



Reported Tuberculosis in the United States, 2014

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Tuberculosis Elimination



For more information, contact

Division of Tuberculosis Elimination

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Centers for Disease Control and Prevention

1600 Clifton Road NE

MS E-10

Atlanta, GA 30333

Phone: (404) 639-8120

Fax: (404) 639-8959

E-mail: TBInfo@cdc.gov

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

Tuberculosis Applications Help Desk

Phone: (678) 460-7828

Email: ntss@cdc.gov

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Centers for Disease Control and Prevention	Thomas R. Frieden, M.D., M.P.H. Director
Office of Infectious Diseases	Rima Khabbaz, M.D. Director
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention ...	Jonathan Mermin, M.D., M.P.H. Director
Division of Tuberculosis Elimination	Philip LoBue, M.D. Director
Surveillance, Epidemiology, and Outbreak Investigations Branch	Thomas R. Navin, M.D. Chief
Surveillance Team	Roque Miramontes, P.A.-C., M.P.H. Team Lead
Communications, Education, and Behavioral Studies Branch	Wanda Walton, Ph.D. Chief
Field Services and Evaluation Branch.....	Terence Chorba, M.D., DSc Chief
Data Management and Statistics Branch	Chad Heilig, Ph.D. Acting Chief

This report was prepared by

**Surveillance, Epidemiology, and Outbreak Investigations Branch
Division of Tuberculosis Elimination
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention**

Surveillance Team

Roque Miramontes, P.A.-C., M.P.H.
Carla Jeffries, J.D., M.P.H.
Robert Pratt, B.S.
Rachel S. Yelk Woodruff, M.P.H.
Lori Armstrong, Ph.D.
Elvin Magee, M.P.H., M.S.
Lilia P. Manangan, R.N., M.P.H.
Glenda T. Newell
Kai Young, M.P.H.
Shareen Iqbal, Ph.D., M.P.H.

Molecular Epidemiology Activity

Anne Marie France, Ph.D., M.P.H.
Divia Forbes, M.P.H.
Tracie Gardner, Ph.D., M.S.
Smita Ghosh, M.S.
J. Steve Kammerer, M.B.A.
Lauren A. Lambert, M.P.H.
Benjamin Silk, Ph.D., M.P.H.

Others contributing to the production of this publication

Office of the Director

Philip LoBue, M.D., FACP, FCCP

Data Management and Statistics Branch

Sandy Price, P.M.P.
Cynthia Adams¹
Stacey Parker¹
Katrina Williams¹

National Center for Health Marketing, Division of Creative Services
Brenda Holmes

Field Services and Evaluation Branch

Communications, Education, and Behavioral Studies Branch

All state and local health departments throughout the United States whose staff collected and reported the data used in this publication.

¹ CDC Information Management Systems Contractor

Preface

Reported Tuberculosis in the United States, 2014 presents summary data for tuberculosis (TB) cases verified and counted in 2014. 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, 2014 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 2014 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, 2014* 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, 2012* 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, 2014* 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, 2012*

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, Metropolitan Statistical Areas, 2014* 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, 2014* 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 1993–2013). Atlanta: CDC; 1994–2014.

**Reports from 2011 through 2014 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>**

Contents

Acknowledgments.....	vii
Preface.....	ix
Previous Statistical Reports in this Series.....	xi
Executive Commentary.....	3
Technical Notes.....	9

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, 1953–2014.....	17
Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race: United States, 1993–2014.....	18
Table 3. Tuberculosis Cases and Percentages by Hispanic Ethnicity and non-Hispanic Race, and Origin of Birth: United States, 1993–2014.....	19
Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2014.....	20
Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2014.....	21
Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons by the Top 30 Countries of Birth: United States, 2010–2014.....	22
Table 7. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2014.....	23
Table 8. Tuberculosis Cases and Percentages, by Resistance to INH, Origin of Birth, and Previous History of TB: United States, 1993–2014.....	24
Table 9. Tuberculosis Cases and Percentages, by Multidrug Resistance, Origin of Birth, and Previous History of TB: United States, 1993–2014.....	25
Table 10. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2014.....	26
Table 11. Tuberculosis Cases and Percentages in Persons with HIV Test Results and with HIV Coinfection, by Age Group: United States, 1993–2014.....	27
Table 12. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2012.....	28

Table 13. National Tuberculosis Genotyping Surveillance Coverage:	
United States, 2004–2014	29
Table 14. National Tuberculosis Genotyping Surveillance Coverage:	
United States Affiliates, 2004–2014	30
Table 15. Genotyped Tuberculosis Cases with Mycobacterium bovis by Origin of Birth:	
United States, 2004–2014	31

