.0)	0	...
Oklahoma	72	11	(90.9)	14	(85.7)	11	(90.9)	6	(100.0)	2	(100.0)	26	(96.2)	0	...	2	(50.0)
Oregon	64	11	(81.8)	2	(100.0)	25	(92.0)	10	(90.0)	2	(100.0)	14	(85.7)	0	...	0	...
Pennsylvania	202	39	(97.4)	0	...	68	(83.8)	49	(75.5)	0	...	42	(85.7)	4	(100.0)	0	...
Rhode Island	25	6	(83.3)	0	...	8	(75.0)	7	(85.7)	0	...	4	(75.0)	0	...	0	...
South Carolina	113	14	(92.9)	0	...	17	(88.2)	64	(98.4)	0	...	18	(94.4)	0	...	0	...
South Dakota	12	0	...	5	(80.0)	3	(100.0)	2	(100.0)	0	...	2	(50.0)	0	...	0	...
Tennessee	131	25	(96.0)	0	...	15	(93.3)	46	(93.5)	0	...	45	(93.3)	0	...	0	...
Texas	1,070	562	(88.1)	2	(100.0)	170	(87.6)	205	(89.8)	2	(100.0)	129	(80.6)	0	...	0	...
Utah	25	9	(100.0)	1	(100.0)	6	(100.0)	3	(100.0)	2	(100.0)	4	(100.0)	0	...	0	...
Vermont	6	0	...	0	...	1	(100.0)	3	(100.0)	0	...	2	(50.0)	0	...	0	...
Virginia	190	35	(97.1)	0	...	74	(85.1)	41	(90.2)	0	...	38	(89.5)	2	(50.0)	0	...
Washington	155	12	(83.3)	2	(100.0)	78	(87.2)	33	(78.8)	4	(75.0)	24	(87.5)	2	(100.0)	0	...
West Virginia	10	1	(100.0)	0	...	2	(50.0)	1	(100.0)	0	...	6	(100.0)	0	...	0	...
Wisconsin	63	17	(88.2)	0	...	27	(85.2)	11	(90.9)	0	...	8	(87.5)	0	...	0	...
Wyoming	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
American Samoa ⁶	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fed. States of Micronesia ⁶	130	2	(50.0)	0	...	4	(100.0)	0	...	122	(90.2)	0	...	1	(100.0)	1	(100.0)
Guam ⁶	72	1	(100.0)	0	...	37	(91.9)	0	...	33	(97.0)	0	...	0	...	1	(100.0)
Marshall Islands ⁶	143	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N. Mariana Islands ⁶	29	0	...	1	(100.0)	17	(76.5)	0	...	8	(62.5)	0	...	0	...	3	(100.0)
Puerto Rico ⁶	34	34	(94.1)	0	...	0	...	0	...	0	...	0	...	0	...	0	...
Republic of Palau ⁶	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Virgin Islands ⁶	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

¹ Percentages shown only for reporting areas with information reported for ≥90% of cases, and indicate the percentage of those who completed therapy within 1 year.

² Most recent year for which data are available.

³ Therapy < 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die within one year of initiating therapy. Excludes persons with initial isolate rifampin resistant, or patient with bone and joint disease, meningial disease or disease of the central nervous system, or pediatric patient (aged < 15) with miliary disease or positive blood culture, and those who moved out of the country within one year of initiating treatment.

⁴ Persons of Hispanic or Latino origin may be of any race.

⁵ Excludes New York City.

⁶ Not included in U.S. totals.

Note: Case counts and percentage for race categories do not include persons of Hispanic ethnicity. Ellipses indicate data not available. See Technical Notes for description of Completion of Therapy calculation (page 9).

Table 60. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2011¹

Reporting Area	Total Cases	Therapy ≤1 Year Indicated ^{2,3,4}			Therapy >1 Year Indicated ^{3,5}		All Drug Therapy ³	
		No.	COT ≤1 Year(%)	COT(%)	No.	COT(%)	No.	COT(%)
United States	10,509	8499	(89.0)	(95.7)	1036	(74.9)	9535	(93.5)
Alabama	161	138	(93.5)	(98.6)	8	(75.0)	146	(97.3)
Alaska	67	53	(60.4)	(64.2)	5	(80.0)	58	(65.5)
Arizona	255	166	(87.3)	(95.8)	59	(67.8)	225	(88.4)
Arkansas	85	67	(83.6)	(88.1)	3	(66.7)	70	(87.1)
California	2,323	1876	(87.3)	(95.3)	218	(72.5)	2094	(92.9)
Colorado	70	59	(96.6)	(96.6)	6	(83.3)	65	(95.4)
Connecticut	83	68	(94.1)	(100.0)	7	(100.0)	75	(100.0)
Delaware	21	17	(94.1)	(100.0)	4	(100.0)	21	(100.0)
District of Columbia	55	47	(80.9)	(97.9)	4	(25.0)	51	(92.2)
Florida	754	607	(92.9)	(98.4)	74	(77.0)	681	(96.0)
Georgia	347	277	(89.5)	(96.8)	39	(59.0)	316	(92.1)
Hawaii	123	110	(90.0)	(99.1)	6	(83.3)	116	(98.3)
Idaho	12	11	(81.8)	(90.9)	1	(100.0)	12	(91.7)
Illinois	358	280	(91.4)	(96.4)	45	(91.1)	325	(95.7)
Indiana	100	87	(89.7)	(96.6)	7	(71.4)	94	(94.7)
Iowa	40	33	(84.8)	(87.9)	7	(100.0)	40	(90.0)
Kansas	36	27	(88.9)	(100.0)	5	(100.0)	32	(100.0)
Kentucky	70	56	(82.1)	(96.4)	5	(80.0)	61	(95.1)
Louisiana	167	140	(82.9)	(94.3)	12	(41.7)	152	(90.1)
Maine	9	8	(62.5)	(62.5)	0	...	8	(62.5)
Maryland	232	194	(94.8)	(98.5)	21	(76.2)	215	(96.3)
Massachusetts	195	155	(83.9)	(96.8)	24	(62.5)	179	(92.2)
Michigan	170	140	(89.3)	(91.4)	19	(84.2)	159	(90.6)
Minnesota	137	101	(95.0)	(96.0)	27	(63.0)	128	(89.1)
Mississippi	91	73	(91.8)	(98.6)	4	(25.0)	77	(94.8)
Missouri	97	81	(91.4)	(95.1)	7	(85.7)	88	(94.3)
Montana	8	7	(100.0)	(100.0)	0	...	7	(100.0)
Nebraska	23	20	(85.0)	(90.0)	2	(50.0)	22	(86.4)
Nevada	96	82	(78.0)	(82.9)	5	(100.0)	87	(83.9)
New Hampshire	11	10	(100.0)	(100.0)	0	...	10	(100.0)
New Jersey	331	253	(89.7)	(96.8)	42	(78.6)	295	(94.2)
New Mexico	49	38	(92.1)	(97.4)	4	(25.0)	42	(90.5)
New York State ⁶	221	188	(94.1)	(97.3)	15	(93.3)	203	(97.0)
New York City	684	565	(91.9)	(96.8)	60	(81.7)	625	(95.4)
North Carolina	244	200	(95.5)	(100.0)	21	(85.7)	221	(98.6)
North Dakota	7	5	(60.0)	(60.0)	2	(50.0)	7	(57.1)
Ohio	145	118	(88.1)	(92.4)	14	(85.7)	132	(91.7)
Oklahoma	94	72	(91.7)	(100.0)	12	(100.0)	84	(100.0)
Oregon	74	64	(89.1)	(96.9)	6	(100.0)	70	(97.1)
Pennsylvania	260	202	(85.1)	(96.5)	28	(75.0)	230	(93.9)
Rhode Island	27	25	(80.0)	(92.0)	1	(100.0)	26	(92.3)
South Carolina	140	113	(95.6)	(97.3)	6	(83.3)	119	(96.6)
South Dakota	15	12	(83.3)	(91.7)	2	(100.0)	14	(92.9)
Tennessee	156	131	(93.9)	(97.7)	9	(66.7)	140	(95.7)
Texas	1,317	1070	(87.5)	(94.6)	137	(71.5)	1207	(92.0)
Utah	34	25	(100.0)	(100.0)	7	(100.0)	32	(100.0)
Vermont	8	6	(83.3)	(100.0)	1	(0.0)	7	(85.7)
Virginia	221	190	(88.9)	(96.8)	14	(71.4)	204	(95.1)
Washington	199	155	(85.2)	(94.2)	25	(72.0)	180	(91.1)
West Virginia	13	10	(90.0)	(100.0)	0	...	10	(100.0)
Wisconsin	70	63	(87.3)	(93.7)	6	(83.3)	69	(92.8)
Wyoming	4	4	(50.0)	(50.0)	0	...	4	(50.0)
American Samoa ⁷	3	3	(0.0)	(0.0)	0	...	3	(0.0)
Fed. States of Micronesia ⁷	142	130	(90.0)	(91.5)	7	(85.7)	137	(91.2)
Guam ⁷	80	72	(94.4)	(97.2)	1	(100.0)	73	(97.3)
Marshall Islands ⁷	148	143	(21.7)	(21.7)	2	(0.0)	145	(21.4)
N. Mariana Islands ⁷	31	29	(75.9)	(86.2)	1	(0.0)	30	(83.3)
Puerto Rico ⁷	50	34	(94.1)	(97.1)	3	(100.0)	37	(97.3)
Republic of Palau ⁷	8	7	(0.0)	(0.0)	1	(0.0)	8	(0.0)
U.S. Virgin Islands ⁷	0	0	--	--	0	...	0	--

¹ Most recent year for which data are available.

² Initial isolate susceptible to rifampin (n=6,293) or susceptibility unknown (n=102); culture negative (n=1,774); culture status unknown (n=330).

³ Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die during therapy. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥90% of cases.

⁴ Therapy < 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die within one year of initiating therapy. Excludes persons with initial isolate rifampin resistant, or patient with bone and joint disease, meningeal disease or disease of the central nervous system, or pediatric patient (aged < 15) with military disease or positive blood culture, and those who moved out of the country within one year of initiating treatment.

⁵ Initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with military disease or positive blood culture.

⁶ Excludes New York City.

⁷ Not included in U.S. totals.

Table 61. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2007–2011¹

Reporting Area	Year									
	2007		2008		2009		2010		2011	
	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³
United States	11413	(85.6)	11016	(86.0)	9527	(88.7)	9127	(89.6)	8499	(89.0)
Alabama	143	(91.6)	148	(90.5)	141	(94.3)	117	(91.5)	138	(93.5)
Alaska	42	(90.5)	45	(88.9)	32	(84.4)	49	(93.9)	53	...
Arizona	235	(71.1)	187	(72.7)	173	(83.2)	217	(86.2)	166	(87.3)
Arkansas	94	(92.6)	73	(79.5)	58	(86.2)	69	(87.0)	67	(83.6)
California	2345	(80.9)	2328	(84.7)	2081	(84.3)	1899	(88.0)	1876	(87.3)
Colorado	86	(97.7)	92	(92.4)	65	(95.4)	53	(92.5)	59	(96.6)
Connecticut	96	(81.3)	86	(91.9)	79	(88.6)	67	(92.5)	68	(94.1)
Delaware	18	(94.4)	21	(85.7)	16	(81.3)	13	(100.0)	17	(94.1)
District of Columbia	48	(72.9)	49	(79.6)	32	(81.3)	31	(87.1)	47	(80.9)
Florida	879	(90.0)	803	(90.5)	689	(93.2)	705	(95.0)	607	(92.9)
Georgia	417	(85.4)	405	(88.4)	336	(85.1)	330	(89.7)	277	(89.5)
Hawaii	107	(77.6)	113	(78.8)	92	(83.7)	104	(95.2)	110	(90.0)
Idaho	8	(75.0)	11	(90.9)	16	(93.8)	14	(85.7)	11	(81.8)
Illinois	437	(85.6)	382	(88.2)	340	(90.0)	301	(87.4)	280	(91.4)
Indiana	115	(89.6)	99	(91.9)	100	(91.0)	80	(93.8)	87	(89.7)
Iowa	35	(88.6)	44	(93.2)	39	(87.2)	39	(94.9)	33	(84.8)
Kansas	50	(86.0)	54	(92.6)	56	(100.0)	36	(100.0)	27	(88.9)
Kentucky	107	(89.7)	85	(83.5)	59	(91.5)	73	(89.0)	56	(82.1)
Louisiana	192	(79.7)	209	(78.9)	162	(88.9)	171	(80.7)	140	(82.9)
Maine	17	(94.1)	8	(87.5)	7	(100.0)	6	(100.0)	8	...
Maryland	233	(91.4)	235	(89.4)	180	(90.0)	179	(91.6)	194	(94.8)
Massachusetts	198	(81.8)	228	(82.5)	212	(83.0)	187	(84.0)	155	(83.9)
Michigan	181	(81.2)	144	(82.6)	114	(87.7)	148	(89.2)	140	(89.3)
Minnesota	208	(91.3)	190	(93.2)	133	(93.2)	116	(90.5)	101	(95.0)
Mississippi	116	(96.6)	91	(93.4)	104	(88.5)	101	(93.1)	73	(91.8)
Missouri	103	(78.6)	96	(87.5)	72	(87.5)	95	(86.3)	81	(91.4)
Montana	9	(100.0)	4	(100.0)	7	(100.0)	6	(100.0)	7	(100.0)
Nebraska	23	(91.3)	30	(80.0)	28	(85.7)	24	(91.7)	20	(85.0)
Nevada	79	(86.1)	83	(85.5)	91	(89.0)	100	(89.0)	82	...
New Hampshire	9	(88.9)	16	(81.3)	13	(100.0)	8	(87.5)	10	(100.0)
New Jersey	385	(87.8)	353	(89.0)	337	(93.2)	325	(92.9)	253	(89.7)
New Mexico	41	(92.7)	43	(93.0)	31	(93.5)	29	(93.1)	38	(92.1)
New York State ⁴	220	(87.7)	262	(87.8)	193	(84.5)	207	(91.3)	188	(94.1)
New York City	768	(90.9)	756	(88.8)	633	(92.6)	599	(92.7)	565	(91.9)
North Carolina	304	(92.1)	293	(91.8)	215	(94.0)	247	(96.4)	200	(95.5)
North Dakota	3	(100.0)	2	(50.0)	3	(66.7)	8	(75.0)	5	...
Ohio	209	(88.5)	180	(86.1)	142	(91.5)	150	(89.3)	118	(88.1)
Oklahoma	130	(81.5)	84	(77.4)	85	(87.1)	69	(94.2)	72	(91.7)
Oregon	86	(90.7)	69	(97.1)	75	(97.3)	71	(98.6)	64	(89.1)
Pennsylvania	241	(85.5)	325	(84.0)	195	(83.1)	181	(86.7)	202	(85.1)
Rhode Island	37	(91.9)	32	(90.6)	21	(90.5)	22	(68.2)	25	(80.0)
South Carolina	185	(89.2)	155	(87.1)	134	(92.5)	125	(93.6)	113	(95.6)
South Dakota	10	(100.0)	15	(93.3)	16	(93.8)	13	(84.6)	12	(83.3)
Tennessee	200	(87.0)	242	(89.3)	173	(94.2)	146	(93.2)	131	(93.9)
Texas	1312	(82.5)	1297	(79.8)	1187	(89.4)	1091	(85.2)	1070	(87.5)
Utah	34	(94.1)	23	(95.7)	26	(100.0)	13	(100.0)	25	(100.0)
Vermont	3	(33.3)	4	(75.0)	5	(80.0)	5	(100.0)	6	(83.3)
Virginia	289	(88.6)	261	(84.3)	238	(87.8)	235	(88.9)	190	(88.9)
Washington	253	(89.7)	178	(94.4)	219	(94.1)	194	(88.1)	155	(85.2)
West Virginia	16	(100.0)	22	(95.5)	15	(73.3)	12	(100.0)	10	(90.0)
Wisconsin	55	(81.8)	57	(73.7)	55	(83.6)	41	(90.2)	63	(87.3)
Wyoming	2	(50.0)	4	(75.0)	2	(50.0)	6	...	4	...
American Samoa ⁵	3	...	3	(100.0)	3	(66.7)	3	(33.3)	3	...
Fed. States of Micronesia ⁵	123	...	156	...	175	(82.9)	160	(91.9)	130	(90.0)
Guam ⁵	90	(91.1)	80	(91.3)	93	(95.7)	86	(95.3)	72	(94.4)
Marshall Islands ⁵	123	...	115	(79.1)	109	(87.2)	189	...	143	...
N. Mariana Islands ⁵	39	(79.5)	34	(70.6)	28	(96.4)	25	(96.0)	29	(75.9)
Puerto Rico ⁵	81	(97.5)	69	(95.7)	50	(94.0)	70	(90.0)	34	(94.1)
Republic of Palau ⁵	11	...	14	...	15	...	15	...	7	...
U.S. Virgin Islands ⁵	0	...	4	(50.0)	0	...	0	...	0	...

¹ Most recent year for which data are available.

² Total cases for which therapy less than 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die within one year of initiating therapy. Excludes persons with initial isolate rifampin resistant, or patient with bone and joint disease, meningeal disease or disease of the central nervous system, or pediatric patient (aged < 15) with miliary disease or positive blood culture, and those who moved out of the country within one year of initiating treatment.

³ Percentage of total cases in persons who completed therapy within one year for whom therapy less than 1 year was indicated. Percentages shown only for reporting areas with information reported for ≥90% of cases.

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Ellipses indicate data not available.

See Technical Notes for description of Completion of Therapy calculation.

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Morbidity Tables

Cities and Metropolitan Statistical Areas, 2013

Table 62. Tuberculosis Cases in Selected Cities¹: 2013 and 2012

City	Cases ²	
	2013	2012
Albuquerque, NM	19	8
Anaheim, CA	20	31
Arlington, TX	16	20
Atlanta, GA	4	13
Austin, TX	32	33
Baltimore, MD	25	33
Birmingham, AL	12	15
Boston, MA	42	42
Buffalo, NY	14	13
Charlotte, NC	38	27
Chicago, IL	140	146
Cincinnati, OH	12	11
Cleveland, OH	22	19
Colorado Springs, CO	8	4
Columbus, OH	39	37
Corpus Christi, TX	11	8
Dallas, TX	146	123
Denver, CO	22	11
Detroit, MI	39	35
El Paso, TX	41	33
Fort Worth, TX	37	39
Fresno, CA	28	26
Honolulu, HI	41	57
Houston, TX	186	195
Indianapolis, IN	36	39
Jacksonville, FL	43	81
Las Vegas, NV	61	55
Long Beach, CA	38	34
Los Angeles, CA	222	232
Louisville, KY	20	21
Memphis, TN	42	53
Mesa, AZ	9	6
Miami, FL	86	89
Milwaukee, WI	7	26
Minneapolis, MN	29	41
Nashville, TN	22	27
Newark, NJ	28	20
New Orleans, LA	18	21
New York, NY	656	651
Norfolk, VA	6	7
Oakland, CA	35	46
Omaha, NE	9	13
Philadelphia, PA	89	86
Phoenix, AZ	52	66
Pittsburgh, PA	9	2
Portland, OR	34	26
Sacramento, CA	56	34
St. Paul, MN	33	35
San Antonio, TX	72	69
San Diego, CA	94	130
San Francisco, CA	107	116
San Jose, CA	116	102
Santa Ana, CA	25	32
Seattle, WA	46	51
Tampa, FL	13	18
Toledo, OH	3	3
Tucson, AZ	21	13
Virginia Beach, VA	7	8
Washington, DC	38	36
Wichita, KS	8	7
TOTAL - 60 CITIES	3,184	3,275
San Juan, PR	15	15

¹ Historical list of cities.² Case counts are based on verified cases residing within city limits. Excludes cases known to not be within city limits; residence within city limits was determined by the health department.

Table 63. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2013 and 2012

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2013
	2013	2012	2013	2012	
Akron, OH	4	7	0.6	1	705,686
Albany-Schenectady-Troy, NY	11	13	1.3	1.5	877,905
Albuquerque, NM	24	10	2.7	1.1	902,797
Allentown-Bethlehem-Easton, PA-NJ	8	6	1	0.7	827,048
Atlanta-Sandy Springs-Roswell, GA	218	210	3.9	3.9	5,522,942
Augusta-Richmond County, GA-SC	21	20	3.6	3.5	580,270
Austin-Round Rock, TX	56	58	3	3.2	1,883,051
Bakersfield, CA	28	34	3.2	4	864,124
Baltimore-Columbia-Towson, MD	70	79	2.5	2.9	2,770,738
Baton Rouge, LA	16	19	2	2.3	820,159
Birmingham-Hoover, AL	18	35	1.6	3.1	1,140,300
Boise City, ID	4	6	0.6	0.9	650,288
Boston-Cambridge-Newton, MA-NH	159	176	3.4	3.8	4,684,299
Bridgeport-Stamford-Norwalk, CT	25	32	2.7	3.4	939,904
Buffalo-Cheektowaga-Niagara Falls, NY	24	21	2.1	1.9	1,134,115
Cape Coral-Fort Myers, FL	14	26	2.1	4	661,115
Charleston-North Charleston, SC	22	29	3.1	4.2	712,220
Charlotte-Concord-Gastonia, NC-SC	58	58	2.5	2.5	2,335,358
Chattanooga, TN-GA	11	11	2	2	541,744
Chicago-Naperville-Elgin, IL-IN-WI	295	307	3.1	3.2	9,537,289
Cincinnati, OH-KY-IN	21	30	1	1.4	2,137,406
Cleveland-Elyria, OH	32	35	1.5	1.7	2,064,725
Colorado Springs, CO	8	6	1.2	0.9	678,319
Columbia, SC	13	12	1.6	1.5	793,779
Columbus, OH	55	48	2.8	2.5	1,967,066
Dallas-Fort Worth-Arlington, TX	327	300	4.8	4.5	6,810,913
Dayton, OH	15	8	1.9	1	802,489
Deltona-Daytona Beach-Ormond Beach, FL	14	...	2.3	...	600,756
Denver-Aurora-Lakewood, CO	47	32	1.7	1.2	2,697,476
Des Moines-West Des Moines, IA	11	13	1.8	2.2	599,789
Detroit-Warren-Dearborn, MI	106	94	2.5	2.2	4,294,983
Durham-Chapel Hill, NC	9	14	1.7	2.7	534,578
El Paso, TX	49	37	5.9	4.4	831,036
Fresno, CA	39	34	4.1	3.6	955,272
Grand Rapids-Wyoming, MI	9	19	0.9	1.9	1,016,603
Greensboro-High Point, NC	20	19	2.7	2.6	741,065
Greenville-Anderson-Mauldin, SC	7	11	0.8	1.3	850,965
Harrisburg-Carlisle, PA	11	14	2	2.5	557,711
Hartford-West Hartford-East Hartford, CT	21	22	1.7	1.8	1,215,211
Houston-The Woodlands-Sugar Land, TX	339	340	5.4	5.5	6,313,158
Indianapolis-Carmel-Anderson, IN	42	47	2.1	2.4	1,953,961
Jackson, MS	21	31	3.6	5.4	576,382
Jacksonville, FL	61	99	4.4	7.2	1,394,624
Kansas City, MO-KS	47	35	2.3	1.7	2,054,473
Knoxville, TN	10	13	1.2	1.5	852,715
Lakeland-Winter Haven, FL	14	15	2.2	2.4	623,009
Lancaster, PA	4	9	0.8	1.7	529,600
Las Vegas-Henderson-Paradise, NV	75	70	3.7	3.5	2,027,868
Little Rock-North Little Rock-Conway, AR	17	11	2.3	1.5	724,385
Los Angeles-Long Beach-Anaheim, CA	896	862	6.8	6.6	13,131,431
Louisville/Jefferson County, KY-IN	24	29	1.9	2.3	1,262,261
Madison, WI	7	11	1.1	1.8	627,431
McAllen-Edinburg-Mission, TX	64	72	7.8	8.9	815,996
Memphis, TN-MS-AR	55	66	4.1	4.9	1,341,746
Miami-Fort Lauderdale-West Palm Beach, FL	266	229	4.6	4	5,828,191
Milwaukee-Waukesha-West Allis, WI	14	32	0.9	2	1,569,659
Minneapolis-St. Paul-Bloomington, MN-WI	114	140	3.3	4.1	3,459,146

Table 63. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2013 and 2012

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2013
	2013	2012	2013	2012	
Modesto, CA	10	7	1.9	1.3	525,491
Nashville-Davidson-Murfreesboro--Franklin, TN	47	49	2.7	2.8	1,757,912
New Haven-Milford, CT	13	16	1.5	1.9	862,287
New Orleans-Metairie, LA	56	52	4.5	4.2	1,240,977
New York-Newark-Jersey City, NY-NJ-PA	1,040	1,027	5.2	5.2	19,949,502
Northport-Sarasota-Bradenton, FL	17	14	2.3	1.9	732,535
Ogden-Clearfield, UT	6	2	1	0.3	621,580
Oklahoma City, OK	28	31	2.1	2.4	1,319,677
Omaha-Council Bluffs, NE-IA	11	13	1.2	1.5	895,151
Orlando-Kissimmee-Sanford, FL	68	94	3	4.2	2,267,846
Oxnard-Thousand Oaks-Ventura, CA	28	34	3.3	4.1	839,620
Palm Bay-Melbourne-Titusville, FL	7	12	1.3	2.2	550,823
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	180	2.6	3	6,034,678
Phoenix-Mesa-Scottsdale, AZ	121	150	2.8	3.5	4,398,762
Pittsburgh, PA	25	23	1.1	1	2,360,867
Portland-South Portland, ME	6	12	1.2	2.3	519,900
Portland-Vancouver-Hillsboro, OR-WA	49	49	2.1	2.1	2,314,554
Providence-Warwick, RI-MA	35	35	2.2	2.2	1,604,291
Provo-Orem, UT	1	3	0.2	0.5	562,239
Raleigh, NC	29	20	2.4	1.7	1,214,516
Richmond, VA	25	24	2	1.9	1,245,764
Riverside-San Bernardino-Ontario, CA	111	115	2.5	2.6	4,380,878
Rochester, NY	25	16	2.3	1.5	1,083,278
Sacramento--Roseville--Arden Arcade, CA	97	74	4.4	3.4	2,215,770
St. Louis, MO-IL	49	43	1.7	1.5	2,825,599
Salt Lake City, UT	23	22	2	2	1,140,483
San Antonio-New Braunfels, TX	81	79	3.6	3.5	2,277,550
San Diego-Carlsbad, CA	206	234	6.4	7.4	3,211,252
San Francisco-Oakland-Hayward, CA	354	382	7.8	8.6	4,516,276
San Jose-Sunnyvale-Santa Clara, CA	182	176	9.5	9.3	1,919,641
Scranton-Wilkes-Barre-Hazleton, PA	9	6	1.6	1.1	562,037
Seattle-Tacoma-Bellevue, WA	162	145	4.5	4.1	3,610,105
Spokane-Spokane Valley, WA	7	...	1.3	...	535,724
Springfield, MA	14	13	2.2	2.1	626,915
Stockton-Lodi, CA	43	44	6.1	6.3	704,379
Syracuse, NY	9	14	1.4	2.1	661,934
Tampa-St. Petersburg-Clearwater, FL	93	77	3.2	2.7	2,870,569
Toledo, OH	4	8	0.7	1.3	608,145
Tucson, AZ	24	16	2.4	1.6	996,554
Tulsa, OK	17	27	1.8	2.8	961,561
Urban Honolulu, HI	83	96	8.4	9.8	983,429
Virginia Beach-Norfolk-Newport News, VA-NC	22	31	1.3	1.8	1,707,369
Washington-Arlington-Alexandria, DC-VA-MD-WV	250	321	4.2	5.5	5,949,859
Wichita, KS	9	8	1.4	1.3	637,394
Winston-Salem, NC	11	...	1.7	...	650,820
Worcester, MA-CT	22	11	2.4	1.2	926,710
Youngstown-Warren-Boardman, OH-PA	0	4	0	0.7	555,506
Total - 104 Areas	7,657	7,848	3.6	3.7	212,266,239
San Juan-Caguas-Guaynabo, PR	40	58	1.8	2.5	2,284,266

Note: 2013 and 2012 population case counts and rates updated using County Totals Datasets: Population, Population Change and Estimated Components of Population Change: April 1, 2010 to July 1, 2013 (<http://www.census.gov/popest/data/counties/totals/2013/files/CO-EST2013-AllData.csv>) and Vintage 2009 County Population Datasets (http://www.census.gov/popest/data/historical/2000s/vintage_2009/datasets.html) (accessed July 15, 2014).
See Technical Notes for definition of MSA.

Table 64. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2013

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥65	Unknown or Missing
Akron, OH	4	0	0	0	1	1	2	0
Albany-Schenectady-Troy, NY	11	0	0	3	5	1	2	0
Albuquerque, NM	24	0	0	0	6	5	13	0
Allentown-Bethlehem-Easton, PA-NJ	8	0	0	0	2	2	4	0
Atlanta-Sandy Springs-Roswell, GA	218	7	9	17	86	70	29	0
Augusta-Richmond County, GA-SC	21	1	1	3	10	5	1	0
Austin-Round Rock, TX	56	0	1	9	21	20	5	0
Bakersfield, CA	28	0	0	0	15	7	6	0
Baltimore-Columbia-Towson, MD	70	3	2	7	19	31	8	0
Baton Rouge, LA	16	3	0	1	2	6	4	0
Birmingham-Hoover, AL	18	0	1	4	2	6	5	0
Boise City, ID	4	0	1	1	1	1	0	0
Boston-Cambridge-Newton, MA-NH	159	1	1	24	67	30	36	0
Bridgeport-Stamford-Norwalk, CT	25	0	0	2	8	10	5	0
Buffalo-Cheektowaga-Niagara Falls, NY	24	1	0	2	9	7	5	0
Cape Coral-Fort Myers, FL	14	0	0	1	8	4	1	0
Charleston-North Charleston, SC	22	0	1	1	9	6	5	0
Charlotte-Concord-Gastonia, NC-SC	58	3	1	8	23	16	7	0
Chattanooga, TN-GA	11	2	0	1	3	0	5	0
Chicago-Naperville-Elgin, IL-IN-WI	295	9	5	33	85	94	69	0
Cincinnati, OH-KY-IN	21	0	1	8	2	6	4	0
Cleveland-Elyria, OH	32	1	0	0	10	8	13	0
Colorado Springs, CO	8	1	0	1	4	0	2	0
Columbia, SC	13	1	0	1	5	4	2	0
Columbus, OH	55	0	4	6	25	12	8	0
Dallas-Fort Worth-Arlington, TX	327	11	3	36	105	119	53	0
Dayton, OH	15	0	0	1	3	8	3	0
Deltona-Daytona Beach-Ormond Beach, FL	14	0	1	0	2	8	3	0
Denver-Aurora-Lakewood, CO	47	1	0	6	15	11	14	0
Des Moines-West Des Moines, IA	11	0	1	1	7	0	2	0
Detroit-Warren-Dearborn, MI	106	0	2	12	29	38	25	0
Durham-Chapel Hill, NC	9	0	0	1	5	2	1	0
El Paso, TX	49	4	1	5	2	16	21	0
Fresno, CA	39	2	1	2	5	15	14	0
Grand Rapids-Wyoming, MI	9	0	0	1	4	1	3	0
Greensboro-High Point, NC	20	0	1	3	8	7	1	0
Greenville-Anderson-Mauldin, SC	7	0	0	0	3	3	1	0
Harrisburg-Carlisle, PA	11	0	0	2	4	5	0	0
Hartford-West Hartford-East Hartford, CT	21	1	0	1	10	5	4	0
Houston-The Woodlands-Sugar Land, TX	339	9	6	46	100	126	52	0
Indianapolis-Carmel-Anderson, IN	42	2	0	8	7	19	6	0
Jackson, MS	21	0	1	2	1	10	7	0
Jacksonville, FL	61	2	0	6	16	30	7	0
Kansas City, MO-KS	47	4	1	6	13	12	11	0
Knoxville, TN	10	0	0	1	0	2	7	0
Lakeland-Winter Haven, FL	14	0	0	1	5	4	4	0
Lancaster, PA	4	0	1	0	2	0	1	0
Las Vegas-Henderson-Paradise, NV	75	15	1	5	23	18	13	0
Little Rock-North Little Rock-Conway, AR	17	0	0	3	3	5	6	0
Los Angeles-Long Beach-Anaheim, CA	896	20	9	78	222	295	272	0
Louisville/Jefferson County, KY-IN	24	0	0	3	11	7	3	0
Madison, WI	7	0	0	0	4	1	2	0
McAllen-Edinburg-Mission, TX	64	5	1	10	19	22	7	0
Memphis, TN-MS-AR	55	6	5	8	18	10	8	0
Miami-Fort Lauderdale-West Palm Beach, FL	266	9	7	24	91	85	50	0
Milwaukee-Waukesha-West Allis, WI	14	0	0	0	4	7	3	0

Table 64. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2013

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥65	Unknown or Missing
Minneapolis-St. Paul-Bloomington, MN-WI	114	2	4	15	47	30	16	0
Modesto, CA	10	3	0	1	1	4	1	0
Nashville-Davidson-Murfreesboro--Franklin, TN	47	2	0	4	21	13	7	0
New Haven-Milford, CT	13	0	0	0	7	4	2	0
New Orleans-Metairie, LA	56	2	1	7	13	25	8	0
New York-Newark-Jersey City, NY-NJ-PA	1,040	16	14	111	381	297	221	0
Northport-Sarasota-Bradenton, FL	17	2	0	1	6	3	5	0
Ogden-Clearfield, UT	6	0	0	1	3	0	2	0
Oklahoma City, OK	28	2	0	6	3	14	3	0
Omaha-Council Bluffs, NE-IA	11	0	0	1	3	5	2	0
Orlando-Kissimmee-Sanford, FL	68	2	0	10	16	28	12	0
Oxnard-Thousand Oaks-Ventura, CA	28	2	0	2	9	4	11	0
Palm Bay-Melbourne-Titusville, FL	7	0	0	1	3	1	2	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	1	3	18	59	51	26	0
Phoenix-Mesa-Scottsdale, AZ	121	2	3	26	42	27	21	0
Pittsburgh, PA	25	0	0	2	8	6	9	0
Portland-South Portland, ME	6	0	0	0	3	3	0	0
Portland-Vancouver-Hillsboro, OR-WA	49	4	1	4	12	18	10	0
Providence-Warwick, RI-MA	35	2	1	2	10	8	12	0
Provo-Orem, UT	1	0	0	0	1	0	0	0
Raleigh, NC	29	2	0	2	15	5	5	0
Richmond, VA	25	0	1	1	7	5	11	0
Riverside-San Bernardino-Ontario, CA	111	4	5	10	27	32	33	0
Rochester, NY	25	2	1	1	9	6	6	0
Sacramento--Roseville--Arden Arcade, CA	97	1	3	7	22	36	28	0
St. Louis, MO-IL	49	2	0	2	9	24	12	0
Salt Lake City, UT	23	2	1	2	9	7	2	0
San Antonio-New Braunfels, TX	81	4	2	7	22	28	18	0
San Diego-Carlsbad, CA	206	3	5	29	61	58	50	0
San Francisco-Oakland-Hayward, CA	354	7	3	20	82	111	130	1
San Jose-Sunnyvale-Santa Clara, CA	182	2	2	14	53	52	59	0
Scranton-Wilkes-Barre-Hazleton, PA	9	1	0	0	4	2	2	0
Seattle-Tacoma-Bellevue, WA	162	4	1	20	56	50	31	0
Spokane-Spokane Valley, WA	7	0	0	2	5	0	0	0
Springfield, MA	14	0	0	3	5	3	3	0
Stockton-Lodi, CA	43	4	1	5	7	6	20	0
Syracuse, NY	9	0	0	1	4	3	1	0
Tampa-St. Petersburg-Clearwater, FL	93	1	1	8	27	40	16	0
Toledo, OH	4	0	0	1	1	0	2	0
Tucson, AZ	24	0	1	1	9	7	6	0
Tulsa, OK	17	0	1	2	3	8	3	0
Urban Honolulu, HI	83	1	2	8	15	27	30	0
Virginia Beach-Norfolk-Newport News, VA-NC	22	0	2	2	9	5	4	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	250	7	6	22	116	66	33	0
Wichita, KS	9	1	1	1	2	2	2	0
Winston-Salem, NC	11	0	0	0	4	3	4	0
Worcester, MA-CT	22	0	0	3	8	8	3	0
Youngstown-Warren-Boardman, OH-PA	0	0	0	0	0	0	0	0
Total - 104 Areas	7,657	214	136	791	2,408	2,378	1,729	1
San Juan-Caguas-Guaynabo, PR	40	0	0	3	8	20	9	0

Note: See Technical Notes for definition of MSA.

Table 65. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2013

Metropolitan Statistical Area	Total Cases	Hispanic or Latino ¹	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race ²	Unknown or Missing
Akron, OH	4	0	0	4	0	0	0	0	0
Albany-Schenectady-Troy, NY	11	1	0	6	3	0	0	0	1
Albuquerque, NM	24	10	2	7	0	1	4	0	0
Allentown-Bethlehem-Easton, PA-NJ	8	1	0	3	3	0	1	0	0
Atlanta-Sandy Springs-Roswell, GA	218	40	0	55	109	0	14	0	0
Augusta-Richmond County, GA-SC	21	0	1	4	13	0	3	0	0
Austin-Round Rock, TX	56	18	0	13	14	0	11	0	0
Bakersfield, CA	28	20	0	2	1	0	4	1	0
Baltimore-Columbia-Towson, MD	70	9	0	20	26	0	15	0	0
Baton Rouge, LA	16	2	0	3	2	0	9	0	0
Birmingham-Hoover, AL	18	2	0	2	10	0	4	0	0
Boise City, ID	4	1	0	2	0	0	1	0	0
Boston-Cambridge-Newton, MA-NH	159	24	0	55	44	1	34	1	0
Bridgeport-Stamford-Norwalk, CT	25	10	0	8	4	0	3	0	0
Buffalo-Cheektowaga-Niagara Falls, NY	24	0	0	10	6	0	8	0	0
Cape Coral-Fort Myers, FL	14	5	0	2	5	0	2	0	0
Charleston-North Charleston, SC	22	4	0	1	9	0	8	0	0
Charlotte-Concord-Gastonia, NC-SC	58	7	0	17	23	0	9	2	0
Chattanooga, TN-GA	11	1	0	3	2	0	5	0	0
Chicago-Naperville-Elgin, IL-IN-WI	295	89	0	114	66	0	25	0	1
Cincinnati, OH-KY-IN	21	3	0	7	6	0	5	0	0
Cleveland-Elyria, OH	32	1	0	12	9	0	9	1	0
Colorado Springs, CO	8	3	0	1	3	0	1	0	0
Columbia, SC	13	1	0	2	8	0	2	0	0
Columbus, OH	55	3	0	14	27	0	11	0	0
Dallas-Fort Worth-Arlington, TX	327	104	0	72	107	0	44	0	0
Dayton, OH	15	1	0	2	4	0	8	0	0
Deltona-Daytona Beach-Ormond Beach, FL	14	1	0	5	2	0	6	0	0
Denver-Aurora-Lakewood, CO	47	11	0	12	16	0	6	2	0
Des Moines-West Des Moines, IA	11	2	0	5	2	0	1	1	0
Detroit-Warren-Dearborn, MI	106	6	0	38	35	2	22	1	2
Durham-Chapel Hill, NC	9	0	0	4	3	0	1	1	0
El Paso, TX	49	43	0	4	0	0	1	1	0
Fresno, CA	39	18	0	18	1	0	1	1	0
Grand Rapids-Wyoming, MI	9	1	0	5	1	0	2	0	0
Greensboro-High Point, NC	20	2	0	7	10	0	1	0	0
Greenville-Anderson-Mauldin, SC	7	1	0	1	2	0	3	0	0
Harrisburg-Carlisle, PA	11	1	0	8	1	0	1	0	0
Hartford-West Hartford-East Hartford, CT	21	3	0	10	3	0	5	0	0
Houston-The Woodlands-Sugar Land, TX	339	156	0	68	62	0	51	1	1
Indianapolis-Carmel-Anderson, IN	42	3	0	14	14	0	11	0	0
Jackson, MS	21	4	0	2	13	0	2	0	0
Jacksonville, FL	61	1	0	13	26	0	21	0	0
Kansas City, MO-KS	47	6	1	16	12	3	9	0	0
Knoxville, TN	10	0	0	3	1	0	6	0	0
Lakeland-Winter Haven, FL	14	4	0	1	4	0	5	0	0
Lancaster, PA	4	0	0	2	1	0	1	0	0
Las Vegas-Henderson-Paradise, NV	75	27	0	26	11	0	10	0	1
Little Rock-North Little Rock-Conway, AR	17	0	0	2	8	0	7	0	0
Los Angeles-Long Beach-Anaheim, CA	896	349	0	405	66	0	53	22	1
Louisville/Jefferson County, KY-IN	24	6	0	3	9	0	6	0	0
Madison, WI	7	3	0	2	1	0	1	0	0
McAllen-Edinburg-Mission, TX	64	61	0	0	1	0	2	0	0
Memphis, TN-MS-AR	55	7	0	2	42	0	4	0	0
Miami-Fort Lauderdale-West Palm Beach, FL	266	101	0	20	121	1	23	0	0
Milwaukee-Waukesha-West Allis, WI	14	0	0	8	4	0	2	0	0
Minneapolis-St. Paul-Bloomington, MN-WI	114	11	3	46	45	0	9	0	0

Table 65. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2013

Metropolitan Statistical Area	Total Cases	Hispanic or Latino ¹	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race ²	Unknown or Missing
Modesto, CA	10	8	0	1	0	0	1	0	0
Nashville-Davidson-Murfreesboro--Franklin, TN	47	5	0	11	22	0	9	0	0
New Haven-Milford, CT	13	4	0	6	1	0	2	0	0
New Orleans-Metairie, LA	56	9	0	6	25	0	16	0	0
New York-Newark-Jersey City, NY-NJ-PA	1,040	309	1	439	198	1	84	7	1
Northport-Sarasota-Bradenton, FL	17	10	0	1	1	0	5	0	0
Ogden-Clearfield, UT	6	4	0	1	0	0	1	0	0
Oklahoma City, OK	28	9	0	3	2	0	13	1	0
Omaha-Council Bluffs, NE-IA	11	4	0	2	1	0	3	1	0
Orlando-Kissimmee-Sanford, FL	68	15	1	13	26	0	13	0	0
Oxnard-Thousand Oaks-Ventura, CA	28	14	0	8	0	0	4	1	1
Palm Bay-Melbourne-Titusville, FL	7	0	0	1	1	0	5	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	18	0	61	55	0	24	0	0
Phoenix-Mesa-Scottsdale, AZ	121	71	3	18	7	0	22	0	0
Pittsburgh, PA	25	2	0	9	5	0	9	0	0
Portland-South Portland, ME	6	1	0	1	1	0	3	0	0
Portland-Vancouver-Hillsboro, OR-WA	49	7	0	18	6	2	16	0	0
Providence-Warwick, RI-MA	35	8	0	10	10	0	7	0	0
Provo-Orem, UT	1	0	0	0	0	0	1	0	0
Raleigh, NC	29	9	0	10	10	0	0	0	0
Richmond, VA	25	1	0	11	9	0	4	0	0
Riverside-San Bernardino-Ontario, CA	111	57	0	31	5	0	18	0	0
Rochester, NY	25	3	0	9	5	0	7	1	0
Sacramento--Roseville--Arden Arcade, CA	97	14	0	51	12	1	8	11	0
St. Louis, MO-IL	49	0	0	19	16	0	14	0	0
Salt Lake City, UT	23	7	0	6	5	2	3	0	0
San Antonio-New Braunfels, TX	81	54	0	11	8	0	8	0	0
San Diego-Carlsbad, CA	206	115	0	60	11	1	16	3	0
San Francisco-Oakland-Hayward, CA	354	47	2	203	30	3	45	24	0
San Jose-Sunnyvale-Santa Clara, CA	182	19	0	115	6	0	9	33	0
Scranton-Wilkes-Barre-Hazleton, PA	9	4	0	1	0	0	4	0	0
Seattle-Tacoma-Bellevue, WA	162	15	1	101	24	4	17	0	0
Spokane-Spokane Valley, WA	7	2	0	1	0	2	2	0	0
Springfield, MA	14	2	0	3	5	0	4	0	0
Stockton-Lodi, CA	43	10	0	27	0	0	4	2	0
Syracuse, NY	9	0	0	5	3	0	1	0	0
Tampa-St. Petersburg-Clearwater, FL	93	19	1	21	23	0	29	0	0
Toledo, OH	4	0	0	1	1	0	2	0	0
Tucson, AZ	24	10	1	7	3	0	3	0	0
Tulsa, OK	17	2	2	3	2	0	6	2	0
Urban Honolulu, HI	83	0	0	63	2	12	1	5	0
Virginia Beach-Norfolk-Newport News, VA-NC	22	2	0	12	7	0	1	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	250	36	0	78	113	2	21	0	0
Wichita, KS	9	3	0	2	1	0	3	0	0
Winston-Salem, NC	11	2	0	4	5	0	0	0	0
Worcester, MA-CT	22	4	0	10	7	0	1	0	0
Youngstown-Warren-Boardman, OH-PA	0	0	0	0	0	0	0	0	0
Total - 104 Areas	7,657	2,123	19	2,665	1,695	38	982	126	9
San Juan-Caguas-Guaynabo, PR	40	36	0	2	2	0	0	0	0

¹ Persons of Hispanic or Latino origin may be of any race or multiple race.

² Indicates two or more races reported for a person.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes for definition of MSA and Hispanic ethnicity and non-Hispanic race.

Table 66. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2013

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Akron, OH	4	0	(0.0)	4	(100.0)	0	(0.0)
Albany-Schenectady-Troy, NY	11	1	(9.1)	10	(90.9)	0	(0.0)
Albuquerque, NM	24	8	(33.3)	16	(66.7)	0	(0.0)
Allentown-Bethlehem-Easton, PA-NJ	8	3	(37.5)	5	(62.5)	0	(0.0)
Atlanta-Sandy Springs-Roswell, GA	218	84	(38.5)	134	(61.5)	0	(0.0)
Augusta-Richmond County, GA-SC	21	17	(81.0)	4	(19.0)	0	(0.0)
Austin-Round Rock, TX	56	22	(39.3)	34	(60.7)	0	(0.0)
Bakersfield, CA	28	5	(17.9)	23	(82.1)	0	(0.0)
Baltimore-Columbia-Towson, MD	70	29	(41.4)	41	(58.6)	0	(0.0)
Baton Rouge, LA	16	11	(68.8)	5	(31.3)	0	(0.0)
Birmingham-Hoover, AL	18	16	(88.9)	2	(11.1)	0	(0.0)
Boise City, ID	4	1	(25.0)	3	(75.0)	0	(0.0)
Boston-Cambridge-Newton, MA-NH	159	26	(16.4)	133	(83.6)	0	(0.0)
Bridgeport-Stamford-Norwalk, CT	25	4	(16.0)	21	(84.0)	0	(0.0)
Buffalo-Cheektowaga-Niagara Falls, NY	24	7	(29.2)	17	(70.8)	0	(0.0)
Cape Coral-Fort Myers, FL	14	6	(42.9)	8	(57.1)	0	(0.0)
Charleston-North Charleston, SC	22	18	(81.8)	4	(18.2)	0	(0.0)
Charlotte-Concord-Gastonia, NC-SC	58	29	(50.0)	29	(50.0)	0	(0.0)
Chattanooga, TN-GA	11	9	(81.8)	2	(18.2)	0	(0.0)
Chicago-Naperville-Elgin, IL-IN-WI	295	87	(29.5)	208	(70.5)	0	(0.0)
Cincinnati, OH-KY-IN	21	8	(38.1)	13	(61.9)	0	(0.0)
Cleveland-Elyria, OH	32	14	(43.8)	18	(56.3)	0	(0.0)
Colorado Springs, CO	8	5	(62.5)	3	(37.5)	0	(0.0)
Columbia, SC	13	7	(53.8)	6	(46.2)	0	(0.0)
Columbus, OH	55	17	(30.9)	38	(69.1)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	327	147	(45.0)	180	(55.0)	0	(0.0)
Dayton, OH	15	11	(73.3)	4	(26.7)	0	(0.0)
Deltona-Daytona Beach-Ormond Beach, FL	14	7	(50.0)	7	(50.0)	0	(0.0)
Denver-Aurora-Lakewood, CO	47	5	(10.6)	42	(89.4)	0	(0.0)
Des Moines-West Des Moines, IA	11	2	(18.2)	9	(81.8)	0	(0.0)
Detroit-Warren-Dearborn, MI	106	43	(40.6)	61	(57.5)	2	(1.9)
Durham-Chapel Hill, NC	9	5	(55.6)	4	(44.4)	0	(0.0)
El Paso, TX	49	15	(30.6)	34	(69.4)	0	(0.0)
Fresno, CA	39	8	(20.5)	31	(79.5)	0	(0.0)
Grand Rapids-Wyoming, MI	9	0	(0.0)	9	(100.0)	0	(0.0)
Greensboro-High Point, NC	20	8	(40.0)	12	(60.0)	0	(0.0)
Greenville-Anderson-Mauldin, SC	7	5	(71.4)	2	(28.6)	0	(0.0)
Harrisburg-Carlisle, PA	11	3	(27.3)	8	(72.7)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	21	8	(38.1)	13	(61.9)	0	(0.0)
Houston-The Woodlands-Sugar Land, TX	339	144	(42.5)	195	(57.5)	0	(0.0)
Indianapolis-Carmel-Anderson, IN	42	19	(45.2)	23	(54.8)	0	(0.0)
Jackson, MS	21	16	(76.2)	5	(23.8)	0	(0.0)
Jacksonville, FL	61	45	(73.8)	16	(26.2)	0	(0.0)
Kansas City, MO-KS	47	22	(46.8)	25	(53.2)	0	(0.0)
Knoxville, TN	10	7	(70.0)	3	(30.0)	0	(0.0)
Lakeland-Winter Haven, FL	14	8	(57.1)	6	(42.9)	0	(0.0)
Lancaster, PA	4	0	(0.0)	4	(100.0)	0	(0.0)
Las Vegas-Henderson-Paradise, NV	75	27	(36.0)	48	(64.0)	0	(0.0)
Little Rock-North Little Rock-Conway, AR	17	15	(88.2)	2	(11.8)	0	(0.0)
Los Angeles-Long Beach-Anaheim, CA	896	166	(18.5)	728	(81.3)	2	(0.2)
Louisville/Jefferson County, KY-IN	24	10	(41.7)	14	(58.3)	0	(0.0)
Madison, WI	7	1	(14.3)	6	(85.7)	0	(0.0)
McAllen-Edinburg-Mission, TX	64	23	(35.9)	41	(64.1)	0	(0.0)
Memphis, TN-MS-AR	55	45	(81.8)	10	(18.2)	0	(0.0)
Miami-Fort Lauderdale-West Palm Beach, FL	266	72	(27.1)	194	(72.9)	0	(0.0)
Milwaukee-Waukesha-West Allis, WI	14	4	(28.6)	10	(71.4)	0	(0.0)
Minneapolis-St. Paul-Bloomington, MN-WI	114	20	(17.5)	94	(82.5)	0	(0.0)

Table 66. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with ≥500,000 Population, 2013

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Modesto, CA	10	4	(40.0)	6	(60.0)	0	(0.0)
Nashville-Davidson-Murfreesboro--Franklin, TN	47	26	(55.3)	21	(44.7)	0	(0.0)
New Haven-Milford, CT	13	2	(15.4)	11	(84.6)	0	(0.0)
New Orleans-Metairie, LA	56	40	(71.4)	16	(28.6)	0	(0.0)
New York-Newark-Jersey City, NY-NJ-PA	1,040	177	(17.0)	862	(82.9)	1	(0.1)
Northport-Sarasota-Bradenton, FL	17	8	(47.1)	9	(52.9)	0	(0.0)
Ogden-Clearfield, UT	6	1	(16.7)	5	(83.3)	0	(0.0)
Oklahoma City, OK	28	18	(64.3)	9	(32.1)	1	(3.6)
Omaha-Council Bluffs, NE-IA	11	3	(27.3)	8	(72.7)	0	(0.0)
Orlando-Kissimmee-Sanford, FL	68	33	(48.5)	35	(51.5)	0	(0.0)
Oxnard-Thousand Oaks-Ventura, CA	28	9	(32.1)	19	(67.9)	0	(0.0)
Palm Bay-Melbourne-Titusville, FL	7	6	(85.7)	1	(14.3)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	54	(34.2)	104	(65.8)	0	(0.0)
Phoenix-Mesa-Scottsdale, AZ	121	25	(20.7)	96	(79.3)	0	(0.0)
Pittsburgh, PA	25	11	(44.0)	14	(56.0)	0	(0.0)
Portland-South Portland, ME	6	3	(50.0)	3	(50.0)	0	(0.0)
Portland-Vancouver-Hillsboro, OR-WA	49	15	(30.6)	34	(69.4)	0	(0.0)
Providence-Warwick, RI-MA	35	9	(25.7)	26	(74.3)	0	(0.0)
Provo-Orem, UT	1	1	(100.0)	0	(0.0)	0	(0.0)
Raleigh, NC	29	4	(13.8)	25	(86.2)	0	(0.0)
Richmond, VA	25	12	(48.0)	13	(52.0)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	111	30	(27.0)	81	(73.0)	0	(0.0)
Rochester, NY	25	9	(36.0)	16	(64.0)	0	(0.0)
Sacramento--Roseville--Arden Arcade, CA	97	23	(23.7)	74	(76.3)	0	(0.0)
St. Louis, MO-IL	49	23	(46.9)	26	(53.1)	0	(0.0)
Salt Lake City, UT	23	5	(21.7)	18	(78.3)	0	(0.0)
San Antonio-New Braunfels, TX	81	45	(55.6)	36	(44.4)	0	(0.0)
San Diego-Carlsbad, CA	206	65	(31.6)	141	(68.4)	0	(0.0)
San Francisco-Oakland-Hayward, CA	354	68	(19.2)	285	(80.5)	1	(0.3)
San Jose-Sunnyvale-Santa Clara, CA	182	15	(8.2)	165	(90.7)	2	(1.1)
Scranton-Wilkes-Barre-Hazleton, PA	9	6	(66.7)	3	(33.3)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	162	33	(20.4)	129	(79.6)	0	(0.0)
Spokane-Spokane Valley, WA	7	4	(57.1)	3	(42.9)	0	(0.0)
Springfield, MA	14	8	(57.1)	6	(42.9)	0	(0.0)
Stockton-Lodi, CA	43	17	(39.5)	26	(60.5)	0	(0.0)
Syracuse, NY	9	1	(11.1)	8	(88.9)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	93	48	(51.6)	45	(48.4)	0	(0.0)
Toledo, OH	4	3	(75.0)	1	(25.0)	0	(0.0)
Tucson, AZ	24	3	(12.5)	21	(87.5)	0	(0.0)
Tulsa, OK	17	11	(64.7)	5	(29.4)	1	(5.9)
Urban Honolulu, HI	83	25	(30.1)	58	(69.9)	0	(0.0)
Virginia Beach-Norfolk-Newport News, VA-NC	22	5	(22.7)	17	(77.3)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	250	36	(14.4)	214	(85.6)	0	(0.0)
Wichita, KS	9	5	(55.6)	4	(44.4)	0	(0.0)
Winston-Salem, NC	11	3	(27.3)	8	(72.7)	0	(0.0)
Worcester, MA-CT	22	2	(9.1)	20	(90.9)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	0	0	(0.0)	0	(0.0)	0	(0.0)
Total - 104 Areas	7,657	2,299	(30.0)	5,348	(69.8)	10	(0.1)
San Juan-Caguas-Guaynabo, PR	40	29	(72.5)	11	(27.5)	0	(0.0)

¹ Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Technical Notes for definition of MSA.

**Table 67. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15:
Metropolitan Statistical Areas with ≥500,000 Population, 2013**

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Akron, OH	4	4	(100.0)	0	(0.0)
Albany-Schenectady-Troy, NY	11	11	(100.0)	0	(0.0)
Albuquerque, NM	24	24	(100.0)	1	(4.2)
Allentown-Bethlehem-Easton, PA-NJ	8	8	(100.0)	0	(0.0)
Atlanta-Sandy Springs-Roswell, GA	202	202	(100.0)	17	(8.4)
Augusta-Richmond County, GA-SC	19	19	(100.0)	2	(10.5)
Austin-Round Rock, TX	55	55	(100.0)	3	(5.5)
Bakersfield, CA	28	27	(96.4)	1	(3.6)
Baltimore-Columbia-Towson, MD	65	64	(98.5)	2	(3.1)
Baton Rouge, LA	13	13	(100.0)	1	(7.7)
Birmingham-Hoover, AL	17	17	(100.0)	1	(5.9)
Boise City, ID	3	3	(100.0)	1	(33.3)
Boston-Cambridge-Newton, MA-NH	157	157	(100.0)	3	(1.9)
Bridgeport-Stamford-Norwalk, CT	25	25	(100.0)	1	(4.0)
Buffalo-Cheektowaga-Niagara Falls, NY	23	21	(91.3)	0	(0.0)
Cape Coral-Fort Myers, FL	14	14	(100.0)	0	(0.0)
Charleston-North Charleston, SC	21	21	(100.0)	4	(19.0)
Charlotte-Concord-Gastonia, NC-SC	54	53	(98.1)	3	(5.6)
Chattanooga, TN-GA	9	9	(100.0)	0	(0.0)
Chicago-Naperville-Elgin, IL-IN-WI	281	281	(100.0)	13	(4.6)
Cincinnati, OH-KY-IN	20	20	(100.0)	1	(5.0)
Cleveland-Elyria, OH	31	31	(100.0)	0	(0.0)
Colorado Springs, CO	7	7	(100.0)	1	(14.3)
Columbia, SC	12	12	(100.0)	0	(0.0)
Columbus, OH	51	51	(100.0)	4	(7.8)
Dallas-Fort Worth-Arlington, TX	313	313	(100.0)	33	(10.5)
Dayton, OH	15	15	(100.0)	0	(0.0)
Deltona-Daytona Beach-Ormond Beach, FL	13	11	(84.6)	1	(7.7)
Denver-Aurora-Lakewood, CO	46	45	(97.8)	3	(6.5)
Des Moines-West Des Moines, IA	10	10	(100.0)	0	(0.0)
Detroit-Warren-Dearborn, MI	104	102	(98.1)	6	(5.8)
Durham-Chapel Hill, NC	9	9	(100.0)	1	(11.1)
El Paso, TX	44	44	(100.0)	2	(4.5)
Fresno, CA	36	36	(100.0)	0	(0.0)
Grand Rapids-Wyoming, MI	9	8	(88.9)	0	(0.0)
Greensboro-High Point, NC	19	19	(100.0)	0	(0.0)
Greenville-Anderson-Mauldin, SC	7	7	(100.0)	1	(14.3)
Harrisburg-Carlisle, PA	11	11	(100.0)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	20	20	(100.0)	2	(10.0)
Houston-The Woodlands-Sugar Land, TX	324	324	(100.0)	17	(5.2)
Indianapolis-Carmel-Anderson, IN	40	40	(100.0)	8	(20.0)
Jackson, MS	20	20	(100.0)	1	(5.0)
Jacksonville, FL	59	59	(100.0)	13	(22.0)
Kansas City, MO-KS	42	42	(100.0)	0	(0.0)
Knoxville, TN	10	10	(100.0)	1	(10.0)
Lakeland-Winter Haven, FL	14	14	(100.0)	1	(7.1)
Lancaster, PA	3	3	(100.0)	0	(0.0)
Las Vegas-Henderson-Paradise, NV	59	58	(98.3)	5	(8.5)
Little Rock-North Little Rock-Conway, AR	17	17	(100.0)	3	(17.6)
Los Angeles-Long Beach-Anaheim, CA	867	866	(99.9)	70	(8.1)
Louisville/Jefferson County, KY-IN	24	24	(100.0)	0	(0.0)
Madison, WI	7	7	(100.0)	0	(0.0)
McAllen-Edinburg-Mission, TX	58	58	(100.0)	1	(1.7)
Memphis, TN-MS-AR	44	44	(100.0)	3	(6.8)
Miami-Fort Lauderdale-West Palm Beach, FL	250	248	(99.2)	12	(4.8)
Milwaukee-Waukesha-West Allis, WI	14	14	(100.0)	1	(7.1)
Minneapolis-St. Paul-Bloomington, MN-WI	108	108	(100.0)	4	(3.7)

Table 67. (Cont'd) Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15: Metropolitan Statistical Areas with ≥500,000 Population, 2013

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Modesto, CA	7	7	(100.0)	1	(14.3)
Nashville-Davidson-Murfreesboro--Franklin, TN	45	45	(100.0)	4	(8.9)
New Haven-Milford, CT	13	13	(100.0)	0	(0.0)
New Orleans-Metairie, LA	53	53	(100.0)	5	(9.4)
New York-Newark-Jersey City, NY-NJ-PA	1,010	997	(98.7)	22	(2.2)
Northport-Sarasota-Bradenton, FL	15	15	(100.0)	0	(0.0)
Ogden-Clearfield, UT	6	6	(100.0)	0	(0.0)
Oklahoma City, OK	26	23	(88.5)	0	(0.0)
Omaha-Council Bluffs, NE-IA	11	11	(100.0)	0	(0.0)
Orlando-Kissimmee-Sanford, FL	66	66	(100.0)	10	(15.2)
Oxnard-Thousand Oaks-Ventura, CA	26	26	(100.0)	1	(3.8)
Palm Bay-Melbourne-Titusville, FL	7	7	(100.0)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	154	154	(100.0)	4	(2.6)
Phoenix-Mesa-Scottsdale, AZ	116	104	(89.7)	14	(12.1)
Pittsburgh, PA	25	25	(100.0)	0	(0.0)
Portland-South Portland, ME	6	6	(100.0)	1	(16.7)
Portland-Vancouver-Hillsboro, OR-WA	44	43	(97.7)	3	(6.8)
Providence-Warwick, RI-MA	32	32	(100.0)	0	(0.0)
Provo-Orem, UT	1	1	(100.0)	0	(0.0)
Raleigh, NC	27	27	(100.0)	1	(3.7)
Richmond, VA	24	24	(100.0)	2	(8.3)
Riverside-San Bernardino-Ontario, CA	102	102	(100.0)	4	(3.9)
Rochester, NY	22	22	(100.0)	1	(4.5)
Sacramento--Roseville--Arden Arcade, CA	93	92	(98.9)	1	(1.1)
St. Louis, MO-IL	47	47	(100.0)	0	(0.0)
Salt Lake City, UT	20	20	(100.0)	1	(5.0)
San Antonio-New Braunfels, TX	75	75	(100.0)	9	(12.0)
San Diego-Carlsbad, CA	198	198	(100.0)	13	(6.6)
San Francisco-Oakland-Hayward, CA	343	342	(99.7)	18	(5.2)
San Jose-Sunnyvale-Santa Clara, CA	178	176	(98.9)	6	(3.4)
Scranton-Wilkes-Barre-Hazleton, PA	8	8	(100.0)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	157	156	(99.4)	8	(5.1)
Spokane-Spokane Valley, WA	7	7	(100.0)	0	(0.0)
Springfield, MA	14	14	(100.0)	1	(7.1)
Stockton-Lodi, CA	38	38	(100.0)	2	(5.3)
Syracuse, NY	9	9	(100.0)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	91	91	(100.0)	12	(13.2)
Toledo, OH	4	4	(100.0)	0	(0.0)
Tucson, AZ	23	23	(100.0)	0	(0.0)
Tulsa, OK	16	9	(56.3)	1	(6.3)
Urban Honolulu, HI	80	79	(98.8)	5	(6.3)
Virginia Beach-Norfolk-Newport News, VA-NC	20	20	(100.0)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	237	237	(100.0)	7	(3.0)
Wichita, KS	7	7	(100.0)	1	(14.3)
Winston-Salem, NC	11	11	(100.0)	1	(9.1)
Worcester, MA-CT	22	22	(100.0)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	0	0	.	0	.
Total - 104 Areas	7,306	7,249	(99.2)	407	(5.6)
San Juan-Caguas-Guaynabo, PR	40	40	(100.0)	2	(5.0)

¹ Homeless within past 12 months of TB diagnosis.