Morbidity Tables, 2014

Table 16. Tuberculosis Cases and Percentages Among Foreign-born Persons by the Top 30 Countries of Birth and Years in the United States Before TB Diagnosis: United States, 2014	35
Table 17. Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2014	36
Table 18. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2014.....	38
Table 19. Tuberculosis Cases in Foreign-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2014.....	39
Table 20. Tuberculosis Cases Among Foreign-born Persons by Country of Birth:	
United States, 2014	40
Table 21. Tuberculosis Risk Factors by Origin and Race/Ethnicity: United States, 2014.....	42
Table 22. Epidemiologic Characteristics of Cases in GENType Clusters by Alert Levels Based on Log-likelihood Ratios (LLR): United States, 2012–2014.....	44
Table 23. Tuberculosis Cases by Cluster Status: United States, 2012–2014	46
Table 24. Tuberculosis Cases and Clusters by Cluster Size: United States, 2012–2014	47
Table 25. Ten Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases:	
United States, 2012–2014	48
Table 26. Five Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases:	
United States Affiliates, 2012–2014	49

Morbidity Tables, 2012

Table 27. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2012	53
Table 28. Deaths Prior to Tuberculosis Diagnosis or During Tuberculosis Therapy by Age Group: United States, 2012.....	54
Table 29. Sputum Culture Conversion by Age Group: United States, 2012.....	55

Morbidity Tables, Reporting Areas, 2014

Table 30. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2014 and 2013.....	59
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, 2014 and 2013.....	60
Table 32. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2014	62
Table 33. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2014	64
Table 34. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons: United States, 2014	66
Table 35. Tuberculosis Cases and Percentages in Foreign-born Persons by Top 7 Countries of Birth: Reporting Areas, 2014.....	68
Table 36. Tuberculosis Cases and Percentages in Foreign-born Persons by Immigration Status at First Entry: Reporting Areas, 2014	70
Table 37. Tuberculosis Cases and Percentages in Foreign-born Persons by Number of Years in the United States: Reporting Areas, 2014.....	72
Table 38. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease: Reporting Areas, 2014	73
Table 39. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2014	74
Table 40. Tuberculosis Risk Factors: Reporting Areas, 2014.....	76
Table 41. Primary Reason for Tuberculosis Evaluation: Reporting Areas, 2014	78
Table 42. Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facili- ties, Age >15: Reporting Areas, 2014	80
Table 43. Tuberculosis Cases and Percentages by Homeless Status, Age >15: Reporting Areas, 2014	82
Table 44. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities, Age >15: Reporting Areas, 2014	83
Table 45. Tuberculosis Cases and Percentages by Injecting Drug Use, Age >15: Reporting Areas, 2014	84
Table 46. Tuberculosis Cases and Percentages by Noninjecting Drug Use, Age >15: Reporting Areas, 2014	85
Table 47. Tuberculosis Cases and Percentages by Excess Alcohol Use, Age >15: Reporting Areas, 2014	86

Table 48. Tuberculosis Cases and Percentages by Primary Occupation, Age >15: Reporting Areas, 2014	87
Table 49. Tuberculosis Cases and Percentages by Initial Drug Regimen: Reporting Areas, 2014	88
Table 50. Culture-positive Tuberculosis Cases and Percentages with Drug Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2014	89
Table 51. Tuberculosis Cases and Percentages by HIV Status: Reporting Areas, 2014	90
Table 52. Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2014	92
Table 53. Tuberculosis Genotyping Surveillance Coverage: Reporting Areas, 2014	94
Table 54. County-based Tuberculosis Genotype Clusters Based on GENType: Reporting Areas, 2012–2014	95

Morbidity Tables, Reporting Areas, 2012

Table 55. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2012	99
Table 56. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2012	100
Table 57. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2012	102
Table 58. Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2012	104
Table 59. Completion of Tuberculosis Therapy (COT) Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2012	106
Table 60. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2012	108
Table 61. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2008–2012	109

Morbidity Tables, Metropolitan Statistical Areas, 2014

Table 62. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with >500,000 Population, 2014 and 2013	114
Table 63. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with >500,000 Population, 2014	116

Table 64. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with >500,000 Population, 2014.....	118
Table 65. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with >500,000 Population, 2014.....	120
Table 66. Tuberculosis Cases and Percentages by Homeless Status, Age >15: Metropolitan Statistical Areas with >500,000 Population, 2014	122

Surveillance Slide Set, 2014

Slides.....	127
Narrative	163

Appendices

Appendix A: Tuberculosis Case Definition for Public Health Surveillance	171
Appendix B: Recommendations for Counting Reported Tuberculosis Cases	172
Appendix C: National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information.....	181
Appendix D: Genotyping Background Information and Glossary	182

Executive Commentary

Executive Commentary

Highlights of 2014 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. Each individual TB case report (Report of Verified Case of Tuberculosis or RVCT) is submitted electronically. Following are the highlights of the 2014 report.