² Percent of those with known status.

Note: See Technical Notes for definition of MSA.

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Surveillance Slide Set

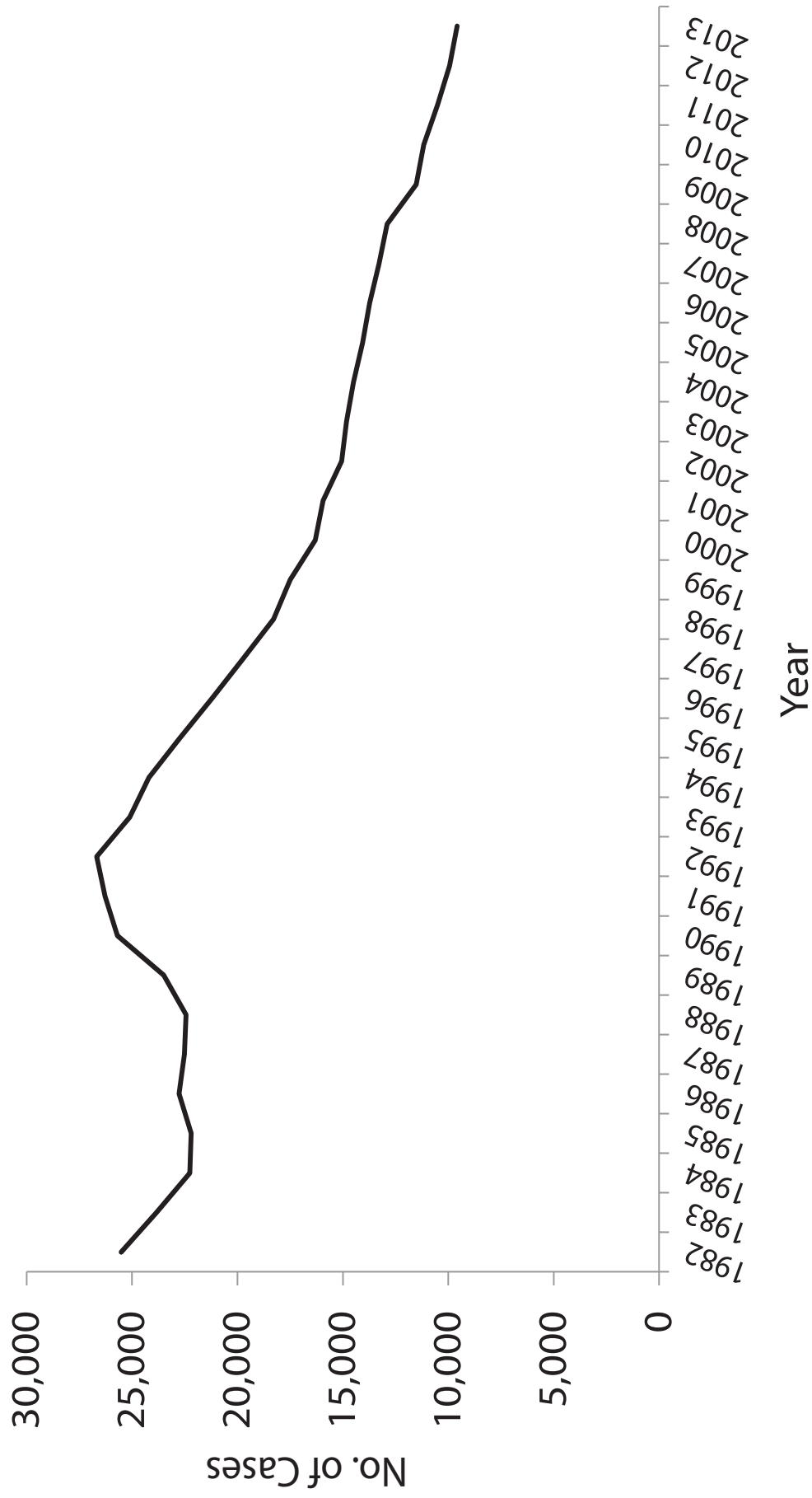
2013

Tuberculosis in the United States

National Tuberculosis Surveillance System

Highlights from 2012

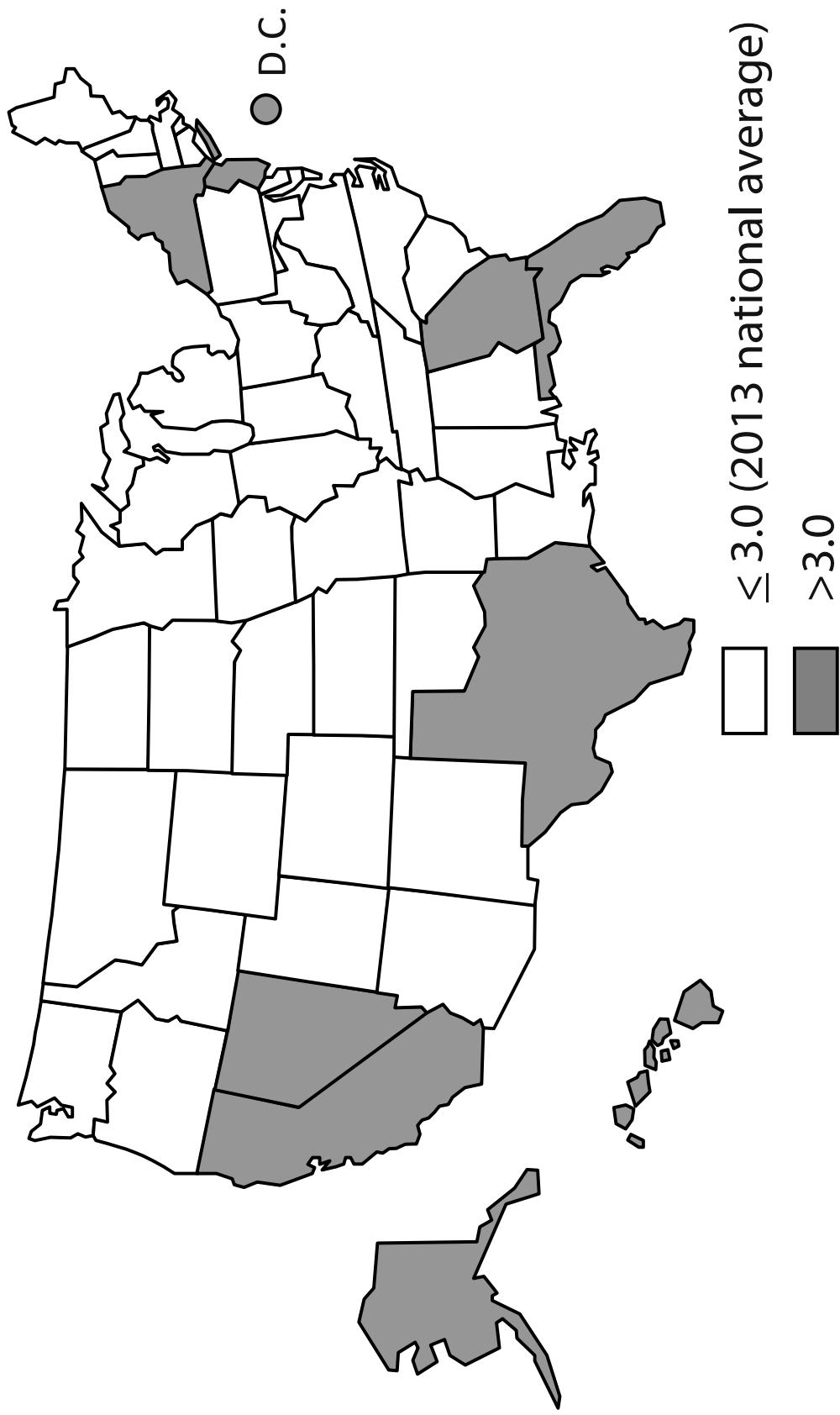
Reported TB Cases United States, 1982–2013*



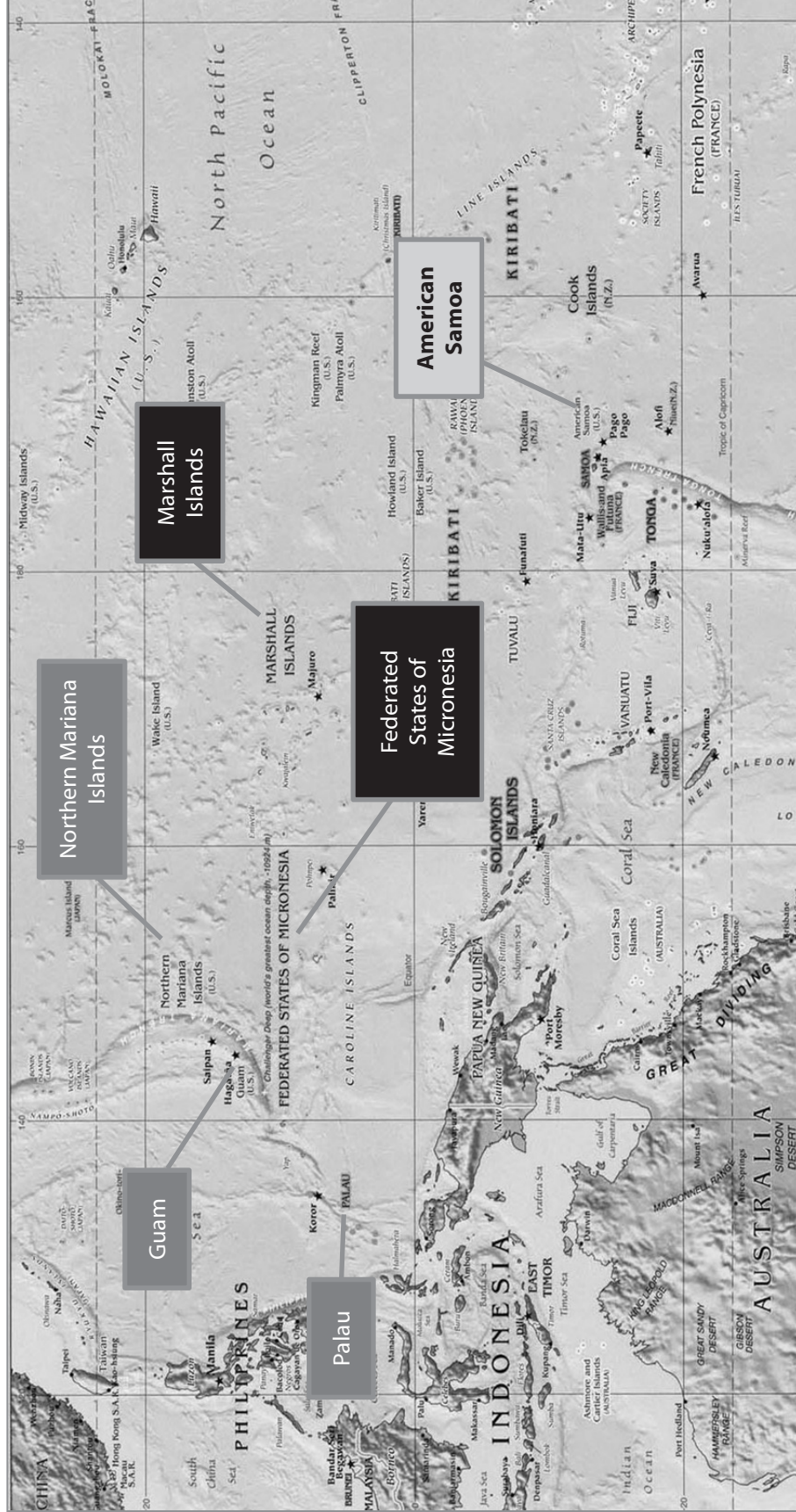
TB Morbidity United States, 2008–2013

Year	No.	Rate*
2008	12,893	4.2
2009	11,519	3.8
2010	11,164	3.6
2011	10,509	3.4
2012	9,940	3.2
2013	9,582	3.0

TB Case Rates,* United States, 2013



Map of U.S.-Affiliated Pacific Islands by TB Case Rates,* 2013



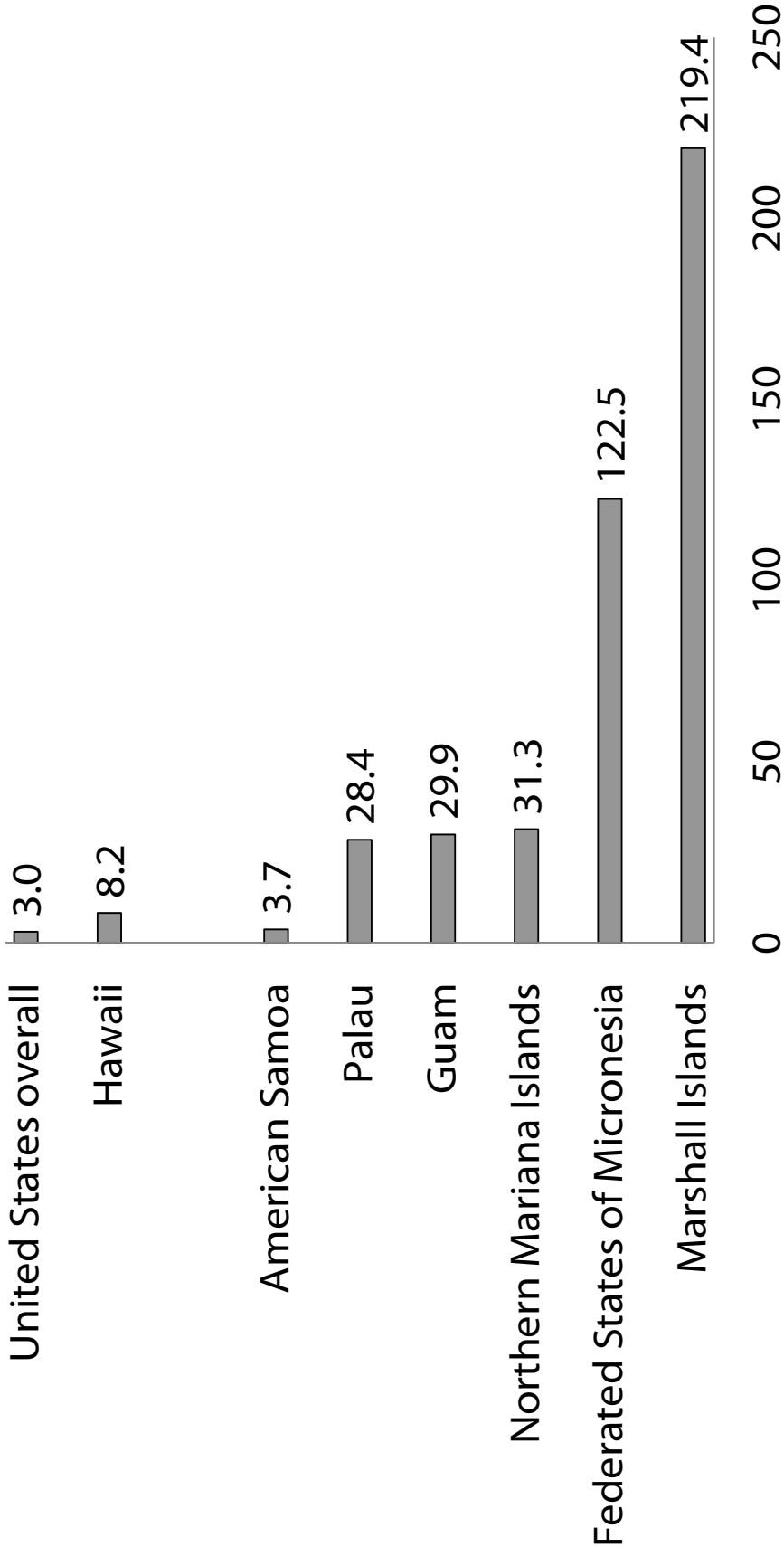
≥50

10-49.9

≤9.9

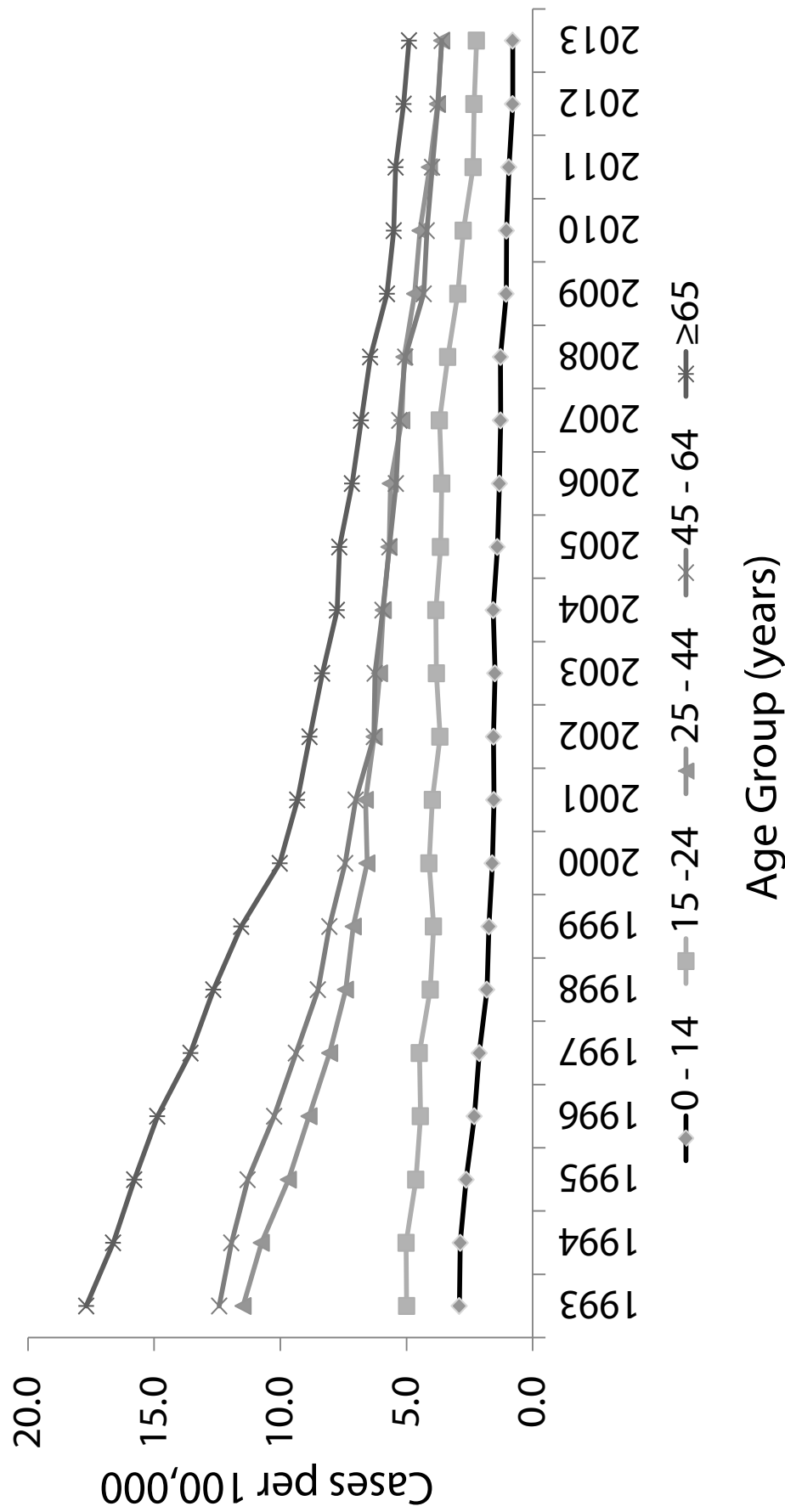
*Case per 100,000

TB Case Rates,* U.S.-Affiliated Pacific Islands, 2013



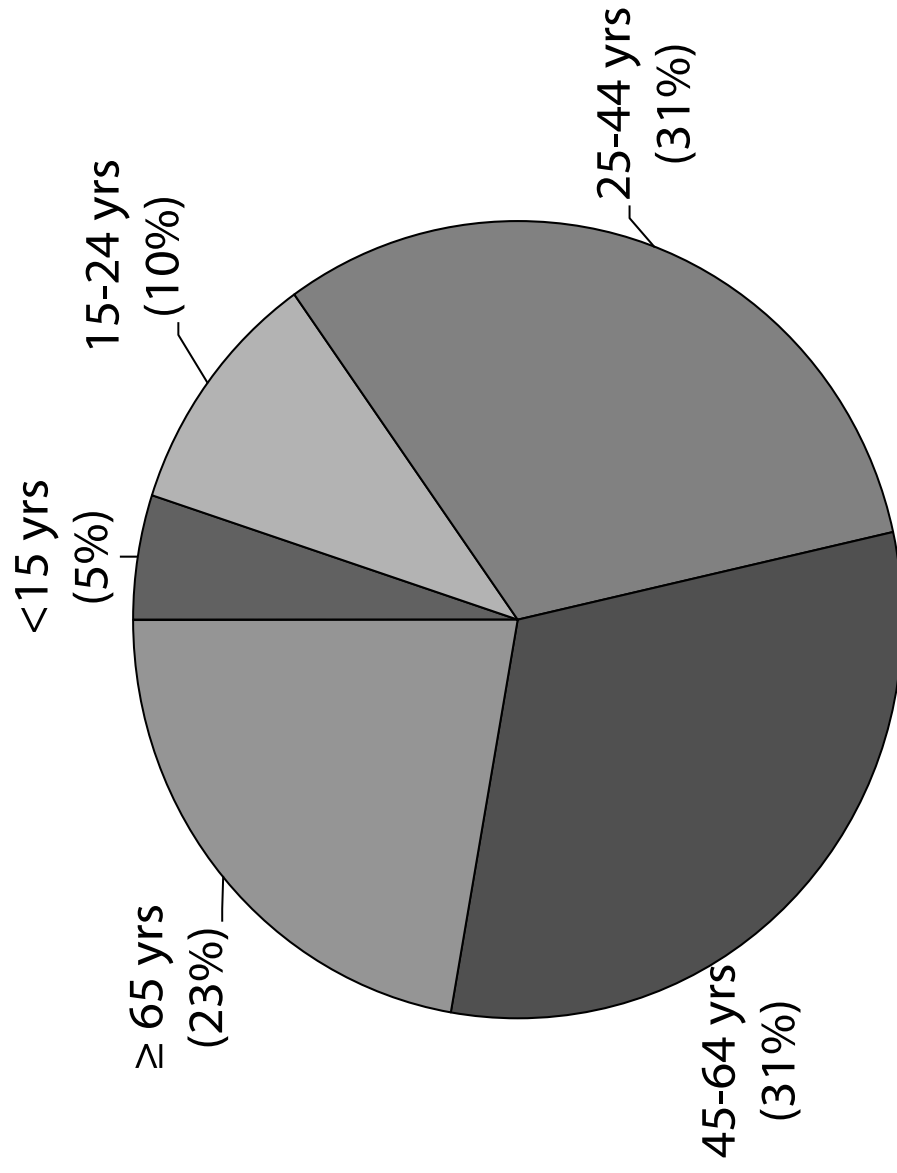
*Cases per 100,000

TB Case Rates* by Age Group **United States, 1993–2013**

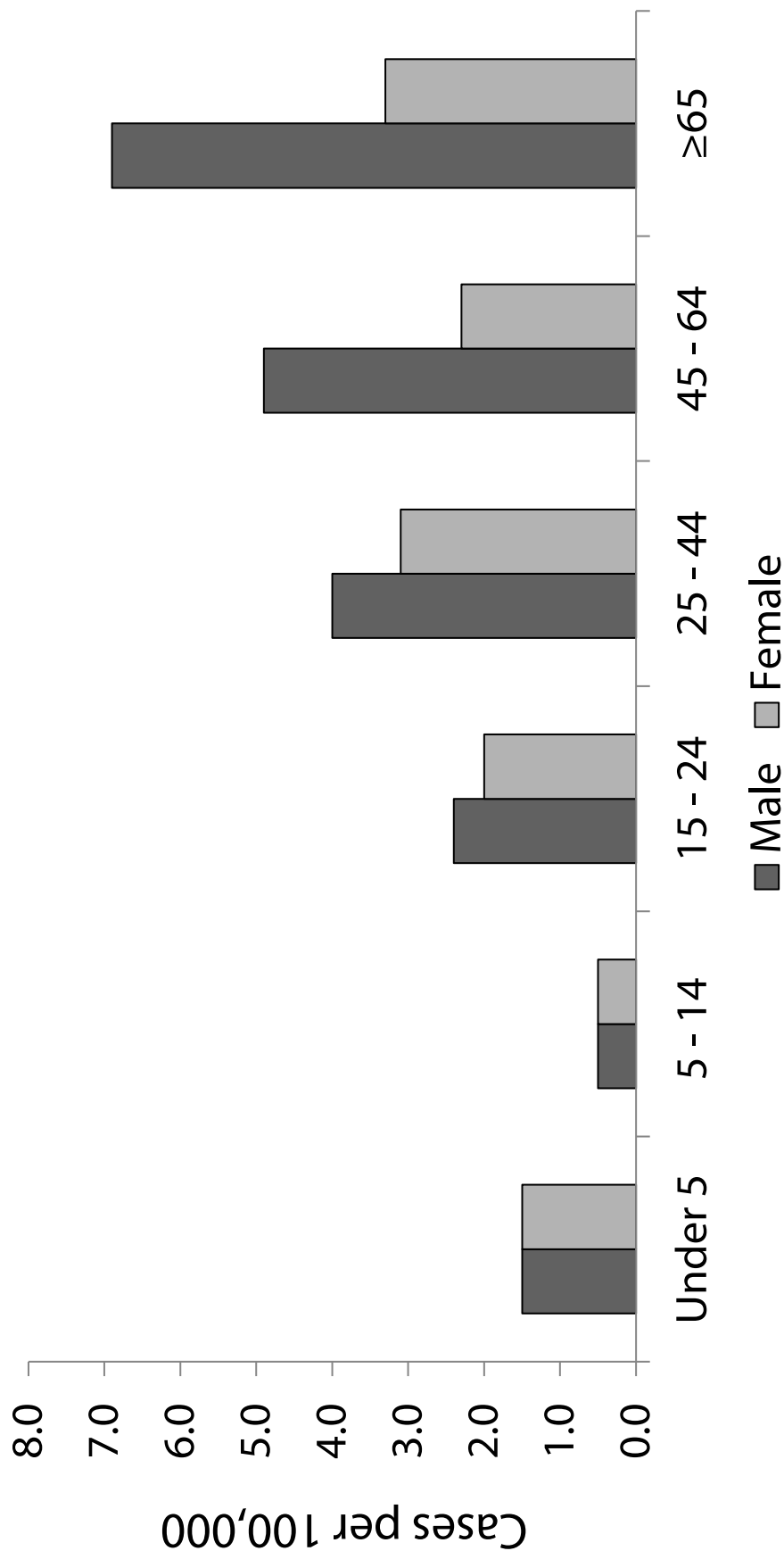


* Updated as of June 11, 2014.

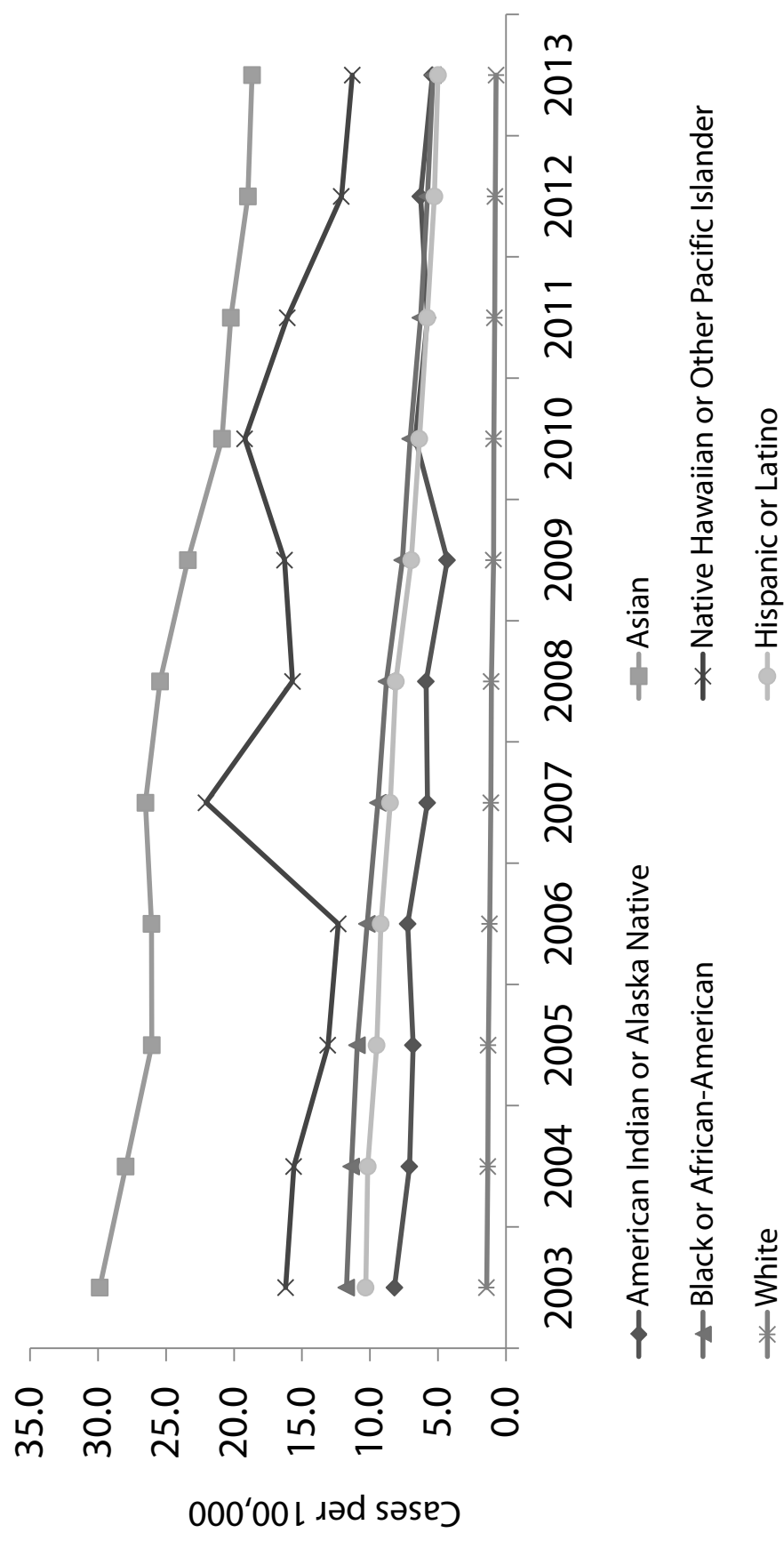
Reported TB Cases by Age Group, United States, 2013



TB Case Rates by Age Group and Sex, United States, 2013

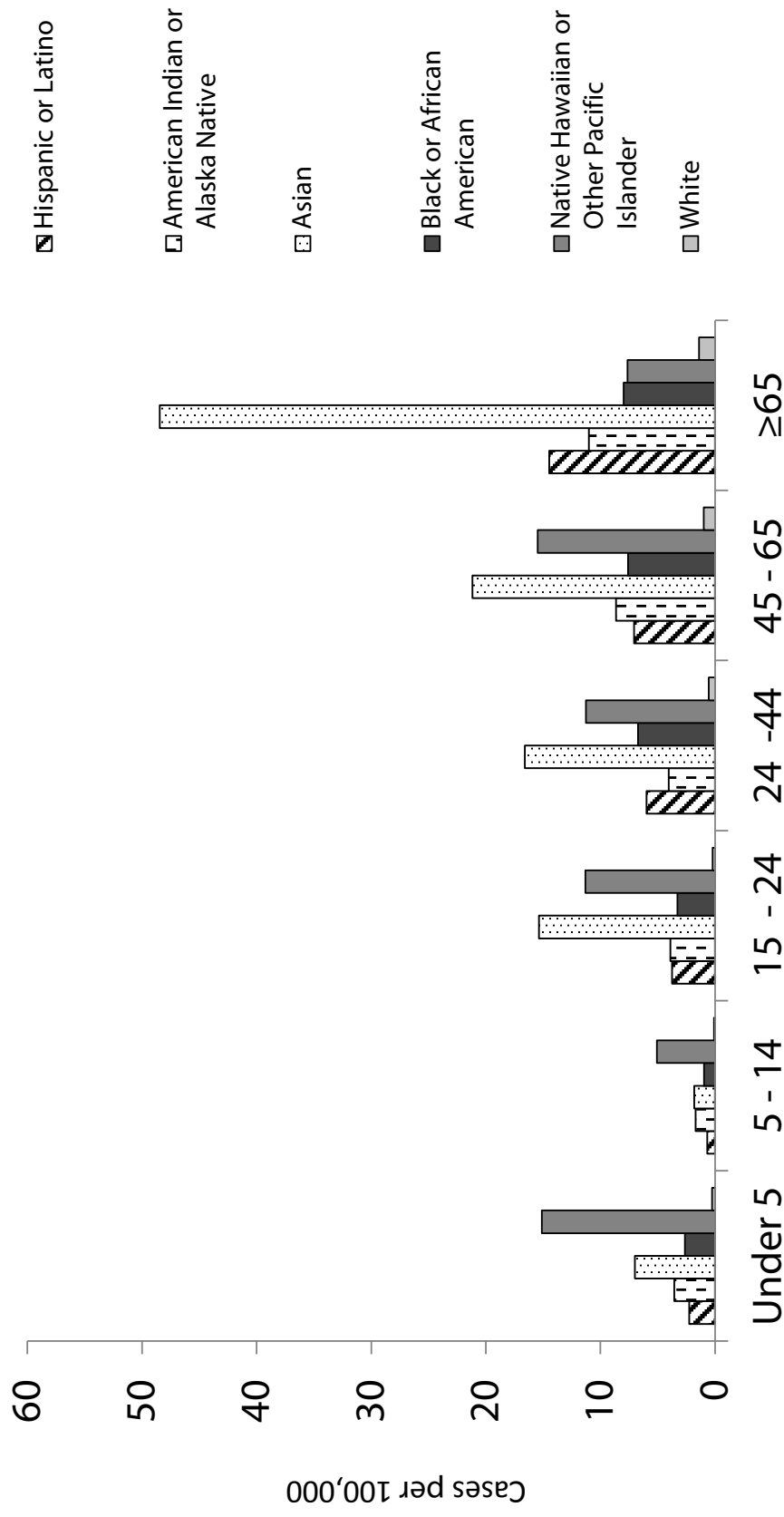


Surveillance Slide #10 TB Case Rates by Race/Ethnicity,* United States, 2003–2013**



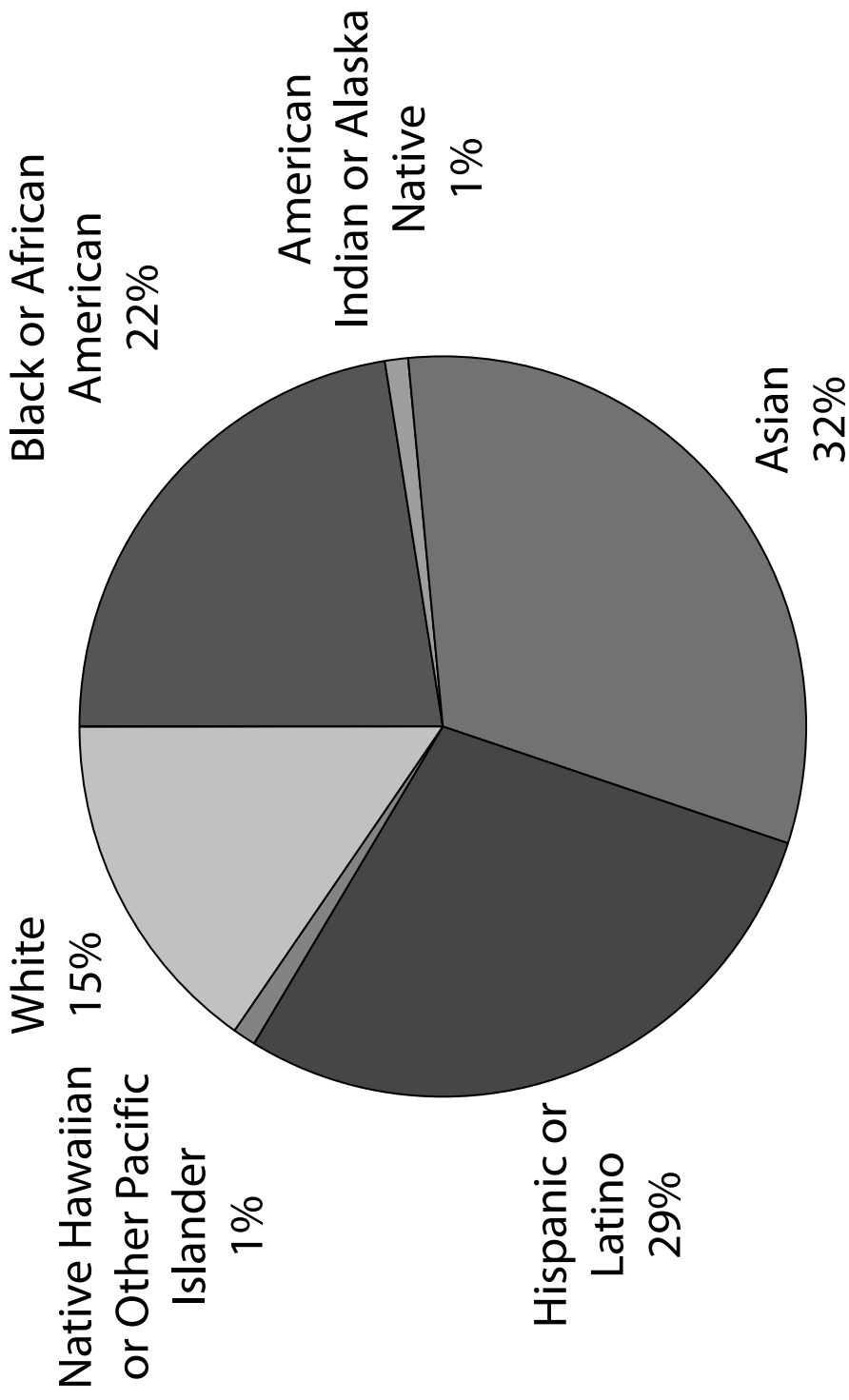
*All races are non-Hispanic.
 **Updated as of June 11, 2014.

TB Case Rates by Age Group and Race/Ethnicity,* United States, 2013

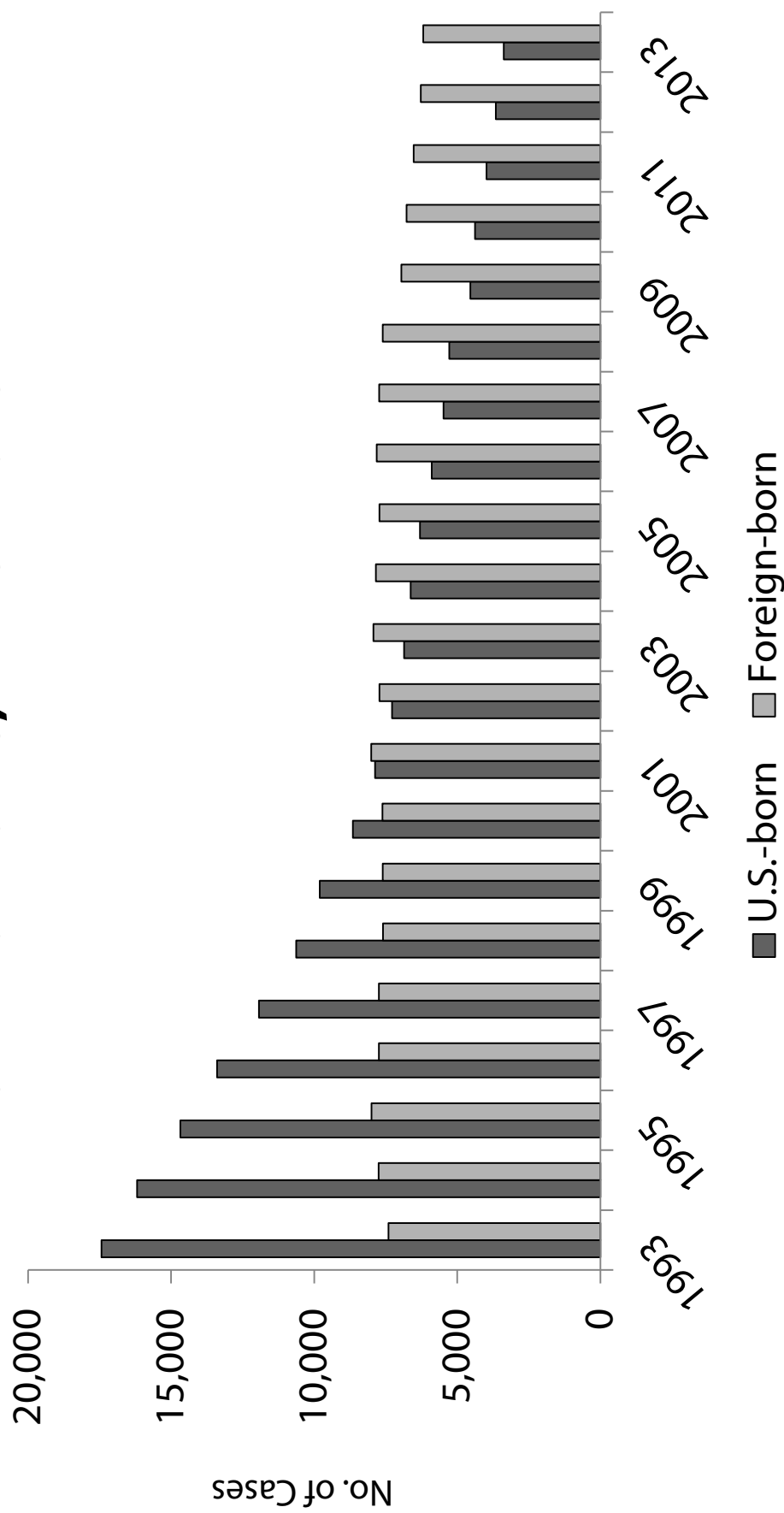


*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

Reported TB Cases by Race/Ethnicity,* United States, 2013

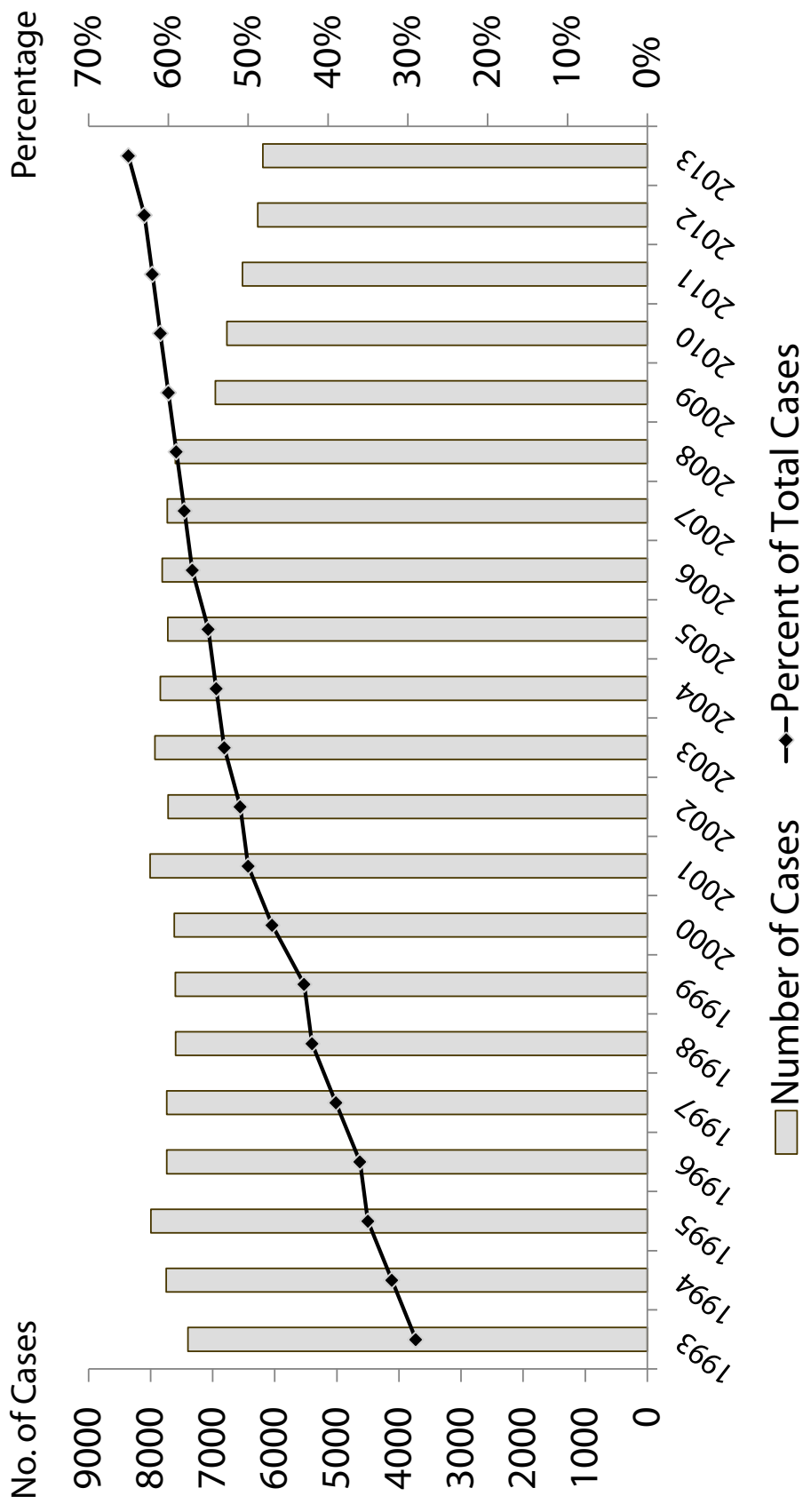


Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2013*



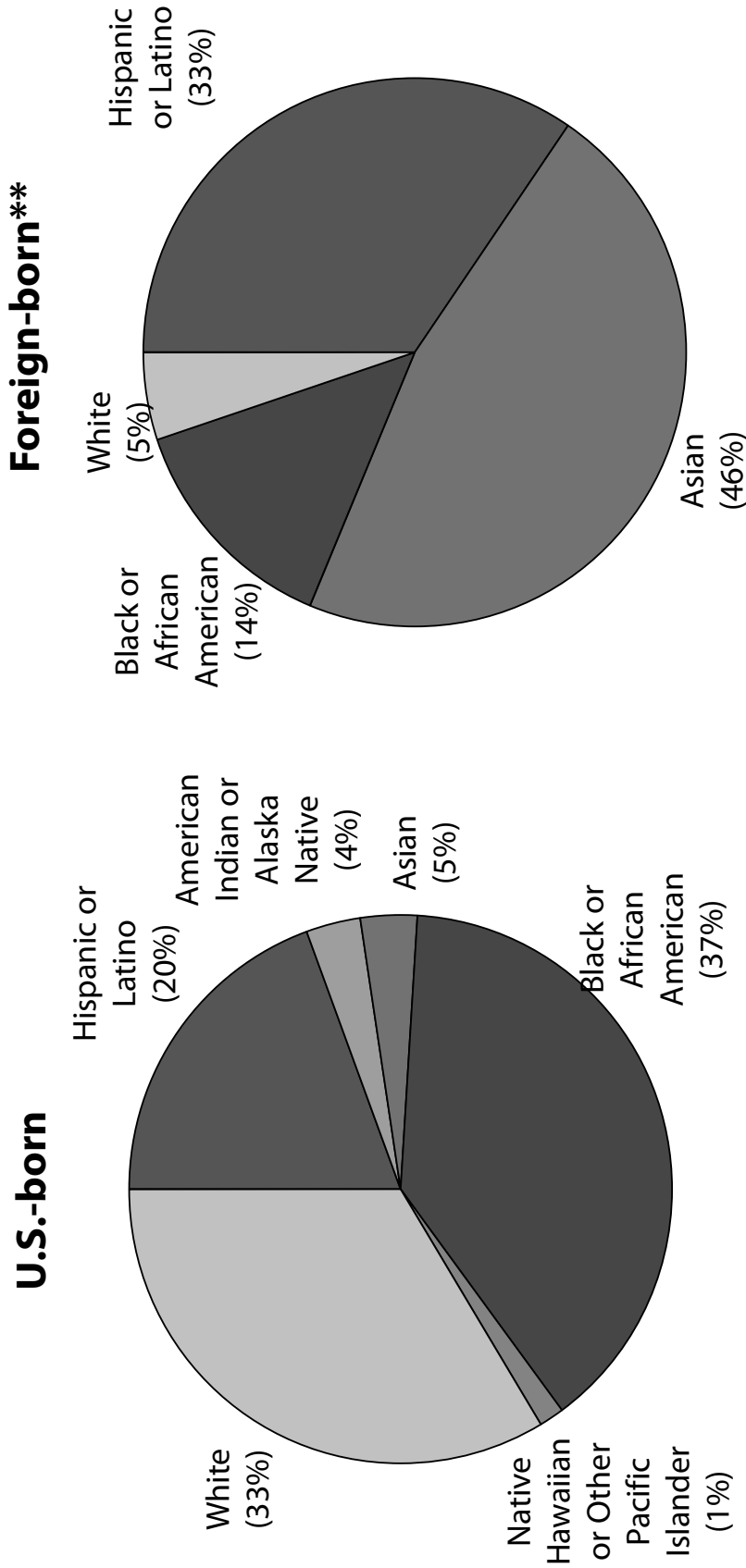
*Updated as of June 11, 2014.

Trends in TB Cases in Foreign-born Persons, United States, 1993 – 2013*



*Updated as of June 11, 2014.

Reported TB Cases by Origin and Race/Ethnicity,* United States, 2013

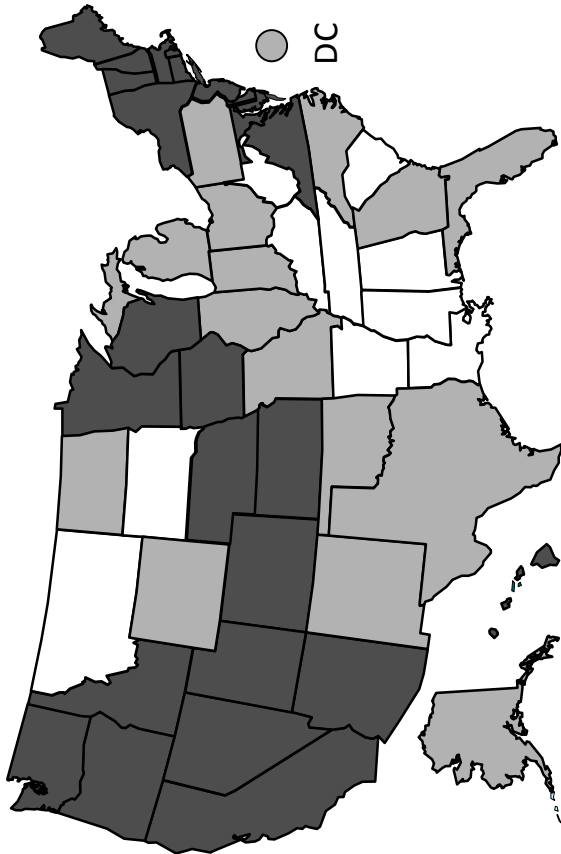


*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

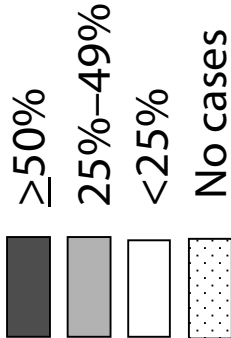
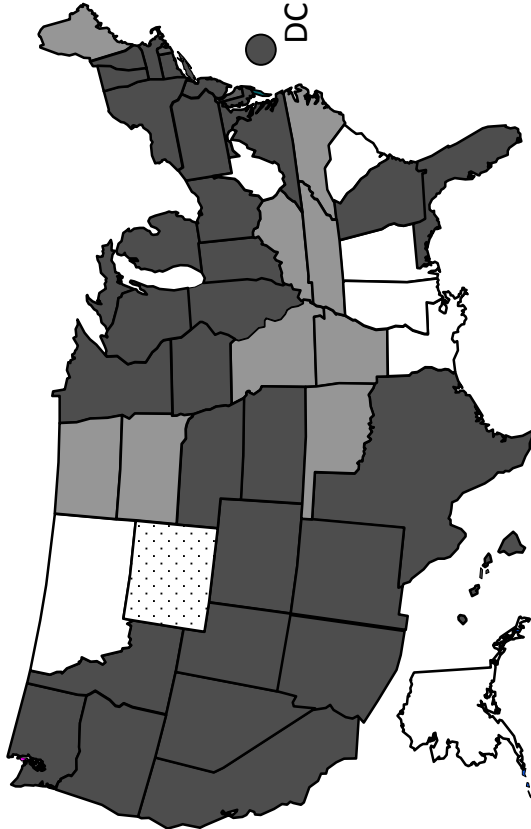
** American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

Percentage of TB Cases Among Foreign-born Persons, United States*

2003

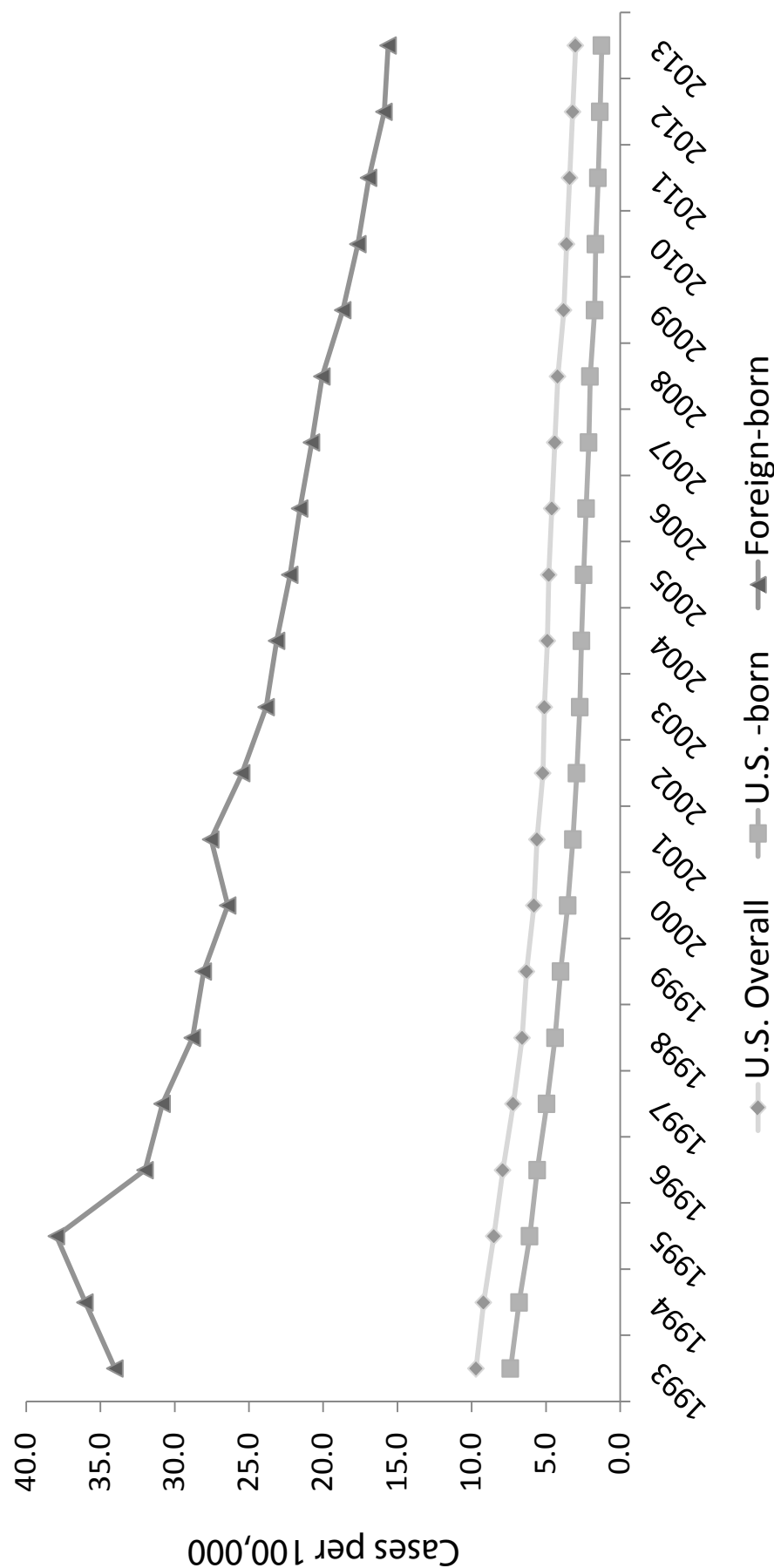


2013



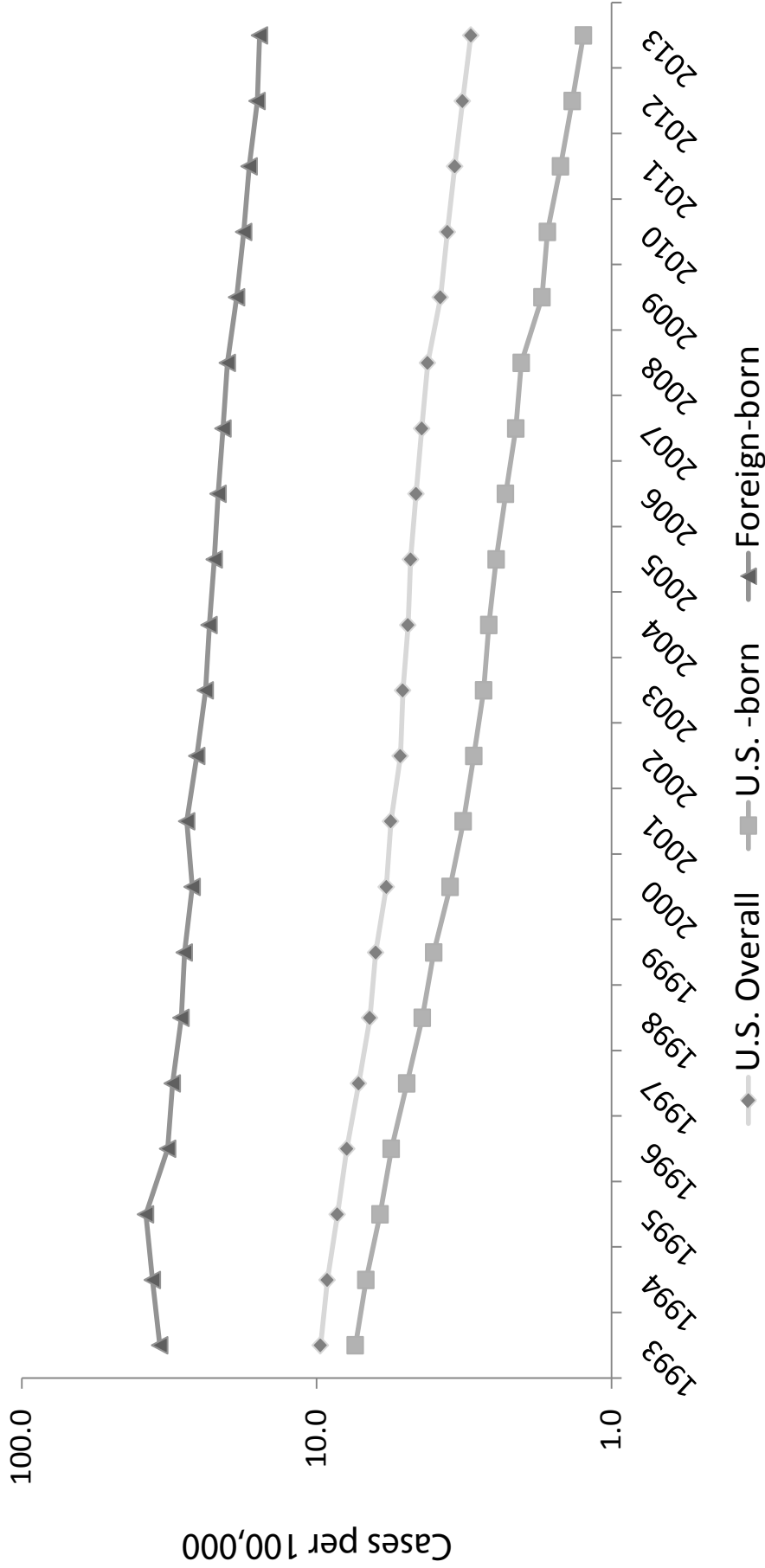
*Updated as of June 11, 2014.

TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2013*



*Updated as of June 11, 2014.

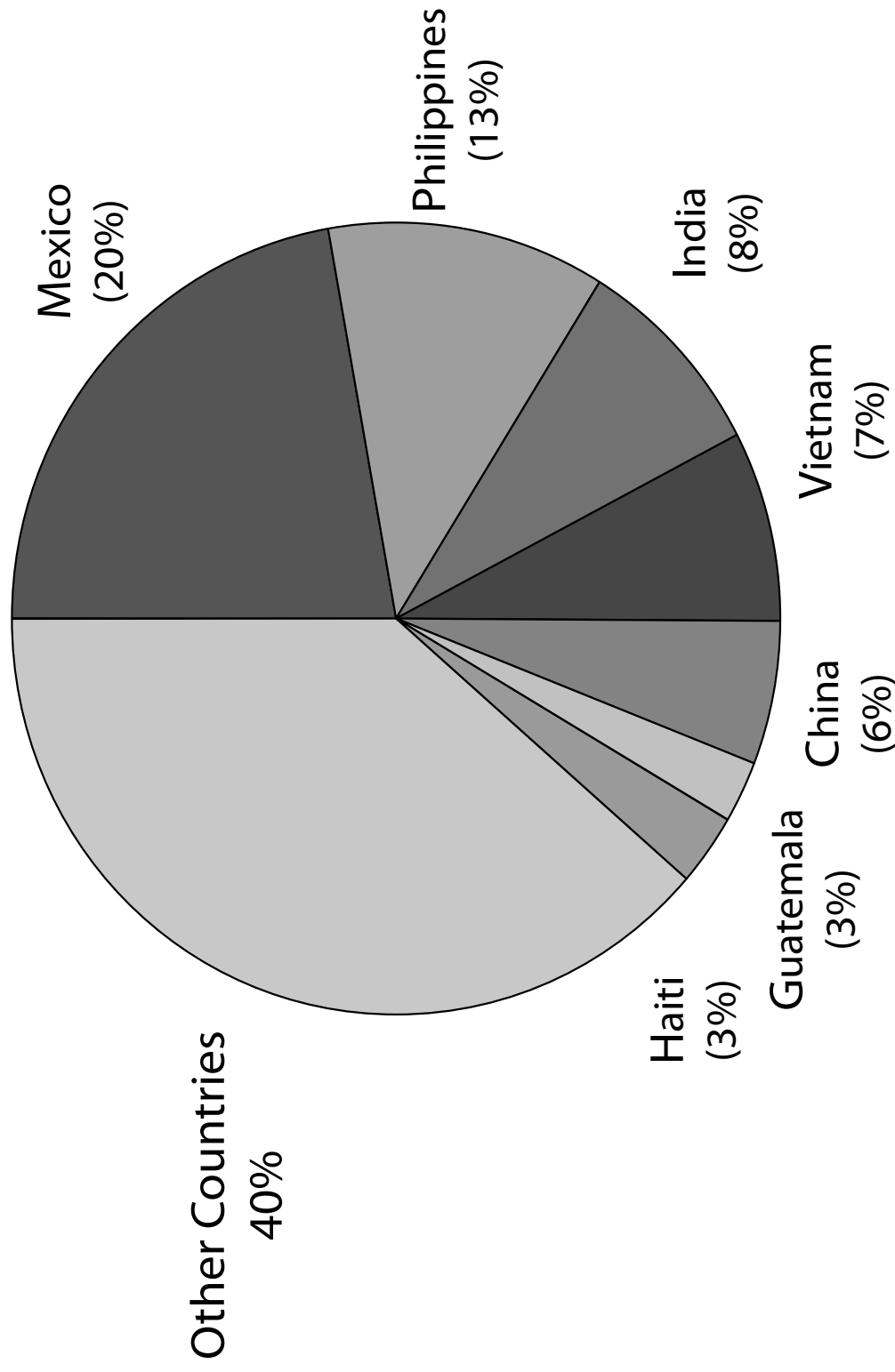
TB Case Rates in U.S.-born vs. Foreign-born Persons, United States,* 1993 – 2013**



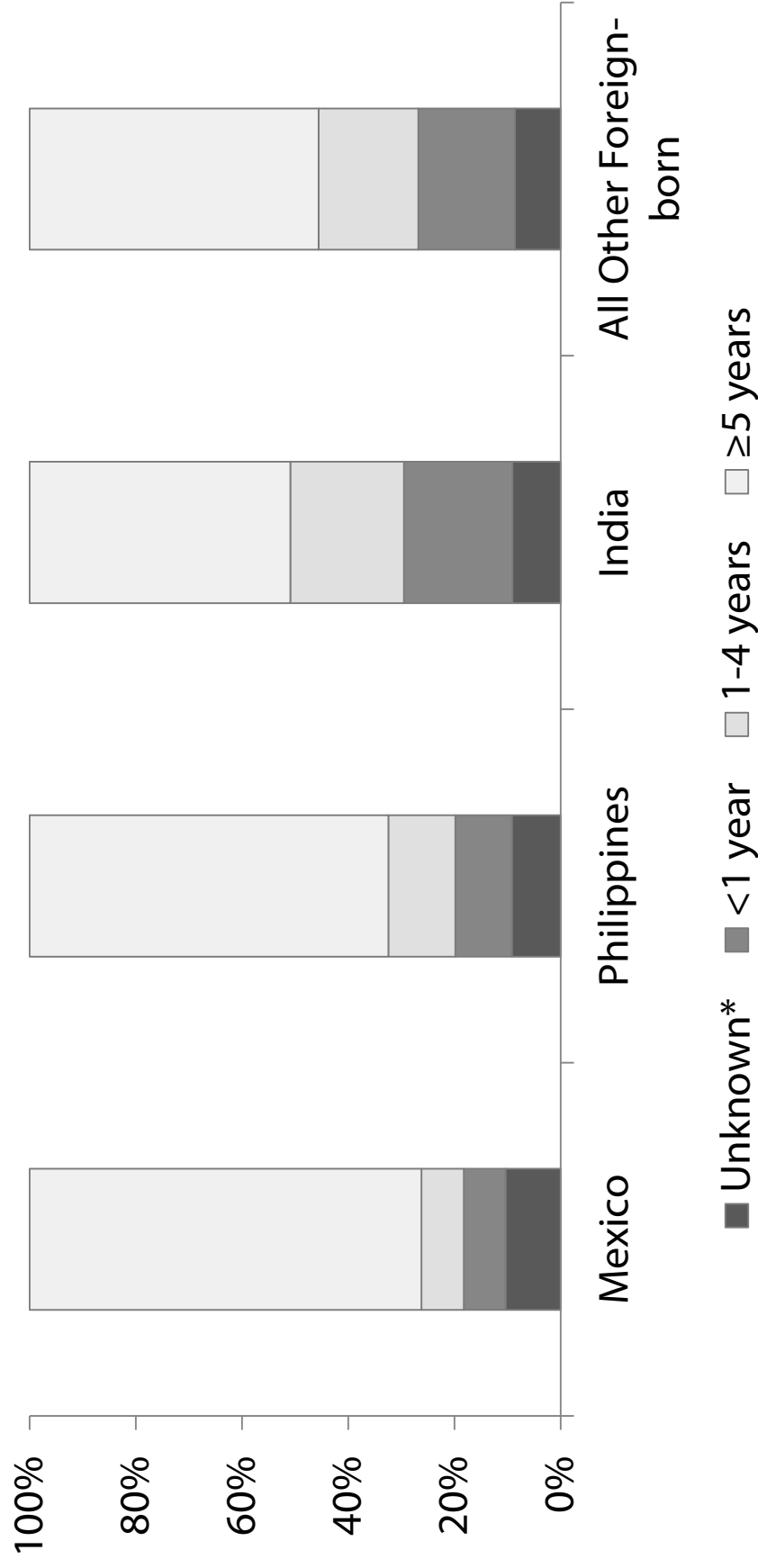
*Includes the same data as slide 15, but rates presented on a logarithmic scale.

**Updated as of June 11, 2014.

Countries of Birth of Foreign-born Persons Reported with TB, United States, 2013

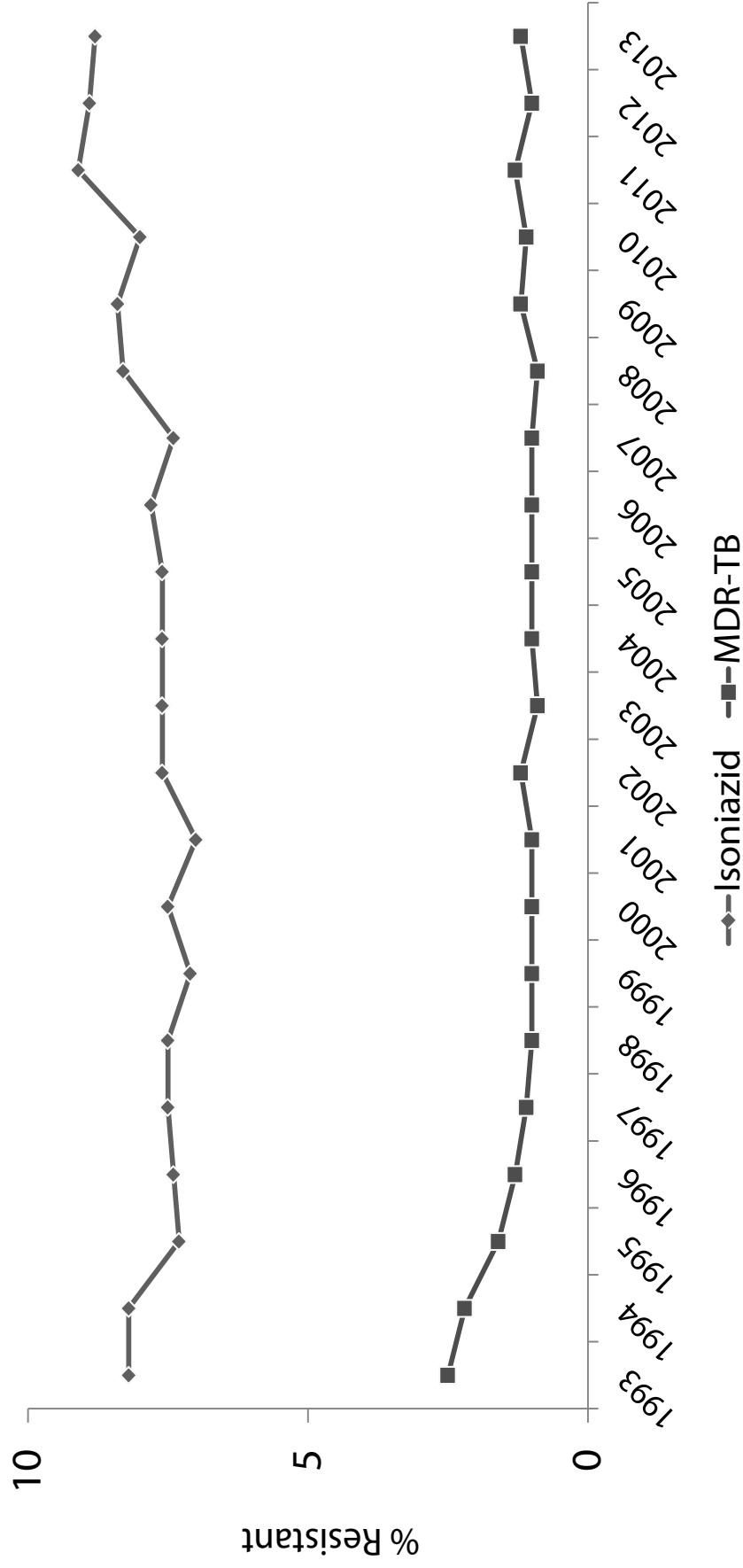


Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2013



*Foreign-born TB patients for whom information on length of residence in the U.S. prior to diagnosis is unknown or missing.

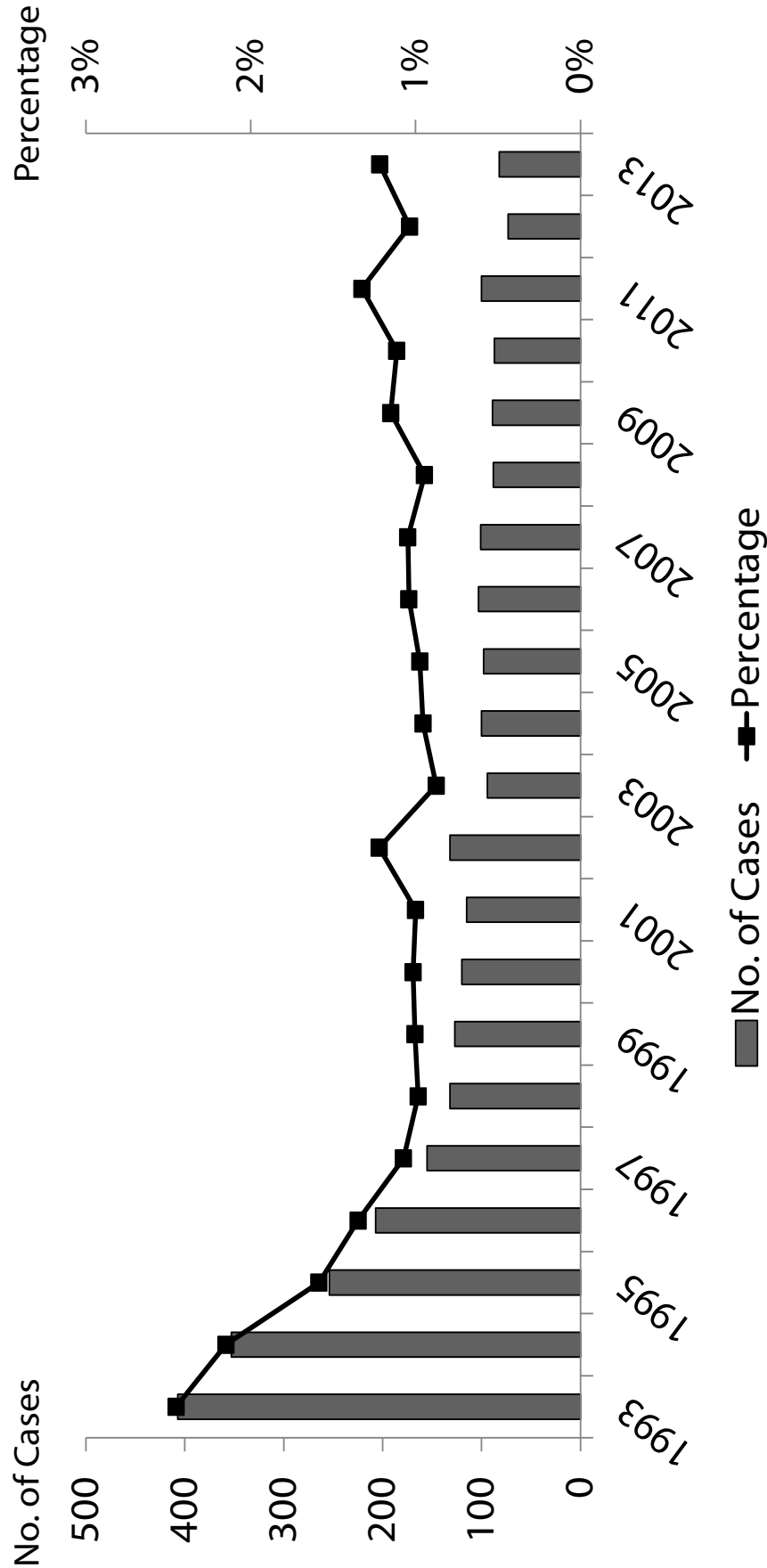
Primary Anti-TB Drug Resistance, United States, 1993 – 2013*



*Updated as of June 11, 2014.

Note: Based on initial isolates from persons with no prior history of TB. Multidrug resistant TB (MDR TB) is defined as resistance to at least isoniazid and rifampin.

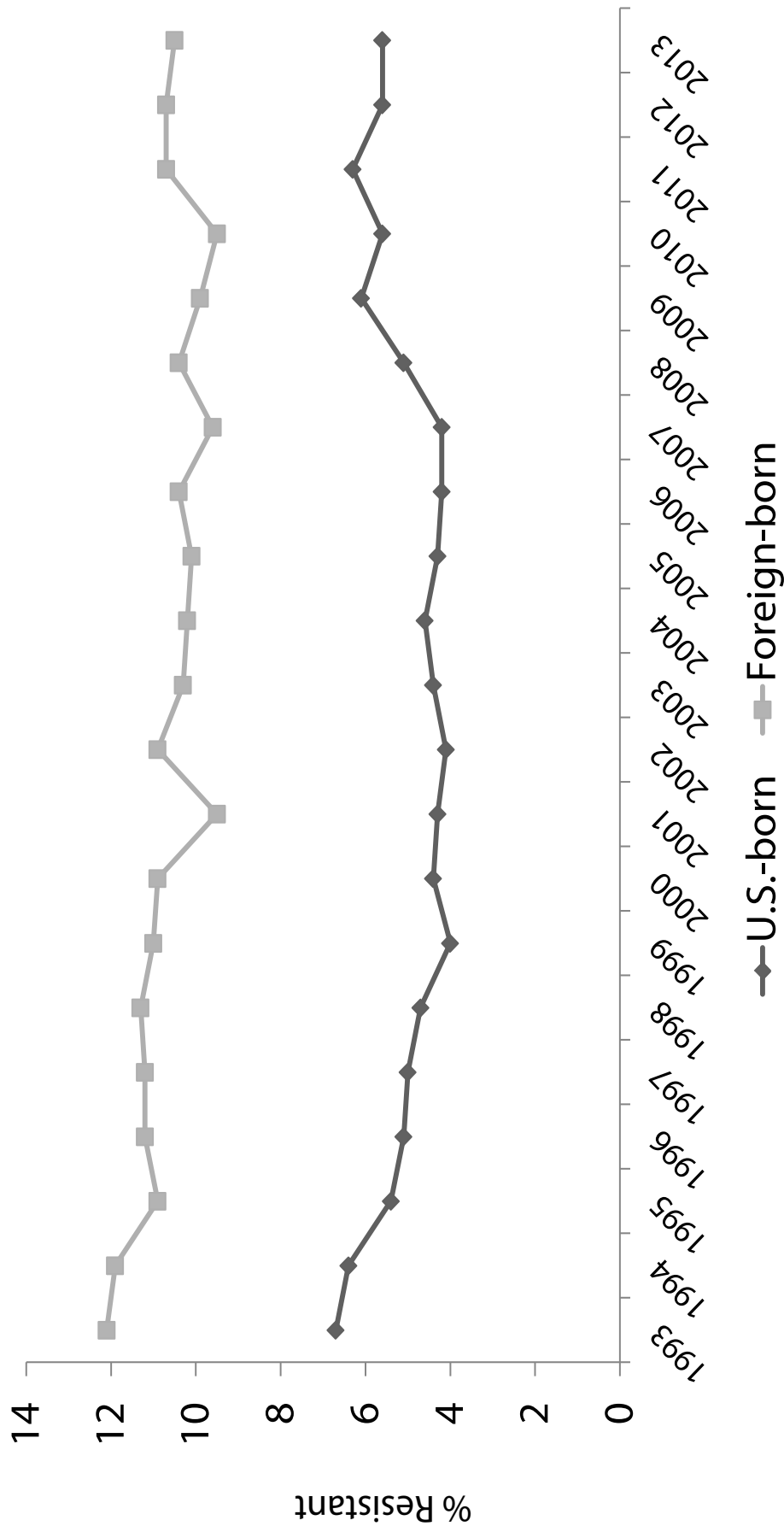
Primary MDR TB, United States, 1993 – 2013*



*Updated as of June 11, 2014.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

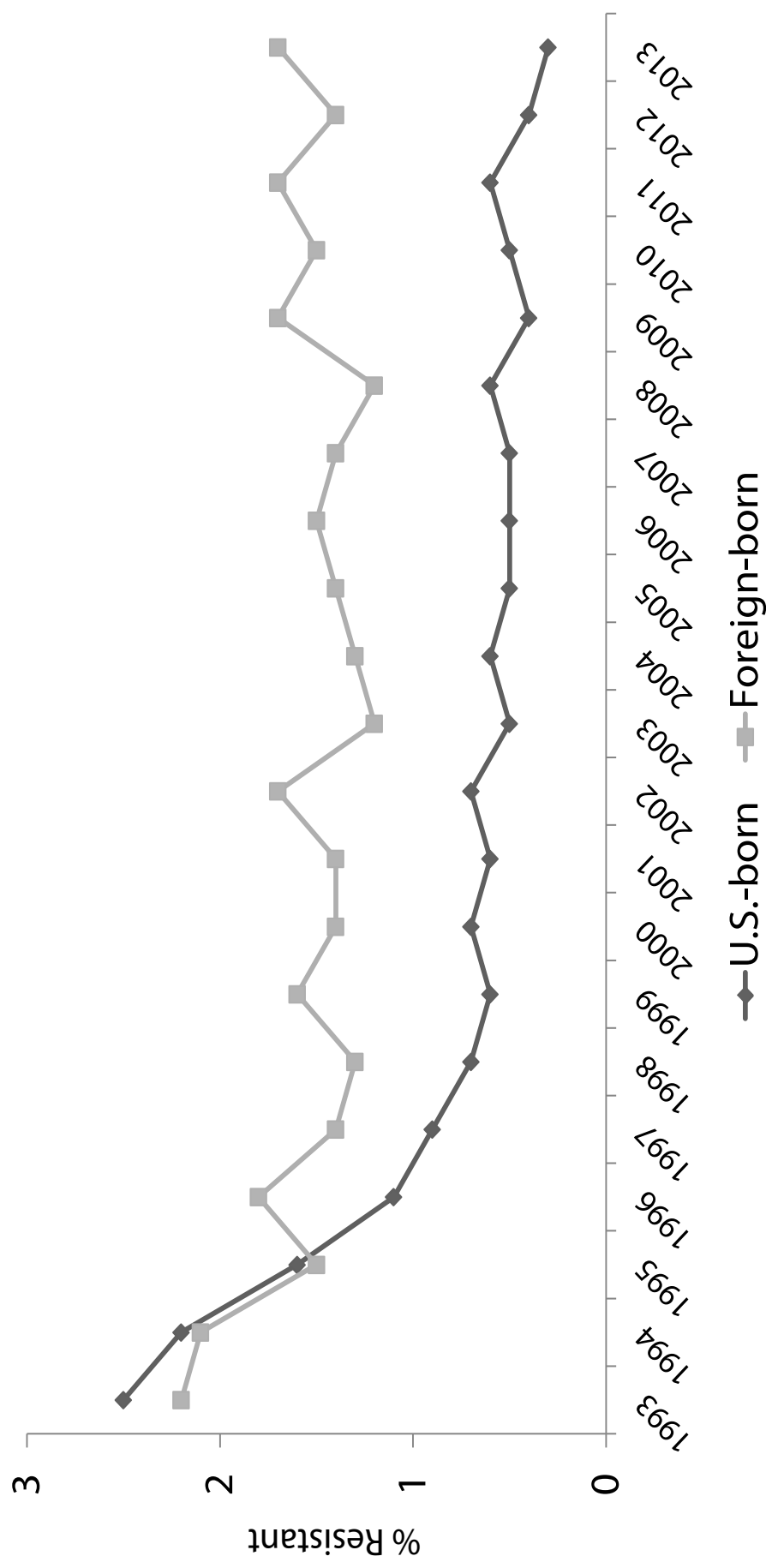
Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2013*



*Updated as of June 11, 2014.

Note: Based on initial isolates from persons with no prior history of TB.