1. Updated case counts for each year from 1993 through 2013, in addition to new 2014 data.
2. Case count for 2014: 9,421 TB cases were reported to CDC from the 50 states and the District of Columbia (DC), representing a 1.5% decrease from 2013 (Table 1).
 - Twenty-one states reported increased case counts from 2013 (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 (32%, Table 2). Almost all Asians with TB were in persons born outside the United States (95.5%, Table 3).
 - Hispanics comprised the second largest racial or ethnic group (29%, Table 2). Many Hispanics with TB were born in the United States (24.0%, Table 3)
 - 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 2014, the TB case rate declined from 3.02 to 2.96 per 100,000 persons, representing a 2.2% decrease from 2013 (Table 1).
 - Ten 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 15.4 for foreign-born persons (Table 5).
 - Asians continued to have the highest case rate (17.8 per 100,000 persons) among all racial or ethnic groups (Table 2).
4. Burden among the foreign-born: In 2014, the percentage of cases occurring in foreign-born persons increased to 66% of the national case total (Table 5). This percentage has risen steadily since 1993.
 - In 35 states, and the District of Columbia, $\geq 50\%$ 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 in 2014 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 between 0.9% and 1.3% since 1996.
6. HIV status: In 2014, 6% of persons with TB were HIV positive.
 - The percentage of persons with TB who were HIV positive has dropped steadily since HIV test results were first reported in 1993 (Table 11).
7. Genotype surveillance coverage: In 2014, genotype surveillance coverage was 95.3%.
 - Genotype surveillance coverage has increased steadily since 2004. Thirty-nine states met or exceeded the national target of 94% genotype surveillance coverage in 2014 (Table 53). Among genotyped cases during 2012–2014, 21.6% were clustered, suggesting recent transmission (Table 23).

Tuberculosis in the United States

In 2014, the reported number of TB cases (9,421) and case rate (3.0 cases per 100,000) both decreased; these represented declines of 1.5% and 2.2%, respectively, compared to 2013. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 65% (Table 1).

TB case rates vary by factors such as age, race and ethnicity, and country of origin. The proportion of total cases occurring in foreign-born persons has been increasing steadily since 1993. In 2014, 66% 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 2014 was approximately 13 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths (compiled by the National Center for Health Statistics) increased by 8.8%, from 510 deaths in 2012 to 555 deaths in 2013. The number of TB deaths reported annually has decreased by 67% since 1992 (Table 1).

Age

Since 1993, TB case rates have declined annually for almost all age groups. In 2014, TB case rates continued the trend with declines in all age groups except children < 15 years of age and young adults 15-24 years old, which remained the same as the previous year at 0.8/100,000 and 2.2/100,000, respectively. The highest burden of disease continues to be among older adults. In 2014, adults ≥ 65 years old had a case rate of 4.8 cases per 100,000, while children ≤ 14 years old 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 2014, Asians had the highest TB case rate at 17.8 cases per 100,000, which was a slight decrease from 18.5 in 2013. Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 16.9 cases per 100,000, which is an increase compared to 11.4 cases per 100,000 reported in 2013. Owing to low case numbers among Native Hawaiians or other Pacific Islanders, case rates fluctuate and changes 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 5.1 cases per 100,000 (-82%); 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 2014, 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 2014, the TB case rate for U.S.-born persons was 1.2 cases per 100,000, representing an 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 2014, the TB case rate among foreign-born persons was 15.4 cases per 100,000, representing a 55% 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 2014, 34% of TB cases were among U.S.-born persons compared to 69% in 1993 (Table 5). In 36 states, and the District of Columbia, ≥ 50% of TB cases occurred among foreign-born persons. In 8 states (Colorado, Maine, Maryland, Massachusetts, Nebraska, New Jersey, New York, Utah, Virginia, Washington, Wisconsin), ≥ 80% of TB cases occurred among foreign-born persons (Table 34).

Country of Origin and World Region

From 2010 through 2014, 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 6,215 TB cases reported among foreign-born persons in 2014, 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 2014, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 5% in 2014), the Southeast Asia region (6% in 1993 to 14% in 2014), and the Africa region (2% in 1993 to 8% in 2014) (Table 20).

Multidrug-resistant Tuberculosis

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% in 1993 to 1.3% in 1996. From 1996 to 2014, the percentage of primary

MDR TB cases has fluctuated between 1.3 and 0.9%. Since 1996, 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 85% (57 of 67) in 2014 (Table 9).

Extensively Drug-resistant Tuberculosis

CDC has included an updated case count of extensively drug-resistant (XDR) TB cases from 1993 to 2014 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). Two cases were reported as XDR TB in 2014, compared to five cases in 2013, two cases in 2012, five cases in 2011, one case in 2010, and 0 cases in 2009. Of the 15 XDR TB cases reported since 2009, 11 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 85.4% in 2012. The proportion of patients who completed therapy within 1 year increased from 63.4% in 1993 to 89.4% in 2012 (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 91% in 2012, the latest year for which complete outcome data are available (Table 10).