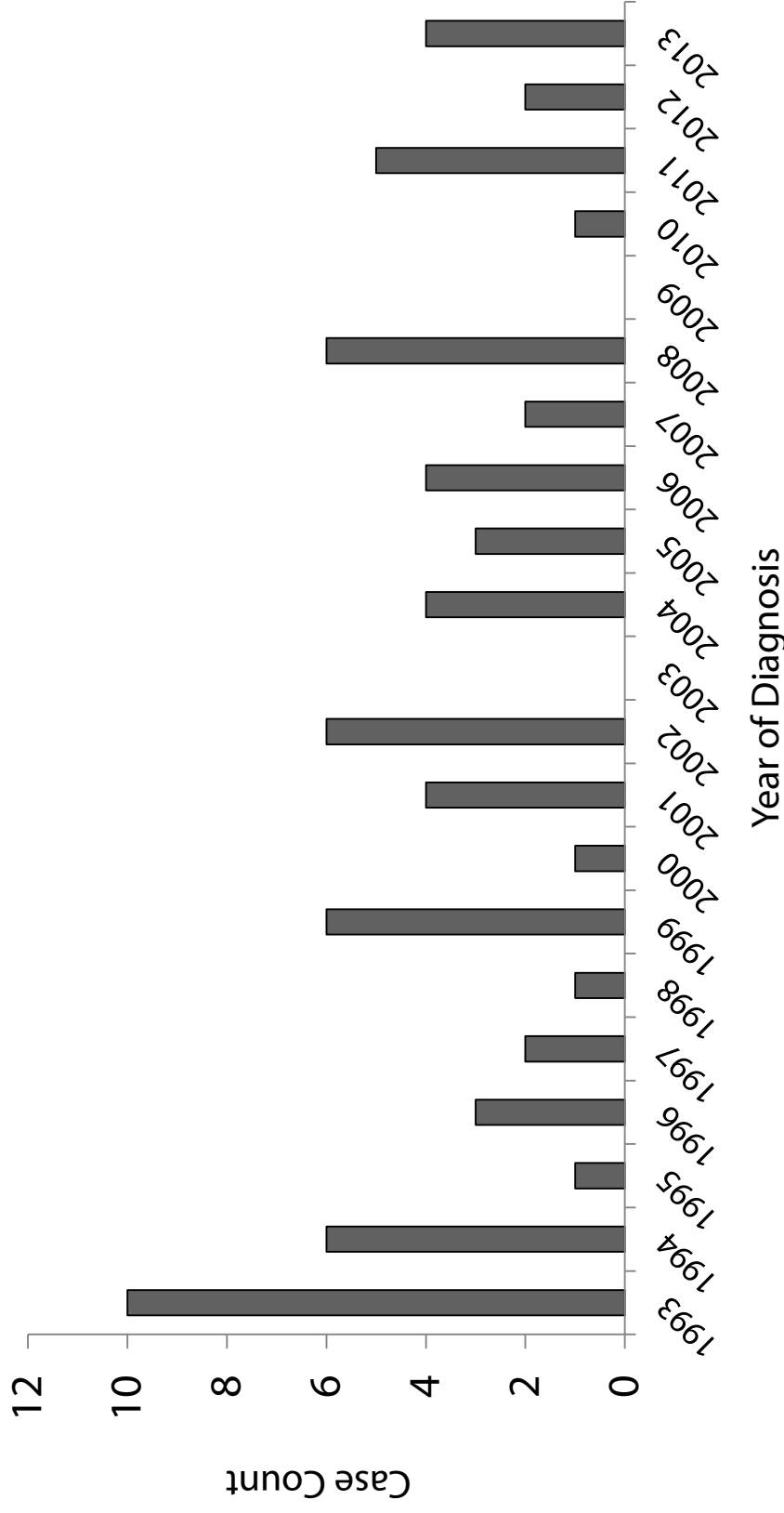
Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2013*



*Updated as of June 11, 2014.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

XDR TB Case Count Defined on Initial DST* by Year, 1993 – 2013**

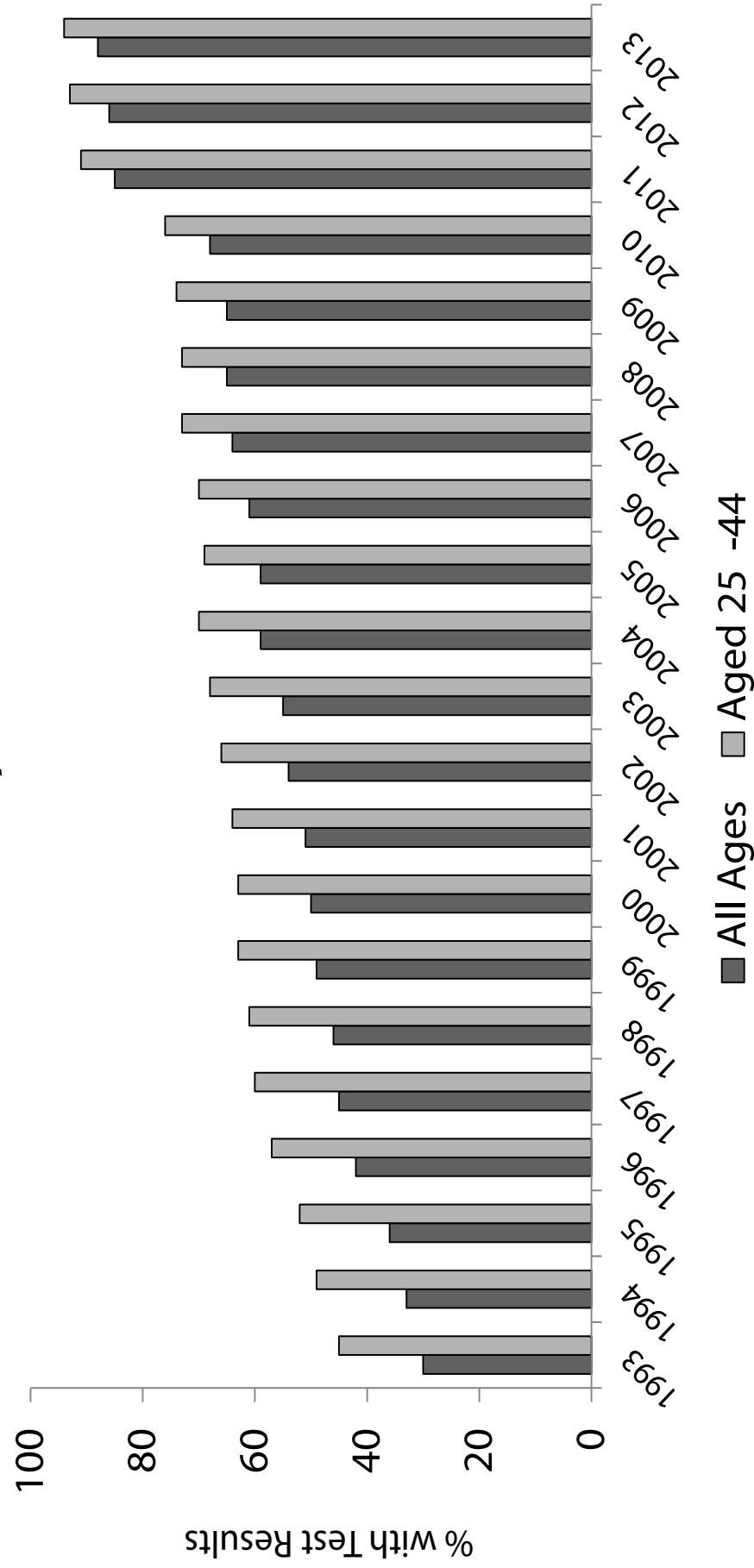


* Drug susceptibility test.

** Updated as of June 11, 2014.

Note: Extensively drug-resistant TB (XDR TB) is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs.

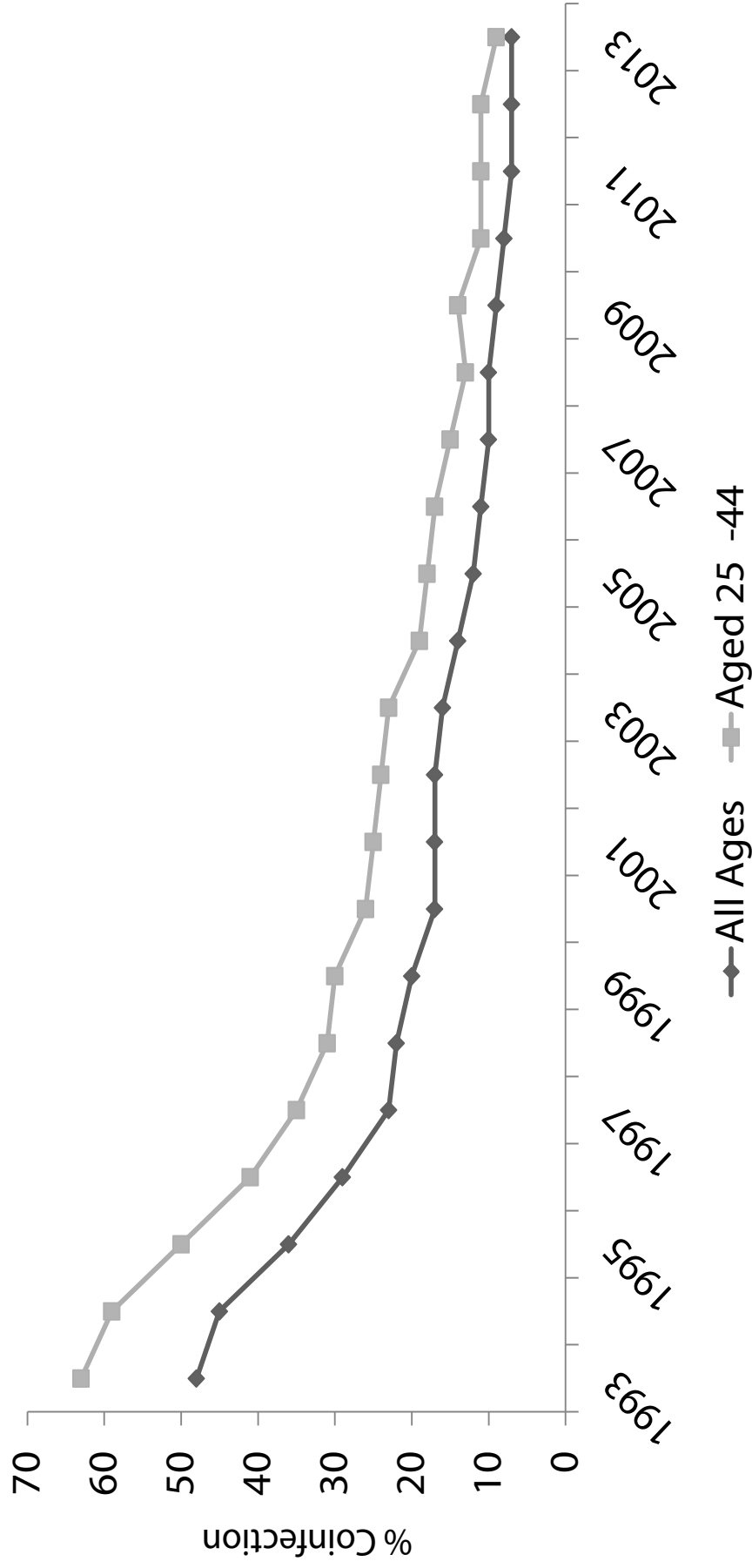
Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993 – 2013*



*Updated as of June 11, 2014.

Note: Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS. Rhode Island did not report HIV test results for years 1993–1997. HIV test results for Vermont are not included for years 2007–2010. HIV test results for California are not included for years 2005–2010.

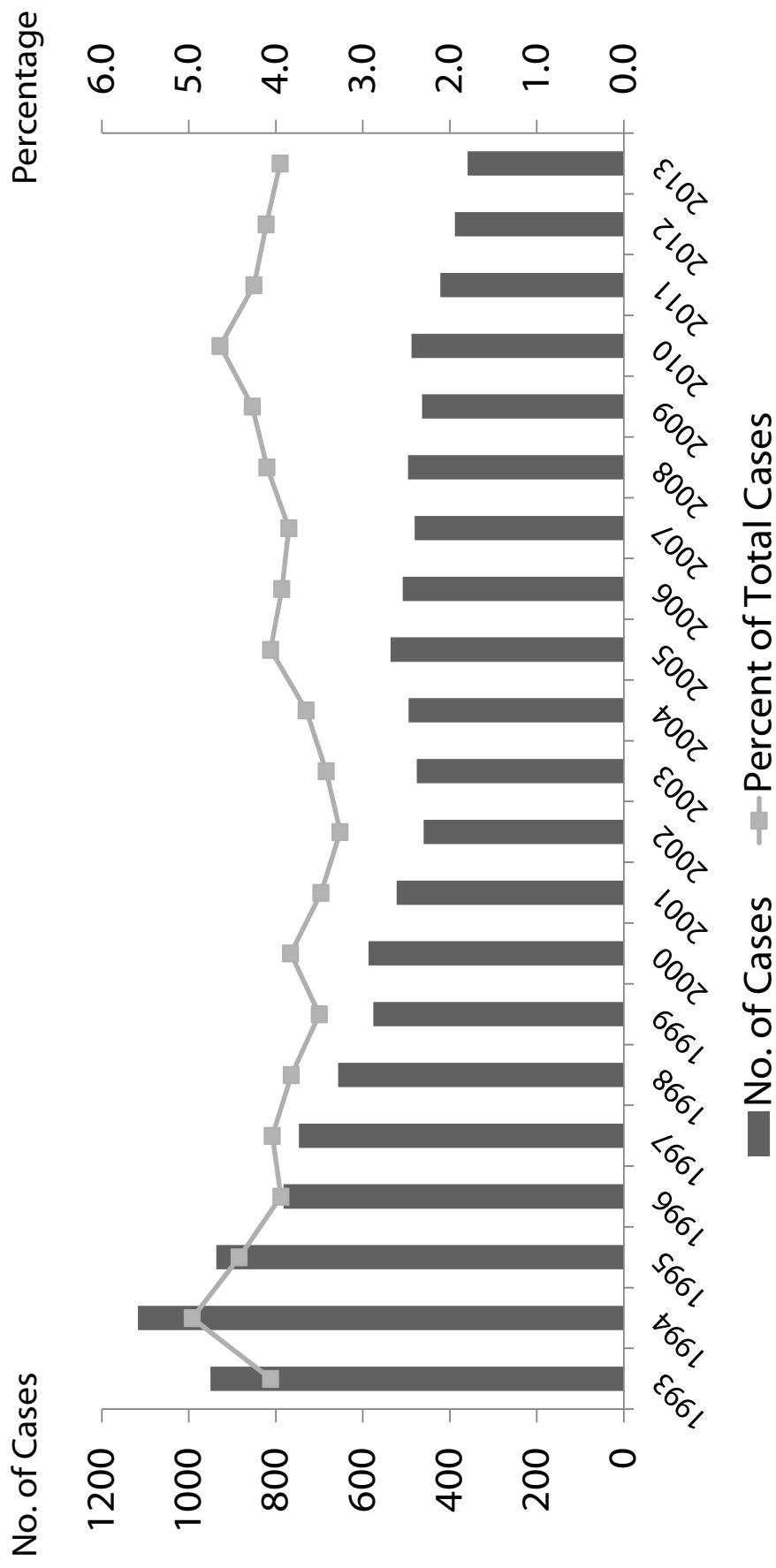
Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2013*



*Updated as of June 11, 2014

Note: Minimum estimates based on reported HIV-positive status among all TB cases in the age group

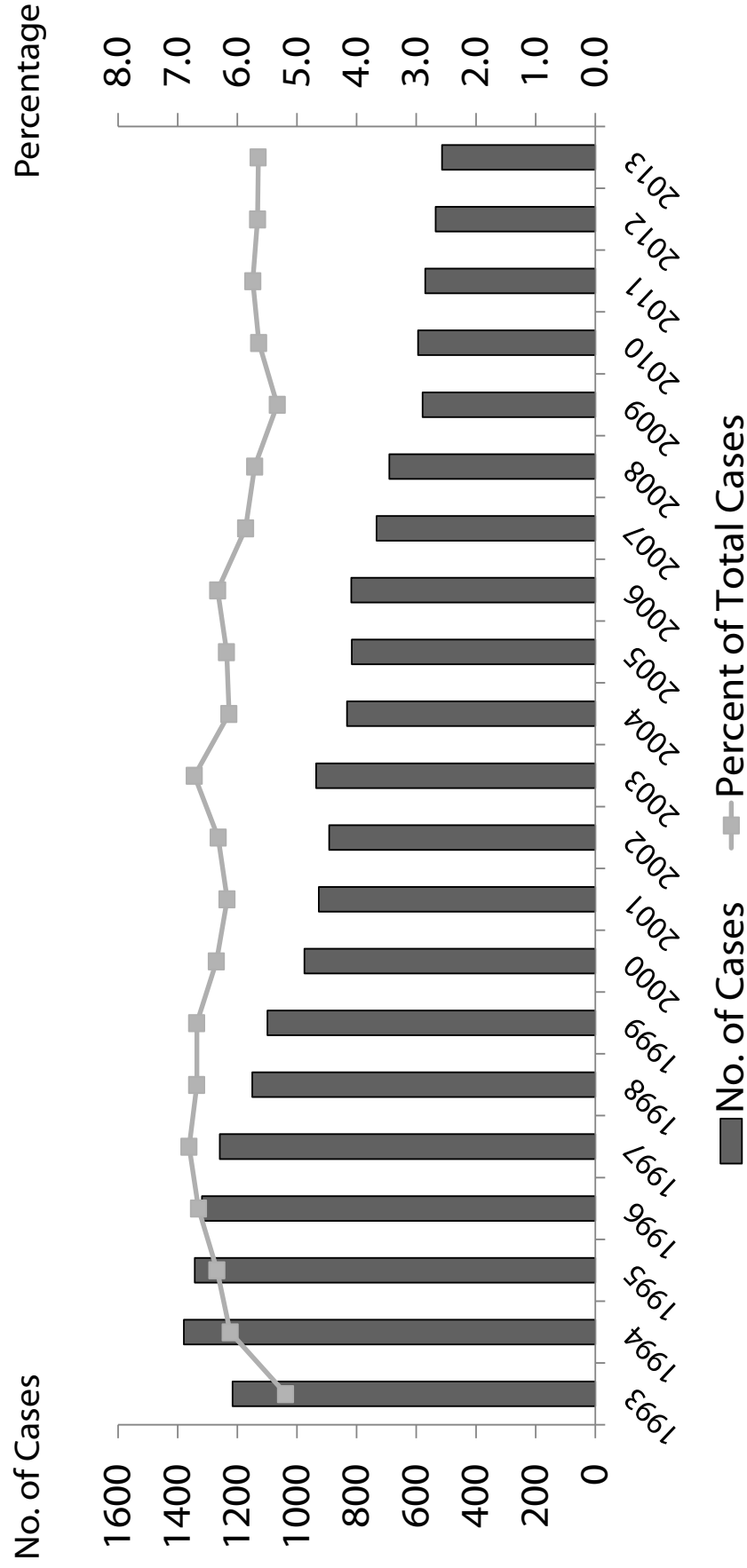
TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993-2013*



*Updated as of June 11, 2014

Note: Resident of correctional facility at time of TB diagnosis

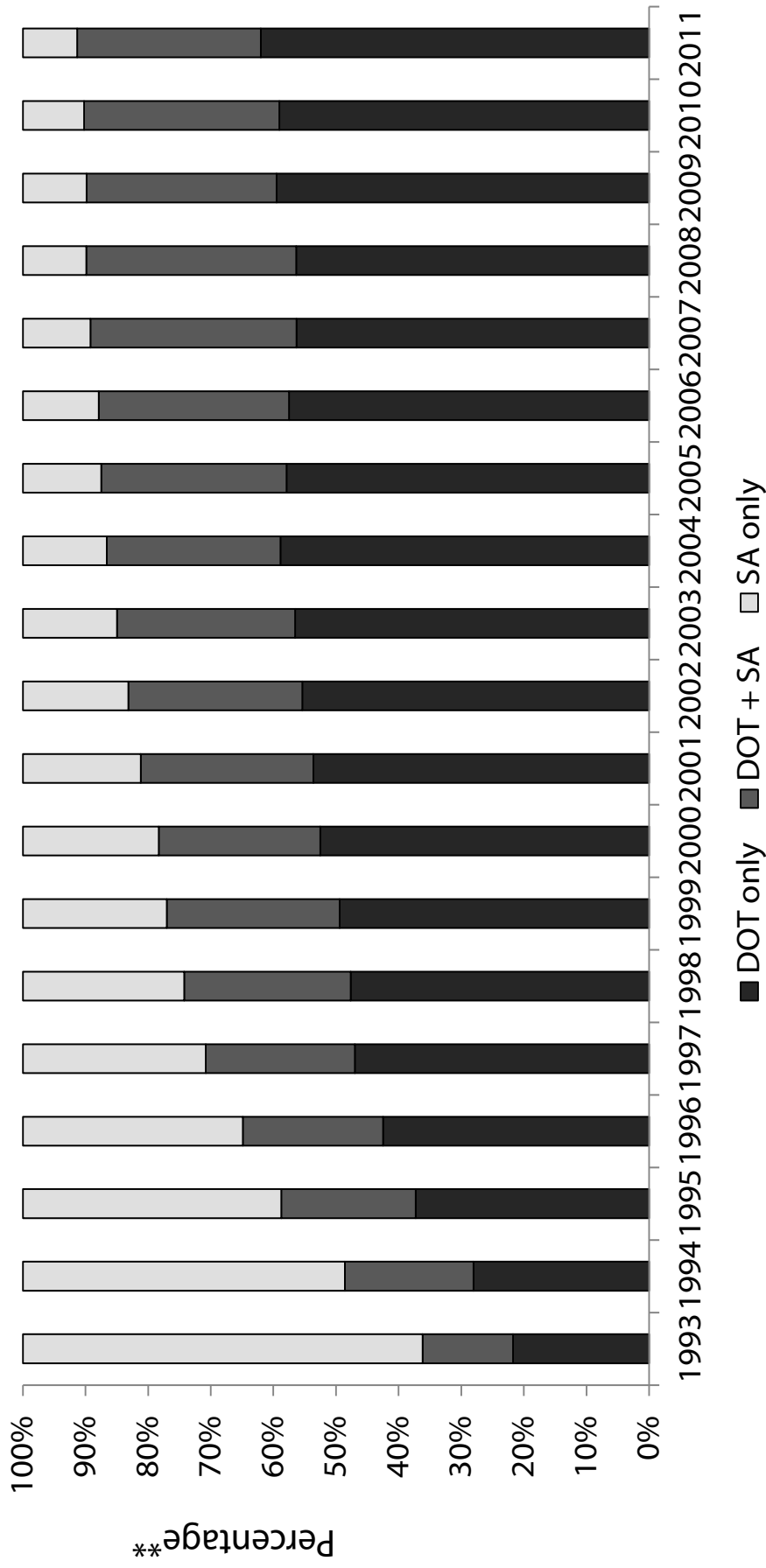
TB Cases Reported as Homeless in the 12 Months Prior to Diagnosis, Age ≥15, United States, 1993-2013*



*Updated as of June 11, 2014

Note: Homeless within past 12 months of TB diagnosis

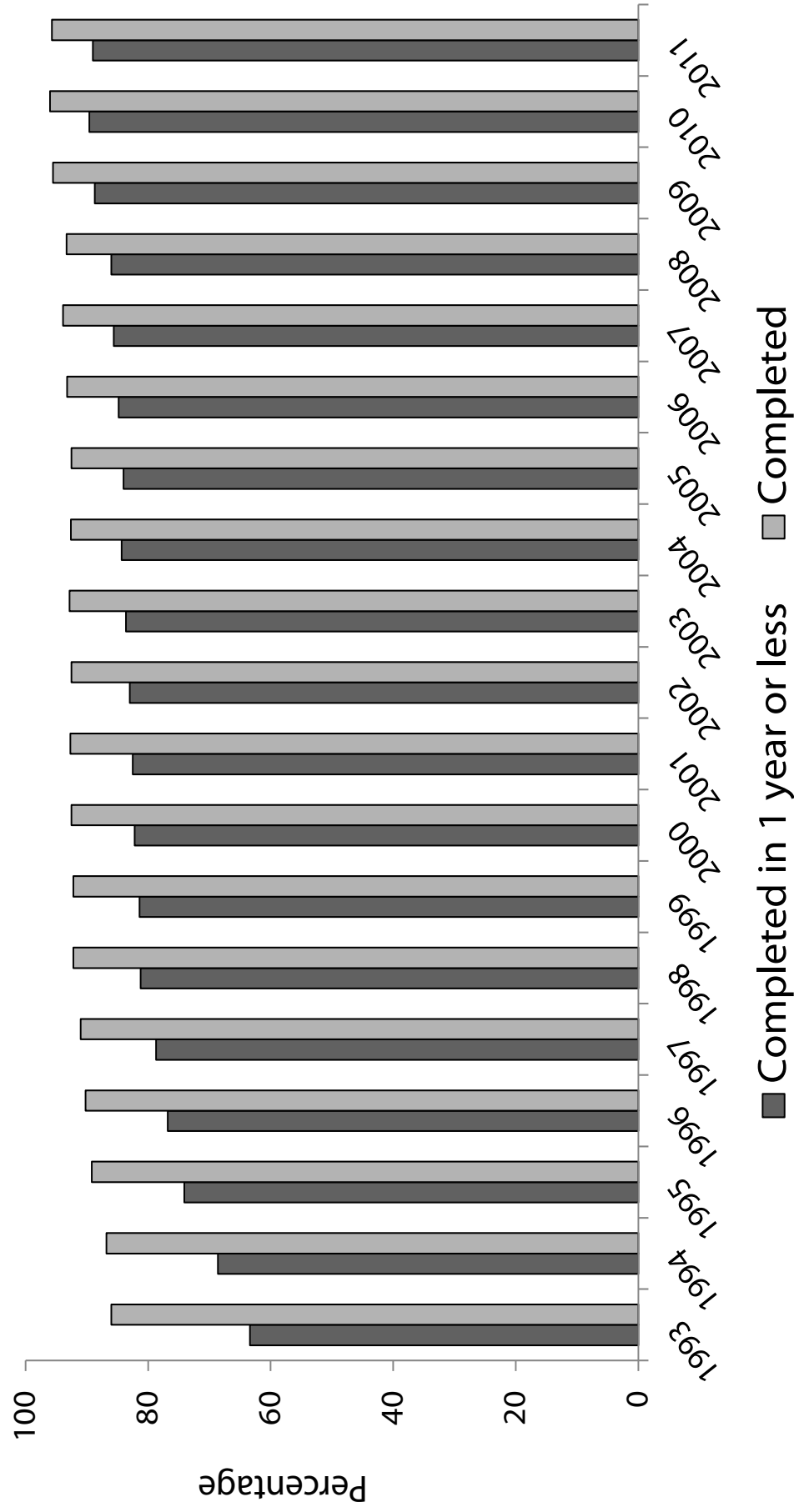
Mode of Treatment Administration in Persons Reported with TB, United States, 1993 – 2011*



*Updated as of June 11, 2014. Data available through 2011 only.

**Percentage of total cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, and excluding cases with unknown mode of treatment administration. Directly observed therapy (DOT); Self-administered therapy (SA)

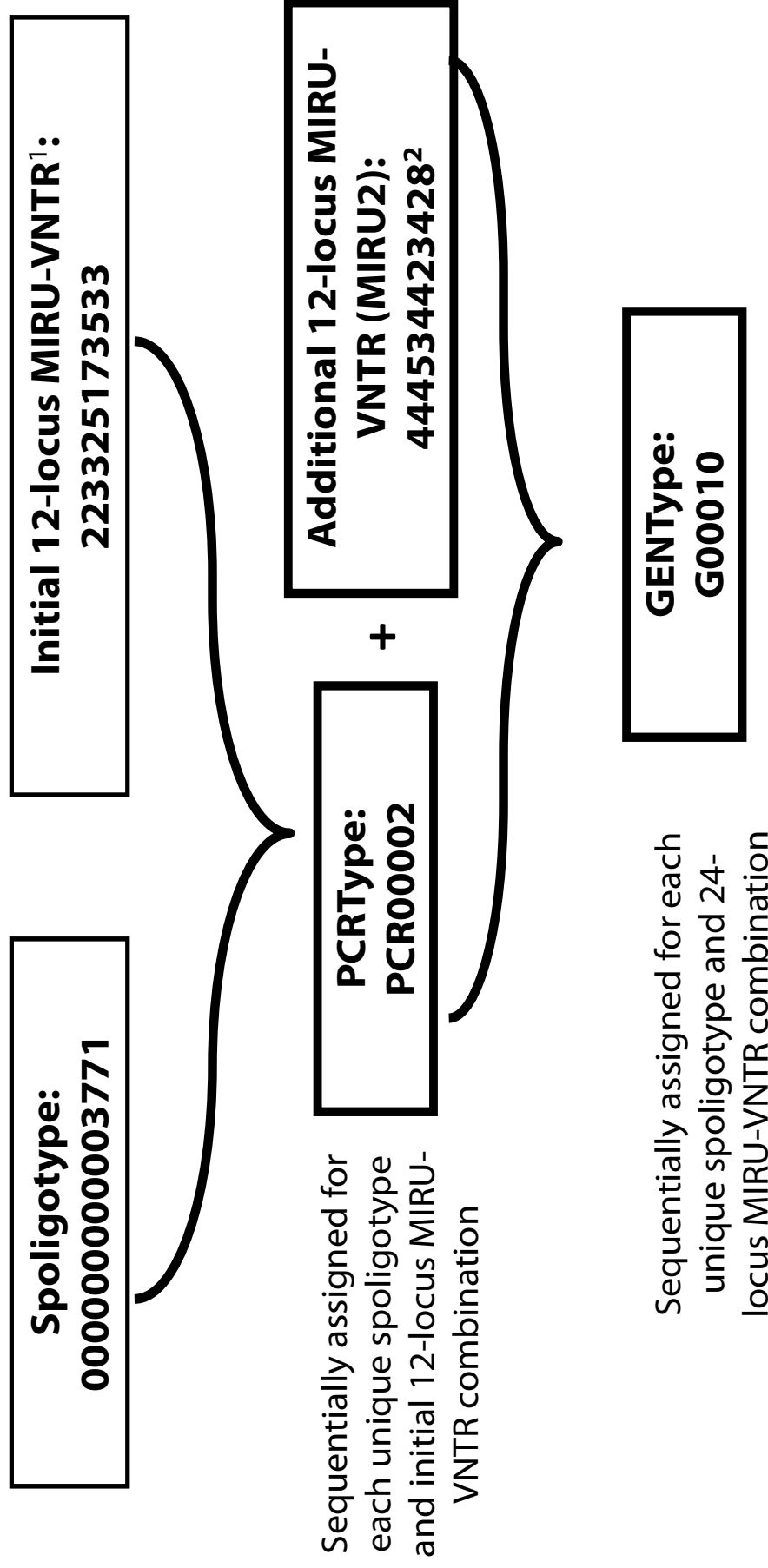
Completion of TB Therapy, United States, 1993 – 2011*



* Updated as of June 11, 2014. Data available through 2011 only.

Note: Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningial disease, or pediatric patient (aged <15) with milary disease or positive blood culture.

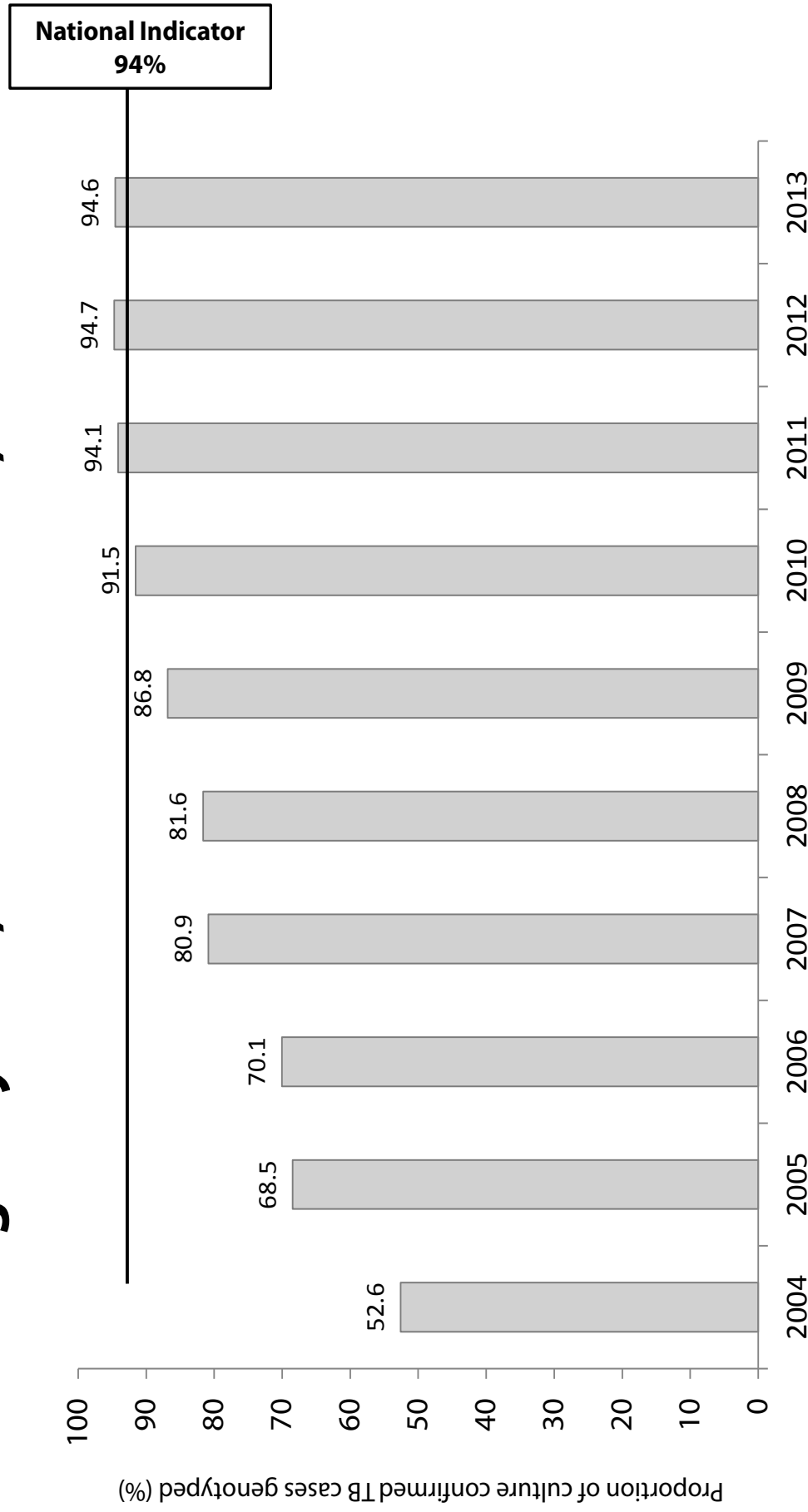
Definition for Tuberculosis Genotyping in the United States



¹ Mycobacterial interspersed repetitive unit-variable number tandem repeat

² The complete set of 24 loci is referred to as 24-locus MIRU-VNTR and is used for GENType designation for genotype in the United States.

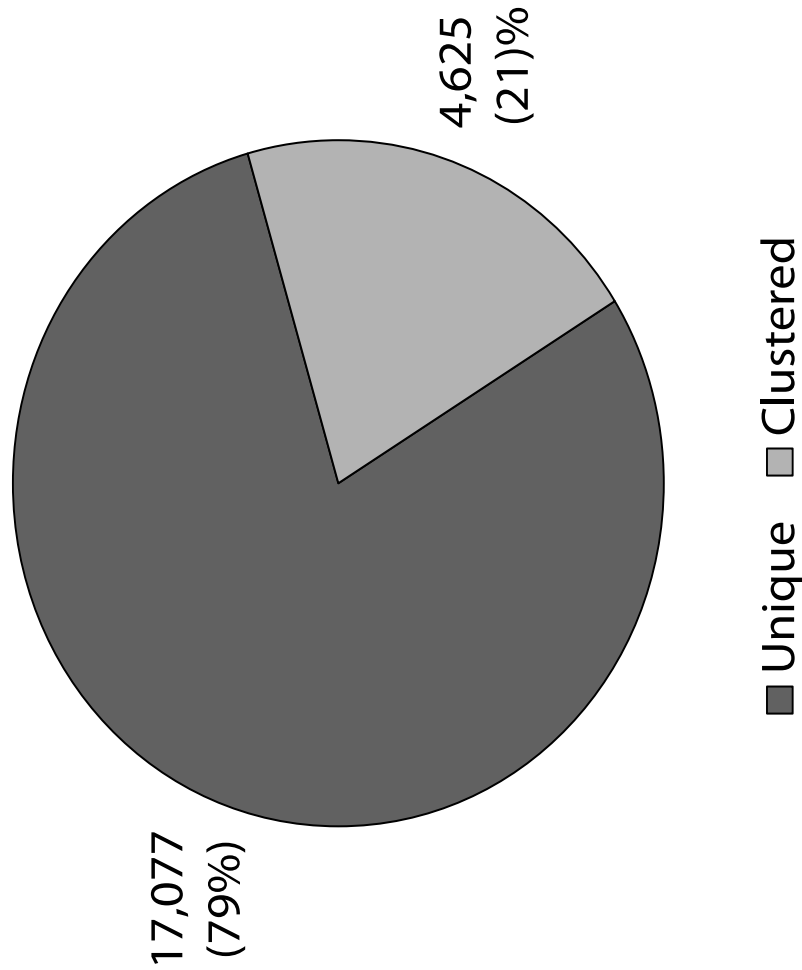
National Tuberculosis Genotyping Surveillance Coverage* by Year, United States**, 2004–2013



* The proportion of positive cultures with at least one genotyped isolate.

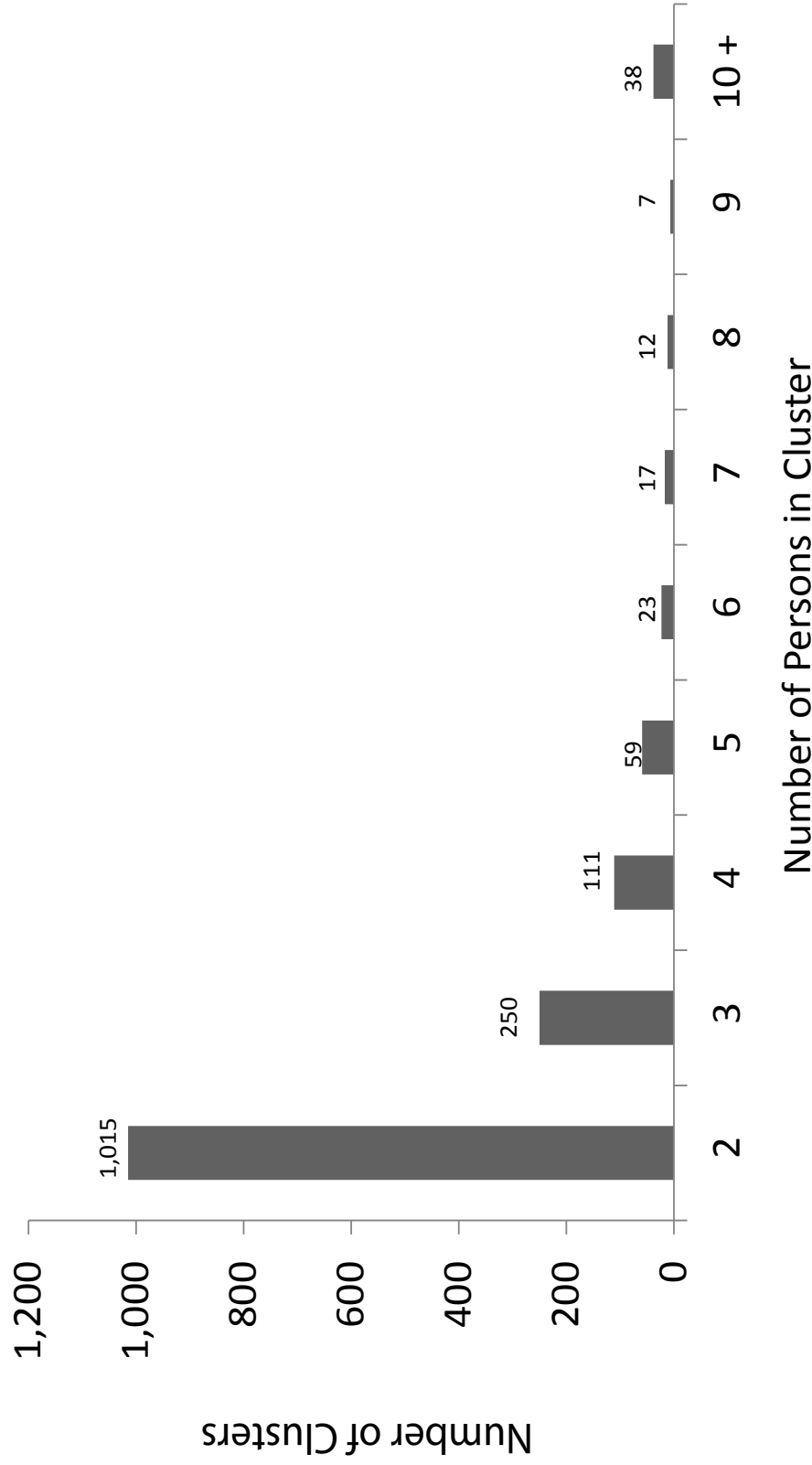
** Includes 50 states and the District of Columbia.

Number and Percent of Unique* and County-GENType Clustered** Cases, United States, 2011–2013



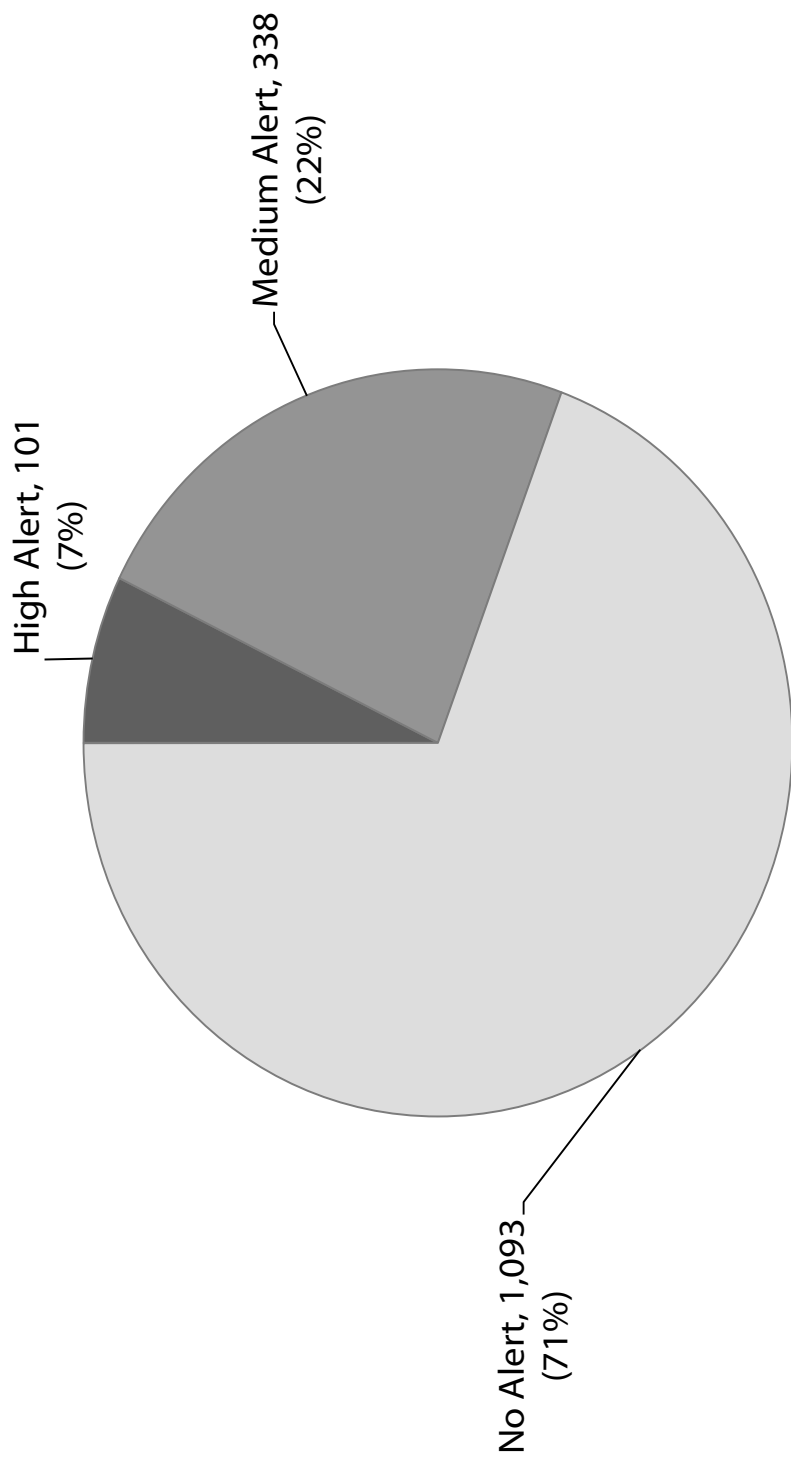
*Unique case is a case with a spoligotype and 24-locus MIRU-VNTR (GENType) that does not match any other case in that county during the specified 3-year time period.
** Two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified 3-year time period.

Number of County-based Tuberculosis Genotype Clusters* by Cluster Size, United States, 2011–2013



* Genotype cluster is defined as two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified 3-year time period.

Tuberculosis Genotype Clusters by TB GIMS* Alert Levels**, United States, 2011-2013



*Tuberculosis Genotyping Information Management System

**Alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster, identifying higher than expected geospatial concentrations for a TB genotype cluster in a specific county, compared to the national distribution of that genotype; TB GIMS generates alert level notifications based on this statistic: "No alert" is indicated if LLR is between 0-5, "medium" is for LLR of 5.1-10 and "high" alert is for clusters with LLR >10.

Tuberculosis in the United States

National Tuberculosis Surveillance System Highlights from 2013

Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2013. This slide set was prepared by the Division of Tuberculosis Elimination, Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (DHHS). It provides trends for the recent past and highlights data collected through the National Tuberculosis Surveillance System for 2013. Since 1953, through the cooperation of state and local health departments, CDC has collected information on newly reported cases of tuberculosis (TB) disease in the United States. The data presented here were collected via the revised TB case report introduced in 2009. Currently, each individual TB case report (Report of Verified Case of Tuberculosis or RVCT) is submitted electronically to CDC. The data for this slide set are based on updates received by CDC as of June 11, 2014. All case counts and rates for years 1993–2013 have been updated.

Slide 2. Reported TB Cases, United States, 1982–2013. The resurgence of TB in the mid-1980s was marked by several years of increasing case counts until its peak in 1992. Case counts began decreasing again in 1993, and 2013 marked the twenty-first year of decline in the total number of TB cases reported in the United States since the peak of the resurgence. From 1992 until 2002, the total number of TB cases decreased 5%–7% annually. From 2002 to 2003, however, the total number of TB cases decreased by only 1.4%. An unprecedented decrease occurred in 2009, when the total number of TB cases decreased by more than 10% from 2008 to 2009. In 2013, a total of 9,582 cases were reported from the 50 states and the District of Columbia (DC). This represents a decline of 3.6% from 2012 and 64.1% from 1992.

Slide 3. TB Morbidity, United States, 2008–2013. This slide provides the total number of reported U.S. TB cases and the associated rates for each of the past 6 years. Rate is defined as cases per 100,000 population. The number of TB cases decreased from 12,893 in 2008 to 9,582 in 2013, and the TB rate decreased from 4.2 in 2008 to 3.0 in 2013.

Slide 4. TB Case Rates, United States, 2013. This map shows TB rates for 2013. Forty-one states reported a rate less than 3.0 TB cases per 100,000, the 2013 national average. Nine states and DC reported a rate above 3.0 TB cases per 100,000; these accounted for 62% of the national total in 2013.

Slide 5. Map of U.S.-Affiliated Pacific Islands by TB Case Rates, 2013. This map of the Pacific region shows the case rates by jurisdiction.

Slide 6. TB Case Rates, U.S.-Affiliated Pacific Islands, 2013. This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2013. These case rates range from 3.7 per 100,000 in American Samoa to 219.4 per 100,000 in the Republic of the Marshall Islands. The overall case rate for the United States (3.0 per 100,000) and for Hawaii (8.2 per 100,000) are also shown.

Slide 7. TB Case Rates by Age Group, United States, 1993–2013. This slide shows the last 21 years' declining trend in TB rates by age group. In 2013, case rates in all age groups declined by more than 50% from 1993 values: persons 65 years and older (from 17.7 per 100,000 in 1993 to 4.9 in 2013); adults aged 45 to 64 years (from 12.4 to 3.6); adults aged 25 to 44 years (from 11.5 to 3.6); those 15 to 24 years of age (from 5.0 to 2.2); and in children under 15 years of age (from 2.9 to 0.8)

Slide 8. Reported TB Cases by Age Group, United States, 2013. This pie chart shows the age distribution of persons reported with TB in 2013. Five percent were children under 15 years of age, 10% were age 15 to 24, 31% were age 25 to 44, 31% were age 45 to 64, and 23% were at least 65 years old.

Slide 9. TB Case Rates by Age Group and Sex, United States, 2013. This slide graphs the TB rates in 2013 by age group and sex. It shows that rates tended to increase with age, ranging from a low of less than 1 per 100,000 in children aged 5 - 14 to a high of 6.9 per 100,000 in men 65 years and older. As age increased, the case rate in men increased faster than women; the rates in men 45 years and older were approximately more than twice those in same-age women.

Slide 10. TB Case Rates by Race/Ethnicity, United States, 2003–2013. This slide shows the declining trend in TB rates by race/ethnicity during the last 12 years. Asians had the highest TB rates, which declined from 29.9 per 100,000 in 2003 to 18.7 in 2013, and had a percent decline over the time period of 37%. Rates also declined in the following racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 11.7 in 2003 to 5.4 in 2013 (-54%); among Hispanics, from 10.3 to 5.0 (-51%); among American Indians and Alaska Natives, from 8.2 to 5.4 (-34%); among non-Hispanic whites, from 1.4 to 0.7 (-50%); and among Native Hawaiian or Other Pacific Islanders, from 16.2 to 11.3 (-30%).

Several important factors likely contribute to the disproportionate burden of TB in minorities. In persons who were born in countries where TB is common, TB disease may result from infection acquired in the country of origin. Unequal distribution of TB risk factors, such as HIV infection, may also contribute to increased exposure to TB or to an increased risk of developing TB once infected with *M. tuberculosis*.

Slide 11. TB Case Rates by Age Group and Race/Ethnicity, United States, 2013. This slide presents TB rates in 2013 by age group and race/ethnicity. After infancy (age under 5), risk typically increased with age across all racial and ethnic groups. Rates were consistently higher in minority racial and ethnic groups than in non-Hispanic whites. Rates were the highest in Asians and Native Hawaiians and Other Pacific Islanders, particularly in adult age groups.

Slide 12. Reported TB Cases by Race/Ethnicity, United States, 2013. In 2013, 83% of all reported TB cases occurred in racial and ethnic minorities (32% in Asians, 29% in Hispanics, 22% in non-Hispanic blacks or African-Americans, 1% in American Indians or Alaska Natives, and 1% in Native Hawaiians or Other Pacific Islanders), whereas 15% of cases occurred in non-Hispanic whites. Persons reporting two or more races accounted for 2% of all cases.

Slide 13. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2013. This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2013. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 65% in 2013. Overall, the number of cases in foreign-born persons remained virtually level, with approximately 7,600–8,000 cases each year before 2009, until 2009 when the number dropped to 6,956. That decreasing trend continued in 2013 with the number of foreign-born cases dropping to 6,193. The number in U.S.-born persons decreased from more than 17,000 in 1993 to 3,375 in 2013.

Slide 14. Trends in TB Cases in Foreign-born Persons, United States, 1993–2013. This slide shows trends in the past 21 years of TB cases in foreign-born persons in the United States from 1993 through 2013. The percentage of TB cases accounted for by foreign-born persons increased from 29% in 1992 to 65% in 2013.

Slide 15. Reported TB Cases by Origin and Race/Ethnicity, United States, 2013. Among U.S.-born persons with TB in 2013, 37% were non-Hispanic black or African-American, 33% were non-Hispanic white, 20% were Hispanic or Latino, 5% were Asian, 4% were American Indian or Alaska Native, and 1% were Native Hawaiian or Other Pacific Islander. Among the foreign-born, 46% were Asian, 33% were Hispanic or Latino, 14% were non-Hispanic black or African-American, and 5% were non-Hispanic white. Cases among American Indians or Alaska Natives and among Native Hawaiians or Other Pacific Islanders constituted less than 1%, respectively, of the cases among the foreign-born and are not shown. Persons reporting two or more races totaled less than 1% of all cases.

Slide 16. Percentage of TB Cases Among Foreign-born Persons, United States, 2003 and 2013. The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 2003 and 2013 in these side-by-side maps. The number of states with less than 25% of their TB cases among the foreign-born decreased from 10 states in 2003 to 7 states in 2013. The number of states with at least 25–49% of cases among the foreign-born decreased from 16 states in 2003 to 9 states in 2013. However, the number of states that had 50% or more of their cases among the foreign-born increased from 27 states in 2003 to 36 states in 2013.

Slide 17. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2013. TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2013, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 1.2, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 15.6.

Slide 18. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2013. This is the same as Slide 15, but the rates are presented on a logarithmic scale to better illustrate the trend in TB rates among the U.S.-born and foreign-born. The lines show a greater rate of decline among the U.S.-born compared with the foreign-born during this period.

Slide 19. Countries of Birth of Foreign-born Persons Reported with TB, United States, 2013. This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2013, with the top seven highlighted. The list of countries has remained relatively constant since 1986, when information on country of birth was first reported by all areas submitting reports to CDC. In 2013 the seven top countries accounted for 60% of all foreign-born cases, with Mexico accounting for 20%; the Philippines, 13%; India, 8%; Vietnam, 7%; China, 6%; Guatemala, 3%; and Haiti, 3%. Persons from more than 135 other countries each accounted for 2% or less of the total, but altogether accounted for 40% of foreign-born persons reported with TB.

Slide 20. Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2013. The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2013 is shown in these stacked bars. Overall, 15% had been in the United States for less than 1 year, 16% between 1 and 4 years, and 60% for at least 5 years. The distribution is also shown for the top three countries of birth: Mexico, the Philippines, and India. Among persons born in Mexico, 8% had been in the United States for less than 1 year, 8% between 1 and 4 years, and 74% for at least 5 years. Among persons born in the Philippines, 11% had been in the United States for less than 1 year, 13% between 1 and 4 years, and 68% for at least 5 years. Among persons born in India, 20% had been in the United States for less than 1 year, 21% between 1 and 4 years, and 49% for at least 5 years. Values for unknown length of residence in U.S. for these top three countries ranged between 9 – 10% for 2013.

Slide 21. Primary Anti-TB Drug Resistance, United States, 1993–2013. Primary drug resistance is shown for the past 21 years. The graph starts in 1993, the year in which the individual TB case reports submitted to the national surveillance system began collecting information on initial susceptibility test results for patients with culture-positive TB. Data were available for more than 85% of culture-positive cases for each year. Primary resistance was calculated by using data from persons with no reported prior TB episode. Resistance to at least isoniazid was 8.2% in 1993; however by 2013, this had increased to 8.8%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), was 2.5% in 1993. The percent of primary MDR TB has remained approximately stable since it decreased to 1.0% in 1998. In 2013 the percent of primary MDR TB was 1.2%.

Slide 22. Primary MDR TB, United States, 1993–2013. This graph focuses on trends in primary MDR TB (based on initial isolates from persons with no prior history of TB) in the United States from 1993 through 2013. The number of primary MDR TB cases, represented by bars, steadily declined from 407 in 1993 to 132 in 2002. Since then, the total number of primary MDR TB cases has fluctuated between 87 to 103 cases, with 82 cases reported for 2013. Primary MDR TB, shown by the line, decreased from 2.5% in 1993 to approximately 1.0% in 1998, and has fluctuated around 1.0% since then. In 2013, the percentage was 1.2%.

Slide 23. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2013. This graph shows primary isoniazid resistance in U.S.-born vs. foreign-born persons. Based on initial isolates from persons with no prior history of TB, the percentage of isoniazid resistance is more than twice as high among foreign-born persons than among U.S.-born persons. In foreign-born persons, the percentage declined from 12.1% in 1993 to 10.5% in 2013. In U.S.-born persons, the percentage decreased from 6.7% in 1993 to 4.2% in 2007, but has increased since then to 5.6% in 2013.

Slide 24. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2013. This graph highlights primary MDR TB in U.S.-born versus foreign-born persons. The percentage with primary MDR TB has declined among both groups since 1993, although the decline in the U.S.-born has been greater. As a result, the proportion of primary MDR TB cases in the US that are attributed to foreign-born persons increased from approximately 25% in 1993 to 92% in 2013 (not shown on slide). Among the U.S.-born, the percentage with primary MDR TB has been less than 1% since 1997 and was 0.3% in 2013. The percentage among foreign-born persons has fluctuated year by year, although it has remained between 1.2 and 1.8% since 1995. In 2013, the percentage of primary MDR TB among foreign-born persons was 1.7%

Slide 25. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2013. This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993–2013. XDR TB is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs. Four cases of XDR TB were reported in 2013. The most reported in a single year was 10 in 1993, while there were no cases reported in 2003 and 2009. There is no apparent trend in the number of cases over time.

Slide 26. Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993–2013. This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2013. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 88% in 2013. Among adults aged 25–44 years, the percentage increased from 45% in 1993 to 94% in 2013. California began reporting HIV test results to CDC in 2011; this accounts for the substantial percentage increase for that year.

Slide 27. Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2013. This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2013. Since the addition of the request for HIV status to the individual TB case report in 1993, incomplete reporting has provided a challenge to calculating reliable estimates, although reporting improved substantially beginning in 2011 (see previous Slide 26). Results from the cross-matching of TB and AIDS registries have been used to supplement reported HIV test results. For all ages, the estimated percentage of HIV coinfection in persons who reported HIV testing (positive, negative, or indeterminate test results) with TB decreased from 48% to 7% overall from 1993 – 2013, and from 63% to 9% among persons aged 25 to 44 years during this period.

Slide 28. TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993–2013. This graph highlights the number of cases that were a resident of any type of correctional facility at the time of TB diagnosis. Cases must have been 15 years of age or greater. The number of cases residing in a correctional facility has decreased from a high of 1,117 cases in 1994 to 359 cases in 2013. Between the years 2000 and 2010, the number of cases residing in a correctional facility ranged between the high-400s and high-500s; 2011 was the first year to drop below this range to 422 cases. Of total cases, the percentage of cases residing in a correctional facility has ranged from 5.0% in 1994 to 3.3% in 2002. The 1990s saw a decreasing trend in percentage until 2002. Since 2002, there has been an increasing trend in percentage; in 2013 the percentage of total cases was 4.0%.

Slide 29. TB Cases by Homeless Status, Age ≥15, United States, 1993–2013. This graph highlights the status of cases that were homeless within twelve months prior of TB diagnosis from 1993 through 2013. Cases must have been 15 years of age or greater. The number of homeless cases has decreased from a high of 1,379 cases in 1994 to 514 in 2013. This category has seen an overall decrease in cases since 1994; increases were observed in the years 2003 (6.7%), 2006 (6.3%), and 2010 (5.6%); these have been exceptions with a small increase in cases. Of total cases, 6.1% were homeless in 1994 and percentages have ranged between 6.8% in 1997 and a low of 5.3% in 2009. It has since increased to 5.7% in 2013.

Slide 30. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2011. In 1993, the reporting areas began providing information about mode of treatment administration on the individual TB case report form. Treatment administered as only directly observed therapy (DOT) increased from 21.7% in 1993 to 62% in 2011, the latest year with available data. The proportion of patients who received at least some portion of their treatment as DOT (based on combining the percentage of patients who received only DOT and the percentage for whom some portion was self-administered) was 29% in 2011.

Slide 31. Completion of TB Therapy, United States, 1993–2011. The reporting areas began providing information on completion of therapy in 1993 through the individual TB case report form. The calculations exclude persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture. Overall completion of therapy had remained at approximately 92–93% from 1998 through 2008, but increased to 96% in 2011, the latest year with available data. Completion in 1 year or less increased from 63% in 1993 to 89% in 2011. The current DHHS Healthy People 2020 objective is completion of therapy in 1 year or less in 93% of patients. CDC is working with state and local health departments to determine and evaluate reasons for apparently delayed completion of therapy, which may vary by jurisdiction.

Slide 32. Definition for Tuberculosis Genotyping in the United States. This slide shows the schematic for sequential assignment of unique spoligotypes and initial 12-locus MIRU-VNTR combination or 24-locus MIRU-VNTR combination.

Slide 33. National Tuberculosis Genotyping Surveillance Coverage by Year, United States, 2004–2013. This slide shows the increase in genotyping surveillance coverage from 2004 to 2013. In 2004 the proportion of positive cultures with at least one genotyped isolate was 52.6%; in 2013 it was 94.6%. The national indicator for genotyping surveillance coverage is 94%.

Slide 34. Number and Percent of Unique and County-GENType Clustered Cases, United States, 2011–2013. This slide shows a chart with the percentage of unique and clustered cases. Unique cases are those with a spoligotype and 24-locus MIRU-VNTR (GENType) that does not match any other case in that county during the specified three year time period. Clustered cases are two or more cases with matching spoligotype and 24-locus locus MIRU-VNTR (GENType) within a county during the specified three year time period. In the 2011 – 2013 three year time period, there were 79% unique cases, and 21% clustered cases.

Slide 35. Number of County-based Tuberculosis Genotype Clusters by Cluster Size, United States, 2011–2013. This slide shows the number of county-based TB genotype clusters by the size of the clusters; genotype cluster is defined as two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified three year time period. In the 2011 – 2013 three year time period, there were 1,015 two-case clusters, 250 three-case clusters, 111 four-case clusters, 59 five-case clusters, 23 six-case clusters, 17 seven-case clusters, 12 eight-case clusters, 7 nine-case clusters, and 38 case clusters that were greater or equal to 10 in size.

Slide 36. Tuberculosis Genotype Clusters by TB GIMS Alert Levels, United States, 2011–2013. This slide shows a chart with percentage of genotype clusters by alert level. Alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster, identifying higher than expected geospatial concentrations for a TB genotype cluster in a specific county, compared to the national distribution of that genotype; TB GIMS generates alert level notifications based on this statistic: “No alert” is indicated if LLR is between 0–5, “medium” is for LLR of 5.1–10 and “high” alert is for clusters with LLR >10. In the 2011–2013 three year time period, high alerts made up 7% of the total, medium alerts were 22%, and no alert were 71%.

Appendices

Appendix A

Tuberculosis Case Definition for Public Health Surveillance (Revised May 13, 2009)

Clinical description

A chronic bacterial infection caused by *Mycobacterium tuberculosis*, usually characterized pathologically by the formation of granulomas. The most common site of infection is the lung, but other organs may be involved.

Clinical case definition

A case that meets **all** of the following criteria:

- A positive tuberculin skin test result 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)
- Treatment with two or more anti-TB medications
- A completed diagnostic evaluation

Laboratory criteria for diagnosis

- 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.

Case classification

Confirmed: a case that meets the clinical case definition or is laboratory confirmed

Comment

A case should not be counted twice within any consecutive 12-month period. However, a case occurring in a patient who had previously had verified TB disease should be reported and counted again if more than 12 months have elapsed since the patient completed therapy. A case should also be reported and counted again if the patient was lost to supervision for greater than 12 months and TB disease can be verified again. Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in tuberculosis morbidity statistics unless there is concurrent tuberculosis.