HIV Status

Between 2013 and 2014, the proportion of persons with TB who reported HIV test results has remained high at 89% for all ages and 95–93% for persons 25–44 years old (Table 11). The percentage of persons with TB who reported HIV test results and who were HIV-positive was 6% in 2014, representing a 7% decrease from 2011 (Table 11). Among persons 25–44 years of age, 9% of persons with TB who reported HIV test results were HIV-positive in 2014, decreasing from 11% in 2011 (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.¹

¹ CDC. Treatment of tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11).

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, and results are reported by 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 52.6% in 2004 to 95.3% in 2014 (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 infection that was acquired in the past. Among genotyped cases during 2012–2014, 21.6% were clustered (Table 23). During this period, the percentage of clustered cases among U.S.-born persons with TB was 35.5%, compared to 14.3% among foreign-born persons diagnosed with TB in the United States (Table 22). Among 4,544 cases in clusters during 2012–2014, 908 cases were in 93 high-alert clusters, 1,036 cases were in 338 medium-alert clusters, and 2,600 cases were in 1,063 non-alerted clusters (Table 22; see Appendix D for cluster definitions). Among all cases genotyped in 2014, 1.6% had TB caused by *Mycobacterium bovis*, and the majority of these *M. bovis* cases (77.6%) were foreign-born (Table 15). Technical notes describe changes made in the *M. bovis* case definition, which resulted in a 13.9% reduction in the average of annual *M. bovis* case counts (n=105) compared to average annual counts that would have been reported without these changes (n=122).

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 receive U.S. federal government funding, including CDC cooperative agreement funding for domestic TB control program activities. In 2014, the USAPI had 410 reported cases of TB. Among these, 204 (50%) were male, 79 (19%) were aged less than 15 years and 123 (30%) were aged 25–44 years. In addition, 46 (11%) were not born in the USAPI jurisdictions or the United States, and of those, 41 (89%) emigrated from the Republic of the Philippines. Some other data highlights of the 410 reported USAPI cases are that 334 (81%) were diagnosed with pulmonary disease only, 185 (45%) had a positive culture for *Mycobacterium tuberculosis*; < 1% had MDR TB, and 127 (31%) were unemployed. Genotype surveillance coverage for USAPI was 92.4% in 2014.

Puerto Rico

In 2014, the Commonwealth of Puerto Rico reported 44 TB cases to CDC, a case rate of 1.2 per 100,000 persons. Among those cases, 33 (75%) were male, two (5%) were < 25 years old, and 35 (80%) were > 45 years old. Of the 44 reported cases, 7 were born outside of Puerto Rico, and of those, 5 (71%) emigrated from the Dominican Republic. The majority of reported cases (86%) were diagnosed with pulmonary disease only, 91% had positive cultures for *Mycobacterium tuberculosis*, none had MDR TB, and 39% were unemployed. Genotype surveillance coverage for Puerto Rico was 95.0% in 2014.

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 9,421 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). However, despite consistent declines in TB cases and case rates over the past 60 years, this year's decline in the rate of TB (-2.2%) was the smallest decrease in more than a decade. This minimal decline stresses the importance of refining our strategies in surveillance, contact investigations, and screening and treating contacts with latent TB infection. Focusing on populations at highest risk for TB and latent TB infection, such as persons born in high-burden countries, is also key.

Foreign-born persons continue to be disproportionately affected by TB; in 2014, the proportion of persons with TB who were foreign-born continued to increase to 66% of total cases. Global TB disease burden and the incidence in the United States are closely related, highlighting the need to strengthen existing support for TB control efforts abroad. This is particularly true as relates to the countries of origin of immigrants that contributed over half of the U.S. foreign-born TB patients in 2014: Mexico, the Philippines, India, Vietnam and China (Table 6). These top countries of birth for foreign-born persons with TB are further explored in Table 35, which provides data by state. Table 20 further analyzes all countries of birth for cases among foreign-born persons, and arranges the data by region; the largest proportion is from the Americas, followed by the Western Pacific region. In Table 21, an analysis of risk factors leading to TB disease is provided by origin of birth and race/ethnicity. Table 36 stratifies TB in foreign-born persons by their immigration status at first entry into the United States and Table 37 provides information on the number of years a foreign-born TB patient has been in the

United States; both of these tables show data at the state level. In Table 65, data on TB cases among foreign-born persons are available for metropolitan statistical areas.

CDC and the Division of Tuberculosis Elimination are seeking to strengthen surveillance capacity and support collaborations to address TB among persons who cross borders. Efforts are underway to enhance surveillance and measure burden of binational TB cases along the U.S.-Mexico border, an important region for focusing TB control efforts, as 20% of foreign-born TB cases were born in Mexico. To achieve TB elimination, intensified efforts are needed to address the persistent disparities that exist between U.S.-born and foreign-born persons. Ongoing surveillance and improved TB control and prevention activities, including a sustained focus on domestic TB control, a strengthened effort to diagnose and treat latent TB infection, and continued support of global TB control initiatives are especially necessary in light of the small decline of TB case rates in 2014.

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. Anergic patients with a clinical presentation consistent with TB but without laboratory evidence of *M. tuberculosis* complex would also be an example of provider diagnosis and one which has not changed over time.

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 are now 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

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.

medications should be reported and counted by the locality 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 2014 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 2014. 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 2011–2014 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, 2014).

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 2000–2014 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, 2014). 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 1995–2014 rates were based on extrapolations from the U.S. Census Current Population Survey (July Supplement).

Denominators for computing 2014 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.

Mortality Data

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 number of deaths for 2013 was obtained from the Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2013 on CDC WONDER Online Database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2013, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Finalized numbers of deaths for 2014 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 2012. 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 un-

der 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. 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 93% of TB cases tested among persons aged 25–44 years in 2014; 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 reflects the modified 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. Those cases entered as “Moved” as reason therapy stopped after 2009 are now included in the “Unknown” category.

Metropolitan Statistical Areas

Tables 62 through 66 present data by metropolitan statistical areas (MSAs) with an estimated 2014 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 62) 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 Surveillance 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 18 system updates in adding new reports, data management functions, and other tools since TB GIMS was released in March 2010. As of June 2015, there were 522 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). While genotype clustering can be used 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

For culture-confirmed TB cases that have been genotyped, *Mycobacterium bovis* can be defined primarily on the basis of spoligotyping results. The genotype-based definition for *M. bovis* required either (1) the absence of spoligotyping 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, or (3) determination based on microbiologic expertise. Data reported for 2004–2014 exclude 107 cases of Bacillus Calmette-Guérin (BCG) *M. bovis*, which were defined as spoligotype 67677377777600 with x, y or z in the second MIRU position. These specifications represent changes in definitions from annual reports published prior to 2014, which included a spoligotyping-based definition that defined *M. bovis* predominantly by motifs ending in “600” and the prior inclusion of cases of BCG *M. bovis*. These changes result in a 13.9% reduction in the average of annual *M. bovis* case counts (n=105) compared to average annual counts that would have been reported without these changes (n=122).

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, 1953–2014

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	5.0	-2.3	-3.2	662	0.2	-6.9	0.0
2005	14,063	4.8	-3.0	-3.9	648	0.2	-2.1	0.0
2006	13,728	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	12,895	4.2	-2.9	-3.8	590	0.2	6.5	0.0
2009	11,523	3.8	-10.6	-11.4	529	0.2	-10.3	0.0
2010	11,161	3.6	-3.1	-3.9	569	0.2	7.6	0.0
2011	10,510	3.4	-5.8	-6.6	539	0.2	-5.3	0.0
2012	9,941	3.2	-5.4	-6.1	510	0.2	-5.4	0.0
2013	9,565	3.0	-3.8	-4.5	555	0.2	8.8	0.0
2014	9,421	3.0	-1.5	-2.2	...	...	...	...

¹ Official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC, and accessed at <http://wonder.cdc.gov/mcd-icd10.html> on Jul 2, 2015.

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 2014 tuberculosis case counts and rates updated as of June 30, 2015, using the following sources: Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc) (accessed July 15, 2015) 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, 2015) and Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2014 (<http://www.census.gov/popest/data/national/totals/2014/index.html>) (accessed July 15, 2015).