^{*}Use of rapid identification techniques for *M. tuberculosis* (e.g., DNA probes and mycolic acid high-pressure liquid chromatography performed on a culture from a clinical specimen) are acceptable under this criterion.

[†]Nucleic acid amplification (NAA) tests must be accompanied by culture for mycobacteria species for clinical purposes. A culture isolate of *M. tuberculosis* complex is required for complete drug susceptibility testing and also genotyping. However, for surveillance purposes, CDC will accept results obtained from NAA tests approved by the Food and Drug Administration (FDA) and used according to the approved product labeling on the package insert, or a test produced and validated in accordance with applicable FDA and Clinical Laboratory Improvement Amendments (CLIA) regulations.

Appendix B

Recommendations for Reporting and Counting Tuberculosis Cases (Revised May 13, 2009)

Since publication of the “Recommendations for Counting Reported Tuberculosis Cases”¹ in July 1997, numerous changes have occurred, and many issues have been raised within the field of tuberculosis (TB) surveillance. This current version updates and supersedes the previous version.

A distinction should be made between **reporting** TB cases to a health department and **counting** TB cases for determining incidence of disease. Throughout each year, TB cases and suspected cases are reported to public health authorities by sources such as clinics, hospitals, laboratories, and health care providers. From these reports, the state or local TB control officer must determine which cases meet the current surveillance definition for TB disease and whether the case is countable. These countable TB cases are then reported to the Centers for Disease Control and Prevention (CDC).

Beginning in 2009, state and local TB control officers may also report to CDC those TB cases that are verified but not countable for morbidity statistics, as a measure of programmatic and case management burden. The noncountable report can include persons with TB disease recurring within a consecutive 12-month period after the patient completed TB therapy.

I. Reporting TB Cases. CDC recommends that health care providers and laboratories be required to report all TB cases or suspected cases to state and local health departments based on the current “Tuberculosis Case Definition for Public Health Surveillance” (Appendix A). This notification is essential in order for TB programs to:

- Ensure case supervision
- Ensure completion of appropriate therapy
- Ensure completion of contact investigations
- Evaluate program effectiveness
- Assess trends and characteristics of TB morbidity

II. TB Surveillance. For purposes of surveillance, a case of TB is defined on the basis of laboratory or clinical evidence of active disease due to *M. tuberculosis* complex.*

* Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. Other species in the *Mycobacterium tuberculosis* complex include *M. bovis*, *M. africanum*, *M. microti*, *M. canettii*, *M. caprae*, *M. pinnipedii*, and *M. mungi*; the inclusion of these species in *M. tuberculosis* complex should not impact public health laboratories or programs, because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease or be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, *M. canettii*, *M. pinnipedii*, and *M. mungi* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB, using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG strain of *M. bovis* should not be reported as TB.

a. Laboratory Case Definition

- Isolation of *M. tuberculosis* complex from a clinical specimen. The use of rapid identification techniques for *M. tuberculosis* performed on a culture from a clinical specimen, such as DNA probes and high-pressure liquid chromatography (HPLC), is acceptable under this criterion.

OR

- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification (NAA) test. NAA tests must be accompanied by cultures of mycobacterial species. However, for surveillance purposes, CDC will accept results obtained from NAA tests approved by the Food and Drug Administration (FDA) and used according to the approved product labeling on the package insert, or a test produced and validated in accordance with applicable FDA and Clinical Laboratory Improvement Amendments (CLIA) regulations.

OR

- Demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated; historically, this criterion has been most commonly used to diagnose TB in the postmortem setting.

b. Clinical Case Definition. In the absence of laboratory confirmation of *M. tuberculosis* complex after a diagnostic process has been completed, persons must have **all** of the following criteria for clinical TB:

- Evidence of TB infection based on a positive tuberculin skin test result or positive interferon gamma release assay for *M. tuberculosis*
- Current treatment with two or more anti-TB medications

AND

- One of the following:
 - (1) Signs and symptoms compatible with current TB disease, such as an abnormal chest radiograph or abnormal chest computerized tomography scan or other chest imaging study,

OR

- (2) Clinical evidence of current disease (e.g., fever, night sweats, cough, weight loss, hemoptysis)

NOTE: The software for TB surveillance developed by CDC includes a calculated variable called “Vercrit,” for which one of the values is “Provider Diagnosis.” “Provider Diagnosis” is selected when the user chooses to override a “Suspect” default value in the case verification screen as “Verified by Provider Diagnosis.” Thus, “Provider Diagnosis” is not a component of the case definition for TB in the current “Tuberculosis Case Definition for Public Health Surveillance” (Appendix A). CDC’s national morbidity reports have traditionally included all TB cases that are considered verified by the reporting areas, without a requirement that cases meet the published case definition.

III. Counting TB Cases. Cases that meet the current CDC surveillance case definition for verified TB are counted by 52 reporting areas with count authority (50 states, District of Columbia, and New York City) to determine annual incidence for the United States. The remaining 8 reporting areas (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) report cases to CDC but are not included in the annual incidence for the United States. The laboratory and clinical case definitions are the two diagnostic categories used in the CDC “Tuberculosis Case Definition for Public Health Surveillance.”

Most verified TB cases are accepted for counting based on laboratory confirmation of *M. tuberculosis* complex from a clinical specimen.

A person may have more than one discrete (separate and distinct) episode of TB. If disease recurs in a person **within** any 12-consecutive-month period after the patient completed therapy, count only one episode as a case. However, if TB disease recurs in a person, **and** if more than 12 months have elapsed since the person completed TB therapy or was lost to supervision, the TB case is considered a separate episode and should be counted as a new case.

Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in TB morbidity statistics unless there is concurrent TB.

a. Verified TB Cases

COUNT

Count only verified TB cases that meet the laboratory or clinical case definitions (see Section II). The diagnosis of TB must be verified by the TB control officer or designee. The current CDC surveillance case definition for TB describes and defines the criteria to be used in the case definition for TB disease.

DO NOT COUNT

If diagnostic procedures have not been completed, do not count; wait for confirmation of disease. Do not count as a case the patient for which two or more anti-TB medications have been prescribed for preventive therapy for exposure to multidrug-resistant (MDR) TB, or while the diagnosis is still pending

b. Nontuberculous Mycobacterial Diseases (NTM)

COUNT

An episode of TB disease diagnosed concurrently with another nontuberculous mycobacterial disease should be counted as a TB case.

DO NOT COUNT

Disease attributed to or caused by nontuberculous mycobacteria alone should not be counted as a TB case.

c. TB Cases Reported at Death

COUNT

TB cases first reported to the health department at the time of a person's death are counted as incident cases, provided the person had current disease at the time of death. The TB control officer should verify the diagnosis of TB.

DO NOT COUNT

Do not count as a case of TB if there is no evidence of current disease at the time of death or at autopsy.

d. Immigrants, Refugees, Permanent Resident Aliens, Border Crossers,* and Foreign Visitors³

COUNT

Immigrants and refugees who are examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications should be reported and counted by the locality of their current residence at the time of diagnosis regardless of citizenship status.

Border crossers* who are diagnosed with TB and plan to receive anti-TB therapy from a locality in the United States for 90 days or more should be reported and counted by the locality where they receive anti-TB therapy.

Foreign visitors (e.g., students, commercial representatives, and diplomatic personnel) who are diagnosed with TB, are receiving anti-TB therapy, **and** have been, or plan to remain in, the United States for 90 days or more should be reported and counted by the locality of current residence.

DO NOT COUNT

Any person who was diagnosed and started on anti-TB drugs in another country should not be counted as a new case but should be reported as a verified noncountable TB case.

Border crossers* and foreign visitors who are diagnosed with TB and receive anti-TB therapy from a locality in the United States for less than 90 days but plan to return to their native country to continue therapy should not be reported or counted by the locality where they receive anti-TB therapy.

**Border crosser — defined, by the U.S. Citizenship and Immigration Services (USCIS)² as “an alien resident of the United States reentering the country after an absence of less than six months in Canada or Mexico, or a nonresident alien entering the United States across the Canadian border for stays of no more than six months, or across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period*

e. Out-of-State or Out-of-Area Residents

COUNT

A person's TB case should be counted by the locality in which he or she resides at the time of diagnosis. TB in a person who has no address should be counted by the locality that diagnosed and is treating the TB. The TB control officer should notify the appropriate out-of-state or out-of-area TB control officer of the person's home locality to (1) determine whether the case has already been counted to avoid "double counting," and (2) agree on which TB control office should count the case if it has not yet been counted.

DO NOT COUNT

Do not count a case in a newly diagnosed TB patient who is an out-of-area resident and whose TB has already been counted by the out-of-area TB control office.

f. Migrants and Other Transients

COUNT

Persons without any fixed U.S. residence are considered to be the public health responsibility of their present locality and their TB case should be reported and counted where diagnosed.

DO NOT COUNT

Cases in transient TB patients should not be counted when there is evidence that they have already been counted by another locality.

g. Federal Facilities (e.g., Military and Veterans Administration Facilities)

COUNT

Cases in military personnel, dependents, or veterans should be reported and counted by the locality where the persons are residing in the United States at the time of diagnosis and initiation of treatment.

However, if military personnel or dependents are discovered to have TB at a military base outside the United States but are referred elsewhere for treatment (e.g., a military base located within the United States), the TB case should be reported and counted where treated and not where the diagnosis was made.

DO NOT COUNT

Do not count if the case was already counted by another locality in the United States.

h. Indian Health Service

COUNT

TB should be reported to the local health authority (e.g., state or county) and counted where diagnosed and treatment initiated. However, for a specific group such as

the Navajo Nation, which is geographically located in multiple states, health departments should discuss each case and determine which locality should count the case.

DO NOT COUNT

Do not count if the case was already counted by another locality.

i. Correctional Facilities (e.g., Local, State, Federal, and Military)

COUNT

Persons who reside in local, state, federal, or military correctional facilities may frequently be transferred or relocated within and/or between various correctional facilities. TB in these persons should be reported to the local health authority and counted by the locality where the diagnosis was made and treatment plans were initiated.

DO NOT COUNT

Do not count correctional facility residents' TB cases that were counted elsewhere by another locality or correctional facility, even if treatment continues at another locale or correctional facility.

j. Peace Corps, Missionaries, and Other Citizens Residing Outside the United States

DO NOT COUNT

TB in persons diagnosed outside the United States should not be counted. TB in these persons should be counted by the country in which they are residing, regardless of their plans to return to the United States for further work-up or treatment.

IV. Suggested Administrative Practices

To promote uniformity in TB case counting, the following administrative procedures are recommended:

- (a) All TB cases verified by the 52 reporting areas with count authority (50 states, District of Columbia, and New York City) during the calendar year (by December 31) will be included in the annual U.S. incidence count for that year. All tuberculosis cases verified during the calendar year by a reporting area with count authority from one of the remaining 8 reporting areas (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) are also counted but are not included in the annual incidence for the United States. Cases for which bacteriologic results are pending or for which confirmation of disease is questionable for any other reason should not be counted until their status is clearly determined; they should be counted at the time they meet the criteria for counting. This means that a case reported in one calendar year could be included in the morbidity count for the following year. All reporting areas should ensure that there is agreement between final local and state TB figures reported to CDC. Currently, some reporting areas may not use this suggested protocol. Some of these areas may wait until the beginning of the following year when they have received and processed all of the TB cases for inclusion in the

annual case count for the previous year. If reporting areas decide to revise their protocols, they should be aware that their TB trends may change.

- (b) TB is occasionally reported to health departments over the telephone, by letter or fax, or on forms other than the Report of Verified Case of Tuberculosis (RVCT). Such information should be accepted as an official morbidity report if sufficient details are provided; otherwise, the notification should be used as an indicator of a possible TB case (suspect) which should be investigated promptly for confirmation.

V. TB Surveillance Definitions

Case - an episode of TB disease in a person meeting the laboratory or clinical criteria for TB as defined in the document “Tuberculosis Case Definition for Public Health Surveillance” (see Section II for criteria).

Suspect - a person for whom there is a high index of suspicion for active TB (e.g., a known contact to an active TB case or a person with signs or symptoms consistent with TB) who is currently under evaluation for TB disease.

Verification of a TB case - the process whereby a TB case, after the diagnostic evaluation is complete, is reviewed at the local level (e.g., state or county) by a TB control official who is familiar with TB surveillance definitions; if all the criteria for a TB case are met, the TB case is then verified and eligible for counting.

Counting of a TB case - the process whereby a reporting area with count authority evaluates verified TB cases against count criteria (e.g., assesses for case duplication). These cases are then counted for morbidity in that locality (e.g., state or county) and reported to CDC for national morbidity counting. Noncountable, verified cases may also be sent to CDC.

***Mycobacterium tuberculosis* complex** (*M. tuberculosis* complex) - Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. For example, one study in San Diego found that 6% of human tuberculosis was caused by *Mycobacterium bovis*; cultures from these cases would be reported by most laboratories as being positive for *M. tuberculosis* complex. Other species in the *Mycobacterium tuberculosis* complex include *M. africanum*, *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii*. Although *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii* are newly described species, their inclusion in *M. tuberculosis* complex should not impact public health laboratories or programs because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease or be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, *M. canetti*, *M. caprae*, and *M. pinnipedii* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB,

using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG strain of *M. bovis* should not be reported as TB.

Nontuberculous mycobacteria (NTM) - mycobacteria other than *Mycobacterium tuberculosis* complex that can cause human infection or disease. Common nontuberculous mycobacteria include *M. avium* complex or MAC (*M. avium*, *M. intracellulare*), *M. kansasii*, *M. marinum*, *M. scrofulaceum*, *M. chelonae*, *M. fortuitum*, and *M. simiae*. Other terms have been used to represent NTM, including MOTT (mycobacteria other than TB) and “atypical” mycobacteria.

Reporting area - areas responsible for counting and reporting verified TB cases to CDC. Currently there are 60 reporting areas: the 50 states, District of Columbia, New York City, American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands. The annual incidence of tuberculosis for the United States is based on 52 of these reporting areas (the 50 states, District of Columbia, and New York City).

Alien - defined by the U.S. Citizenship and Immigration Services (USCIS)² as “any person not a citizen or national of the United States.”

Border crosser - defined, by the U.S. Citizenship and Immigration Services (USCIS)² as “an alien resident of the United States reentering the country after an absence of less than six months in Canada or Mexico, or a nonresident alien entering the United States across the Canadian border for stays of no more than six months, or across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period.

Class A TB with waiver³

All applicants who have tuberculosis disease and have been granted a waiver.

Class B1 TB, Pulmonary³

No treatment

- Applicants who have medical history, physical exam, HIV, or CXR findings suggestive of pulmonary TB but have negative AFB sputum smears and cultures and are not diagnosed with TB or can wait to have TB treatment started after immigration.

Completed treatment

- Applicants who were diagnosed with pulmonary TB and successfully completed directly observed therapy prior to immigration. The cover sheet should indicate if the initial sputum smears and cultures were positive and if drug susceptibility testing results are available.

Class B1 TB, Extrapulmonary³

Applicants with evidence of extrapulmonary TB. Document the anatomic site of infection.

Class B2 TB, Latent TB Infection (LTBI) Evaluation³

Applicants who have a tuberculin skin test ≥ 10 mm but otherwise have a negative evaluation for TB. The size of the TST reaction, the applicant's status with respect to LTBI treatment, and the medication(s) used should be documented. For applicants who had more than one TST, whether the applicant converted the TST should be documented (i.e., initial TST < 10 mm but subsequent TST ≥ 10 mm).

Class B3 TB, Contact Evaluation³

Applicants who are a recent contact of a known tuberculosis case. The size of the applicant's TST reaction should be documented. Information about the source case, name, alien number, relationship to contact, and type of tuberculosis should also be documented.

Immigrant - defined by the USCIS² as “an alien admitted to the United States as a lawful permanent resident. Immigrants are those persons lawfully accorded the privilege of residing permanently in the United States. They may be issued immigrant visas by the Department of State overseas or adjusted to permanent resident status by the USCIS of the United States.”

Permanent Resident Alien - see Immigrant.

Waivers³ - A provision allows applicants undergoing pulmonary or laryngeal tuberculosis treatment to petition for a Class A TB with waiver. Waivers should be pursued for any immigrant or refugee who has a complicated clinical course and would benefit from receiving treatment of their tuberculosis in the United States. Applicants diagnosed with tuberculosis disease who are both smear- and culture-negative and will be traveling to the United States prior to start of treatment do not need to complete the waiver process.

References

1. *Recommendations for Counting Reported TB Cases*. Atlanta: CDC, July 1997.
2. U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services; <http://uscis.gov>. Accessed September 2010.
3. *2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians*. Atlanta: CDC, Division of Global Migration and Quarantine. <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/tuberculosis-panel-technical-instructions.html>. Accessed September 2010.

Appendix C

National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information

This information is included to alert our public health partners of the importance of reporting severe (i.e., hospitalization or death) adverse events associated with treatment for latent TB infection (LTBI). Data on severe adverse events (SAEs) among persons receiving treatment for LTBI are needed to serve as a basis for periodic evaluation of guidelines for treatment of LTBI.

In April 2000, after the publication of updated *Guidelines for Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection*¹, DTBE began receiving reports of SAEs related to the use of a 2-month course of rifampin and pyrazinamide (RZ) for treatment of LTBI. In response, DTBE requested and received reports and conducted on-site investigations of liver injury in persons on treatment for LTBI, and treatment guidelines were revised to recommend against the general use of rifampin and pyrazinamide to treat LTBI.^{2,3} In January 2004, DTBE implemented the National Surveillance System for Severe Adverse Events Associated with Treatment for LTBI, which collects reports about SAEs associated with any treatment regimen for LTBI, to quantify the frequency of SAEs and to characterize the clinical features of affected patients.⁴

Local medical providers should report possible LTBI-treatment associated SAEs to their respective local/state health departments. State health departments should report SAEs that occurred on or after January 1, 2004 to DTBE (e-mail: LTBIdrugevents@cdc.gov).

References

1. ATS/CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *Am J Respir Crit Care Med* 2000;161:S221-S247.
2. American Thoracic Society/CDC. Update: Adverse event data and revised American Thoracic Society/CDC recommendations against the use of rifampin and pyrazinamide for treatment of latent tuberculosis infection—United States, 2003. *MMWR* 2003;52(31):735-9.
3. ATS. An official ATS statement: hepatotoxicity of antituberculosis therapy. *Am J Respir Crit Care Med* 2006;174:935-52.
4. CDC. Severe isoniazid-associated liver injuries among persons being treated for latent tuberculosis infection — United States, 2004–2008. *MMWR* 2010;59(8):224-9.

Appendix D

Genotyping Background Information and Glossary

Tuberculosis (TB) genotyping is a laboratory-based analysis of the genetic material of the bacteria that cause TB disease, *Mycobacterium tuberculosis* complex. The total genetic content is referred to as the genome. Specific sections of the genome contain distinct genetic patterns that help distinguish different strains of *M. tuberculosis*. TB genotyping examines the location, number, and presence of different types of spacer or repetitive DNA patterns. The areas of the genome examined in TB genotyping are different from those related to drug resistance.

Applications of Genotyping

Persons with TB disease who are related by transmission should have matching genotype results. Conversely, persons with matching TB genotyping results are probably related by transmission in some way, although the connection might not be recent or direct.

Genotyping results, when combined with epidemiologic data, can help identify persons with TB disease involved in the same chain of transmission. This information adds value to conventional TB control activities in a variety of ways. These applications are summarized as follows:

Patient-level Applications of Genotyping

- Complete contact investigations
 - Confirm or refute patient connections (epidemiologic linkages) identified that may or may not be found through routine contact investigations
- Cluster investigations
 - Find patient connections that were not identified through routine contact investigations
- Detect, refute, or confirm potential false-positive culture results
- Distinguish relapse TB disease from new TB infection among TB cases with recurrent TB disease

Population-level Applications of Genotyping

- Detect potential outbreaks using geospatial or other analyses of genotype clusters
- Refute outbreaks when cases thought to be part of the same outbreak have non-matching genotype results
- Define the scope of potential outbreaks by identifying all cases in an area with a matching genotype
- Monitor known outbreaks over time by watching for new cases with the outbreak genotype that get added to existing clusters (outbreak surveillance)

History of TB Genotyping Surveillance in the United States

In 1996, CDC started the National Tuberculosis Genotyping Surveillance Network (NTG-SN), a 5-year initiative which established the utility of genotyping in TB control efforts.¹ In 2004, based on the knowledge gained from NTGSN and associated studies,² CDC established the National TB Genotyping Service (NTGS) and funded a national genotyping laboratories, located in Michigan, to genotype at least one *M. tuberculosis* isolate from each culture-positive TB case reported in the United States.³ All TB control programs may use NTGS at no cost to the patients, healthcare providers, or health departments. NTGS participation is voluntary, with individual programs determining how genotyping data will be used for their TB control activities. Since 2004, over 85,000 *M. tuberculosis* isolates have been successfully genotyped through NTGS and its partnerships between CDC, national genotyping laboratories, and 58 states and jurisdictions.

In 2010, CDC launched the TB Genotyping Information Management System (TB GIMS), a secure web-based database available to all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S.-affiliated Pacific Islands. TB GIMS makes genotyping data easily available to users and links genotyping data to patient surveillance records. Key features include tools to link genotype results of isolate records from NTGS to patient surveillance records from the National TB Surveillance System (NTSS). Additional features include database queries on genotypes and clusters, data quality checks, aggregate reports, maps, and outbreak detection tools. TB GIMS currently has over 400 users among local, state, federal, and territorial partners.

Genotyping-based Outbreak Detection

CDC identifies genotype clusters that are most likely to represent TB outbreaks. Genotyping-based outbreak detection involves the use of geospatial analysis to identify unusual groupings of TB cases with matching genotypes that may represent outbreaks. TB control programs can use outbreak detection information to help allocate and prioritize resources for investigation and intervention on specific TB genotype clusters.

Currently, CDC's primary outbreak detection method is based on identifying higher than expected geospatial concentrations of a TB genotype in a specific county, compared to the national distribution of that genotype. This method calculates a log-likelihood ratio (LLR) statistic; clusters with higher LLRs are more likely to represent greater geospatial concentrations than clusters with lower LLRs; higher LLRs might indicate recent transmission of TB. LLR is then classified into alert levels within TB GIMS based on established cut points. Clusters are classified as no alert ($LLR < 5.0$), medium alert ($LLR \geq 5.0$ and < 10.0), or high alert (≥ 10.0). The alert level and changes in alert levels (e.g., from none to medium or high) can help TB programs identify outbreaks and prioritize TB genotype clusters for further investigation or intervention.

¹ Cowan LS, Crawford JT. Genotype analysis of *Mycobacterium tuberculosis* isolates from a sentinel surveillance population. *Emerg Infect Dis* 2002; 8(11): 1294–302.

² Haddad MB, Diem MA, Cowan LS, et al. Tuberculosis genotyping in six low-incidence states, 2000–2003. *Am J Prev Med* 2007; 32(3):239–43.

³ Ghosh S, Moonan PK, Cowan L, Grant J, Kammerer S, Navin TR. Tuberculosis Genotyping Information Management System: Enhancing Tuberculosis Surveillance in the United States. *Infect Genet Evol* 2012;12:782–8.

Genotyping Terminology

In NTGS, a genotype is currently defined as a unique combination of spacer oligonucleotide typing results (spoligotype) and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat typing (MIRU–VNTR) results. Each unique combination of results is assigned a “GENType” designated as “G” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., G00162). This nomenclature is designed for convenience and ease of communication, but the specific numbers assigned have no additional significance outside of NTGS. Genotyping data from NTGS should not be used for clinical decision making.

National TB Genotyping Surveillance Coverage in the United States

National TB genotyping surveillance coverage refers to the proportion of culture-positive TB cases with a genotyped *M. tuberculosis* isolate. High levels of coverage in the United States can provide a better understanding of the epidemiology of TB transmission within a specific geographic area, as well as the entire country. Additionally, since outbreak detection algorithms are based on identifying unusual geospatial concentrations of genotypes, high coverage levels help decrease the likelihood of false-negative alerts. The National Tuberculosis Indicator Project (NTIP) national genotyping surveillance coverage objective is 94%.

GLOSSARY

Alert level

A mechanism used by TB GIMS to notify users of genotype clusters, possibly representing TB out-breaks, in a specific county. The alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster. This is calculated by TB GIMS and is updated whenever a new case is added to a genotype cluster. Email notifications are generated whenever an alert level changes from a “none” LLR (0–5) to “medium” LLR (5.1–10) or “high” LLR (>10), or from a “medium” LLR to a “high” LLR.

Cluster investigation

A cluster investigation identifies epidemiologic links between TB patients whose isolates have matching genotypes. It may consist of reviewing information from public health and medical records and interviewing case managers and outreach workers. It can also involve re-interviewing TB patients.

Epidemiologic link (epi link)

An epidemiologic link is a relationship that two TB patients share that explains where, when, and how *M. tuberculosis* could have been transmitted between them. Patients that named each other as contacts have an epidemiologic link. However, an epidemiologic link could be a location where the two persons spent time together or an activity that brought them together.

Geospatial concentration

Geospatial concentration is a measure of how concentrated a genotype is in time and space. It suggests that recent transmission has occurred since cases with the same genotype in the same location are more likely to have come in contact with each other. TB GIMS uses the log likelihood ratio (LLR) to generate a numeric measure of geospatial concentration of a given TB genotype.

Genotype

The designation that represents one or more of the three genotyping techniques used for *M. tuberculosis*: spoligotyping, MIRU–VNTR analysis, and IS6110-based RFLP. These designations were developed to facilitate communication of genotyping information within and between TB programs. In the U.S., we use GENType or PCRTYPE to define a genotype.

Genotyping cluster

A genotyping cluster consists of two or more cases in a jurisdiction during a specified time period with *M. tuberculosis* isolates that share matching genotypes. In the U.S., all cases with matching GENType or PCRTyp are considered to be in a genotype cluster. The jurisdiction and time period used vary based on the specific application of the term cluster. Within TB GIMS, a single county and a 3-year time period are used to define a cluster.

Genotype Surveillance Coverage

Genotyping surveillance coverage is defined as the proportion of culture-positive TB cases with a genotype result.

GENType

A designation for each unique combination of spoligotype and 24-locus MIRU–VNTR results. GENType is designated as “G” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., G00017).

LLR (log likelihood ratio)

A measure of the geographic concentration of a specific genotype in a county, compared to the national distribution of that same genotype, over a 3-year period. The higher the LLR, the greater the evidence that the local genotype cluster within the county represents a greater geospatial concentration than the national average, which might indicate recent transmission of *M. tuberculosis*.

Linking

In TB GIMS, linking refers to the process of connecting genotyping results with a reported TB case from the National TB Surveillance System (NTSS). This step is essential to ensure that demographic, risk factor and geographic data can be viewed in TB GIMS for genotype clusters.

MDR

Multidrug-resistant (MDR) tuberculosis strains are resistant to at least isoniazid (INH) and rifampin (RIF).

MIRU-VNTR

Mycobacterial interspersed repetitive unit–variable number tandem repeat typing analysis. MIRU-VNTR is a PCR-based genotyping assay. The CDC genotyping program currently performs 24-locus MIRU-VNTR analysis on every isolate submitted for genotyping. Before 2009, only 12-locus MIRU-VNTR was performed.

Mycobacterium bovis

A member of the *M. tuberculosis* complex that is commonly associated with cattle, particularly in the developing world. In the United States, human cases of *M. bovis* TB generally have a foodborne origin, such as through consumption of unpasteurized dairy products. *M. bovis* is typically resistant to pyrazinamide (PZA). Identification of TB isolates that are *M. bovis* can be done through genotyping; however, this information should not be relied on for clinical decision making.

***Mycobacterium tuberculosis* complex**

Often abbreviated MTC, a group of closely related mycobacterial species that can cause latent TB infection (LTBI) and TB disease (i.e., *M. tuberculosis*, *M. bovis*, *M. bovis* BCG, *M. africanum*, *M. canetti*, *M. microti*, *M. pinnipedii*, and *M. mungi*). In humans, most TB is caused by *M. tuberculosis*.

NTGS

The National TB Genotyping Service has provided TB genotyping services to local and state TB control programs since 2004. Two national genotyping laboratories are contracted by CDC to provide genotyping services at no cost to the patients, healthcare providers, or health departments.

NTSS

National TB Surveillance System administered by CDC. NTSS collects surveillance data through an electronic reporting registry. Data collected include socio-demographic, clinical, and risk factor variables that are reported to CDC by states and local health departments.

PCR

Polymerase chain reaction (PCR) is a laboratory method that can rapidly amplify small quantities of DNA, thereby enabling certain types of laboratory testing. The national genotyping laboratories routinely use two PCR-based techniques, spoligotyping and MIRU-VNTR analysis.

PCRType

A designation for each a unique combination of spoligotype and 12-locus MIRU–VNTR results. PCRType is designated as “PCR” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., PCR01974).

Recent Transmission

Although the precise time interval is not well defined, “recent” transmission for TB is often considered to be TB disease that is due to exposure 2-3 years prior to disease onset. That is, the chain of transmission spanning from exposure to source case through onset of symptoms for secondary cases would be <3 years. Immunocompromised patients (e.g., patients with HIV or diabetes) may be at a higher risk for acquiring TB disease.

Relapse vs. reinfection

A case of relapsed TB represents a worsening of signs and symptoms of disease after a period of improvement, caused by the same strain of *M. tuberculosis*. TB that represents a new infection (or reinfection) is disease caused by a second infection (often with a strain that is different from the strain that caused the initial infection). Genotyping the initial and the subsequent *M. tuberculosis* isolate might distinguish these two possibilities.

RFLP

Restriction fragment length polymorphism. Also called IS6110-based restriction fragment length polymorphism (RFLP) analysis was the first widely used method for genotyping *M. tuberculosis* isolates. A genotyping technique based on measuring the number and length of specific DNA fragments that are cut using specific restriction enzymes.

RVCT

Report of a Verified Case of TB. National surveillance data on patients with tuberculosis is recorded on this form, and subsequently reported to CDC’s National TB Surveillance System (NTSS).

Spoligotyping

Spacer oligonucleotide genotyping. A genotyping technique based on spacer sequences found in the direct repeat region in the chromosomes (genetic makeup) of the *M. tuberculosis* complex. The “spoligotype” is reported as a 15-digit number.