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, 1993–2014

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	25,102	272	(1)	14.0	3,454	(14)	41.2	8,947	(36)	28.5	...	...	...	6,903	(27)	3.6	...	...	...	5,137	(20)	19.9	389	(2)
1994	24,206	327	(1)	16.4	3,639	(15)	41.5	8,383	(35)	26.2	...	...	...	6,572	(27)	3.4	...	...	...	5,019	(21)	18.6	266	(1)
1995	22,726	319	(1)	15.6	3,840	(17)	41.8	7,554	(33)	23.2	...	...	...	5,972	(26)	3.1	...	...	...	4,834	(21)	17.2	207	(1)
1996	21,210	287	(1)	13.7	3,666	(17)	38.1	7,097	(33)	21.5	...	...	...	5,487	(26)	2.8	...	...	...	4,492	(21)	15.2	181	(1)
1997	19,751	264	(1)	12.3	3,683	(19)	36.6	6,604	(33)	19.7	...	...	...	4,824	(24)	2.5	...	...	...	4,217	(21)	13.6	159	(1)
1998	18,286	254	(1)	11.5	3,516	(19)	33.5	5,823	(32)	17.0	...	...	...	4,475	(24)	2.3	...	...	...	4,089	(22)	12.6	129	(1)
1999	17,499	242	(1)	10.7	3,519	(20)	32.1	5,549	(32)	16.0	...	...	...	4,227	(24)	2.1	...	...	...	3,864	(22)	11.4	98	(1)
2000	16,308	232	(1)	11.0	3,392	(21)	31.3	5,148	(32)	15.0	...	...	...	3,638	(22)	1.9	...	...	...	3,803	(23)	10.7	95	(1)
2001	15,945	226	(1)	10.6	3,499	(22)	31.2	4,782	(30)	13.7	...	...	...	3,346	(21)	1.7	...	...	...	4,009	(25)	10.8	83	(1)
2002	15,055	185	(1)	8.6	3,322	(22)	28.6	4,467	(30)	12.7	...	...	...	3,042	(20)	1.5	...	...	...	3,973	(26)	10.3	66	(0)
2003	14,835	179	(1)	8.2	3,460	(23)	29.9	4,159	(28)	11.7	64	(0)	16.2	2,792	(19)	1.4	37	(0)	1.0	4,105	(28)	10.3	39	(0)		
2004	14,499	157	(1)	7.1	3,335	(23)	28.0	4,070	(28)	11.4	63	(0)	15.6	2,631	(18)	1.3	34	(0)	0.9	4,181	(29)	10.2	28	(0)		
2005	14,063	154	(1)	6.9	3,201	(23)	26.0	3,955	(28)	10.9	54	(0)	13.1	2,568	(18)	1.3	45	(0)	1.1	4,044	(29)	9.5	42	(0)		
2006	13,728	165	(1)	7.3	3,297	(24)	26.1	3,730	(27)	10.2	52	(0)	12.3	2,387	(17)	1.2	39	(0)	0.9	4,049	(29)	9.2	9	(0)		
2007	13,282	133	(1)	5.8	3,447	(26)	26.5	3,477	(26)	9.4	95	(1)	22.1	2,207	(17)	1.1	24	(0)	0.6	3,875	(29)	8.5	24	(0)		
2008	12,895	137	(1)	5.9	3,395	(26)	25.4	3,280	(25)	8.8	69	(1)	15.7	2,143	(17)	1.1	43	(0)	1.0	3,803	(29)	8.1	25	(0)		
2009	11,523	102	(1)	4.3	3,201	(28)	23.4	2,875	(25)	7.6	73	(1)	16.3	1,818	(16)	0.9	48	(0)	1.1	3,372	(29)	7.0	34	(0)		
2010	11,161	151	(1)	6.7	3,080	(28)	20.8	2,677	(24)	7.0	96	(1)	19.2	1,759	(16)	0.9	152	(1)	2.7	3,231	(29)	6.4	15	(0)		
2011	10,510	132	(1)	5.8	3,073	(29)	20.2	2,411	(23)	6.3	82	(1)	16.1	1,647	(16)	0.8	143	(1)	2.5	3,006	(29)	5.8	16	(0)		
2012	9,941	146	(1)	6.3	2,965	(30)	18.8	2,243	(23)	5.8	63	(1)	12.1	1,572	(16)	0.8	140	(1)	2.3	2,789	(28)	5.3	23	(0)		
2013	9,565	127	(1)	5.5	3,001	(31)	18.5	2,088	(22)	5.3	61	(1)	11.4	1,423	(15)	0.7	150	(2)	2.4	2,696	(28)	5.0	19	(0)		
2014	9,421	118	(1)	5.0	2,985	(32)	17.8	2,010	(21)	5.1	92	(1)	16.9	1,249	(13)	0.6	181	(2)	2.8	2,758	(29)	5.0	28	(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, 2015). Denominators for computing 2000–2009 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/2009/2009-nat-res.html>) (accessed July 15, 2015). Denominators for computing 2000–2014 case rates were obtained from the 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/2014/files/NC-EST2014-ALLDATA-R-File10.csv>) (accessed June 25, 2015).

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 5, 2015.

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, 1993–2014**

Year	Non-Hispanic																				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		Hispanic or Latino ⁴									
															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. (%)								
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)	2235 (44.0)	2849 (56.0)	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)	1989 (40.1)	2967 (59.9)	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)	1907 (39.6)	2911 (60.4)	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)	1603 (35.9)	2859 (64.1)	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)	1484 (34.9)	2727 (65.1)	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)	1280 (31.5)	2785 (68.5)	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)	1119 (29.2)	2717 (70.8)	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)	1015 (26.8)	2770 (73.2)	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)	1025 (25.7)	2965 (74.3)	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)	980 (24.8)	2973 (75.2)	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)	1000 (24.5)	3089 (75.5)	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)	1064 (25.5)	3107 (74.5)	15 (55.6)	12 (44.4)				
2005	148 (96.1)	6 (3.9)	121 (3.8)	3077 (96.2)	2875 (72.8)	1075 (27.2)	41 (75.9)	13 (24.1)	2132 (83.1)	434 (16.9)	23 (51.1)	22 (48.9)	23 (51.1)	22 (48.9)	955 (23.7)	3073 (76.3)	13 (35.1)	24 (64.9)				
2006	162 (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)	983 (24.4)	3051 (75.6)	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)	877 (22.8)	2968 (77.2)	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)	923 (24.3)	2876 (75.7)	12 (48.0)	13 (52.0)				
2009	98 (96.1)	4 (3.9)	149 (4.7)	3048 (95.3)	1922 (66.9)	951 (33.1)	66 (90.4)	7 (9.6)	1438 (79.1)	379 (20.9)	15 (31.3)	33 (68.8)	15 (31.3)	33 (68.8)	847 (25.2)	2513 (74.8)	7 (21.2)	26 (78.8)				
2010	149 (98.7)	2 (1.3)	123 (4.0)	2957 (96.0)	1772 (66.2)	903 (33.8)	79 (83.2)	16 (16.8)	1423 (80.9)	335 (19.1)	22 (14.5)	130 (85.5)	22 (14.5)	130 (85.5)	806 (25.0)	2420 (75.0)	0 (0.0)	15 (100.0)				
2011	130 (98.5)	2 (1.5)	128 (4.2)	2944 (95.8)	1540 (63.9)	870 (36.1)	60 (73.2)	22 (26.8)	1320 (80.1)	327 (19.9)	26 (18.3)	116 (81.7)	26 (18.3)	116 (81.7)	765 (25.5)	2238 (74.5)	4 (25.0)	12 (75.0)				
2012	144 (99.3)	1 (0.7)	118 (4.0)	2844 (96.0)	1345 (60.0)	898 (40.0)	51 (81.0)	12 (19.0)	1272 (81.0)	298 (19.0)	27 (19.3)	113 (80.7)	27 (19.3)	113 (80.7)	692 (24.8)	2096 (75.2)	6 (27.3)	16 (72.7)				
2013	125 (98.4)	2 (1.6)	152 (5.1)	2847 (94.9)	1251 (59.9)	836 (40.1)	44 (72.1)	17 (27.9)	1100 (77.4)	321 (22.6)	33 (22.3)	115 (77.7)	33 (22.3)	115 (77.7)	654 (24.3)	2039 (75.7)	6 (33.3)	12 (66.7)				
2014	117 (99.2)	1 (0.8)	136 (4.6)	2846 (95.4)	1183 (58.9)	826 (41.1)	84 (91.3)	8 (8.7)	969 (77.6)	279 (22.4)	32 (17.9)	147 (82.1)	32 (17.9)	147 (82.1)	660 (24.0)	2089 (76.0)	7 (26.9)	19 (73.1)				

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 5 2015.

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, 1993–2014

Year	Total Cases	0–14		15–24		25–44		45–64		≥64		Unknown ¹	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	(%)
1993	25,102	1,660	(7)	2.9	1,821	(7)	5.0	6,195	(25)	12.4	5,820	(23)	17.7 (0)
1994	24,206	1,659	(7)	2.9	1,832	(8)	5.0	6,126	(25)	11.9	5,540	(23)	16.6 (0)
1995	22,726	1,536	(7)	2.6	1,697	(7)	4.6	5,960	(26)	11.3	5,328	(23)	15.8 (0)
1996	21,210	1,356	(6)	2.3	1,637	(8)	4.4	5,572	(26)	10.2	5,076	(24)	14.9 (0)
1997	19,751	1,251	(6)	2.1	1,674	(8)	4.5	5,278	(27)	9.4	4,663	(24)	13.6 (0)
1998	18,286	1,077	(6)	1.8	1,543	(8)	4.1	4,954	(27)	8.5	4,377	(24)	12.6 (0)
1999	17,499	1,038	(6)	1.7	1,518	(9)	3.9	4,860	(28)	8.1	4,019	(23)	11.5 (0)
2000	16,308	964	(6)	1.6	1,618	(10)	4.1	4,635	(28)	7.4	3,515	(22)	10.0 (0)
2001	15,945	929	(6)	1.5	1,597	(10)	4.0	4,515	(28)	7.0	3,293	(21)	9.3 (0)
2002	15,055	944	(6)	1.6	1,498	(10)	3.7	4,182	(28)	6.3	3,142	(21)	8.8 (0)
2003	14,835	911	(6)	1.5	1,573	(11)	3.8	4,283	(29)	6.3	2,994	(20)	8.3 (0)
2004	14,499	952	(7)	1.6	1,603	(11)	3.8	4,192	(29)	5.9	2,811	(19)	7.8 (0)
2005	14,063	851	(6)	1.4	1,540	(11)	3.6	4,123	(29)	5.7	2,810	(20)	7.7 (0)
2006	13,728	803	(6)	1.3	1,532	(11)	3.6	4,039	(29)	5.4	2,663	(19)	7.2 (0)
2007	13,282	777	(6)	1.3	1,580	(12)	3.7	4,037	(30)	5.3	2,574	(19)	6.8 (0)
2008	12,895	788	(6)	1.3	1,444	(11)	3.4	3,929	(30)	5.0	2,496	(19)	6.4 (0)
2009	11,523	647	(6)	1.0	1,278	(11)	3.0	3,424	(30)	4.3	2,283	(20)	5.8 (0)
2010	11,161	636	(6)	1.0	1,199	(11)	2.7	3,429	(31)	4.2	2,228	(20)	5.5 (0)
2011	10,510	578	(5)	0.9	1,031	(10)	2.4	3,291	(31)	4.0	2,245	(21)	5.4 (0)
2012	9,941	488	(5)	0.8	1,019	(10)	2.3	3,115	(31)	3.8	2,199	(22)	5.1 (0)
2013	9,565	484	(5)	0.8	980	(10)	2.2	2,959	(31)	3.6	2,181	(23)	4.9 (0)
2014	9,421	460	(5)	0.8	961	(10)	2.2	2,961	(31)	3.5	2,216	(24)	4.8 (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/nvsr/bridgedpop/documentationbridgedintercena1.doc) (accessed July 15, 2015). Denominators for computing 2000–2014 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, 2014 (<http://www.census.gov/popest/data/national/asrh/2014/index.html>) (accessed June 25, 2015).

Data for all years updated through June 5, 2015.

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, 1993–2014

Year	Total Cases	U.S.-born Persons		Foreign-born Persons ¹		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)
1993	25,102	17,435	(69)	7,401	(29)	266	(1)
1994	24,206	16,191	(67)	7,751	(32)	264	(1)
1995	22,726	14,675	(65)	7,998	(35)	53	(0)
1996	21,210	13,398	(63)	7,739	(36)	73	(0)
1997	19,751	11,935	(60)	7,742	(39)	74	(0)
1998	18,286	10,633	(58)	7,599	(42)	54	(0)
1999	17,499	9,805	(56)	7,602	(43)	92	(1)
2000	16,308	8,647	(53)	7,619	(47)	42	(0)
2001	15,945	7,872	(49)	8,010	(50)	63	(0)
2002	15,055	7,282	(48)	7,718	(51)	55	(0)
2003	14,835	6,861	(46)	7,929	(53)	45	(0)
2004	14,499	6,632	(46)	7,844	(54)	23	(0)
2005	14,063	6,308	(45)	7,724	(55)	31	(0)
2006	13,728	5,889	(43)	7,815	(57)	24	(0)
2007	13,282	5,481	(41)	7,731	(58)	70	(1)
2008	12,895	5,284	(41)	7,602	(59)	9	(0)
2009	11,523	4,542	(39)	6,961	(60)	20	(0)
2010	11,161	4,374	(39)	6,778	(61)	9	(0)
2011	10,510	3,973	(38)	6,531	(62)	6	(0)
2012	9,941	3,655	(37)	6,278	(63)	8	(0)
2013	9,565	3,365	(35)	6,189	(65)	11	(0)
2014	9,421	3,188	(34)	6,215	(66)	18	(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, 2015). Denominators for computing the 1995–2014 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 5, 2015.

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, 2010–2014

Country of Origin	Year									
	2014		2013		2012		2011		2010	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Total Cases	6,215	(100)	6,189	(100)	6,278	(100)	6,531	(100)	6,778	(100)
Mexico	1,277	(21)	1,247	(20)	1,312	(21)	1,445	(22)	1,543	(23)
Philippines	748	(12)	781	(13)	772	(12)	759	(12)	757	(11)
India	479	(8)	496	(8)	532	(8)	510	(8)	583	(9)
Viet Nam	501	(8)	457	(7)	453	(7)	551	(8)	543	(8)
China	421	(7)	376	(6)	354	(6)	377	(6)	371	(5)
Guatemala	180	(3)	213	(3)	194	(3)	172	(3)	199	(3)
Haiti	165	(3)	171	(3)	198	(3)	189	(3)	195	(3)
Ethiopia	140	(2)	159	(3)	162	(3)	156	(2)	163	(2)
Honduras	142	(2)	122	(2)	125	(2)	129	(2)	144	(2)
Korea, Republic of	92	(1)	99	(2)	109	(2)	131	(2)	120	(2)
Somalia	105	(2)	86	(1)	101	(2)	116	(2)	124	(2)
El Salvador	97	(2)	96	(2)	116	(2)	104	(2)	116	(2)
Myanmar	102	(2)	102	(2)	116	(2)	93	(1)	116	(2)
Peru	91	(1)	91	(1)	79	(1)	93	(1)	111	(2)
Pakistan	89	(1)	78	(1)	68	(1)	88	(1)	74	(1)
Cambodia	76	(1)	71	(1)	78	(1)	91	(1)	70	(1)
Ecuador	74	(1)	80	(1)	65	(1)	78	(1)	85	(1)
Nepal	79	(1)	72	(1)	81	(1)	77	(1)	64	(1)
Dominican Republic	69	(1)	62	(1)	74	(1)	75	(1)	85	(1)
Laos	70	(1)	88	(1)	64	(1)	62	(1)	71	(1)
Kenya	48	(1)	48	(1)	58	(1)	75	(1)	63	(1)
Bangladesh	42	(1)	71	(1)	54	(1)	66	(1)	58	(1)
Nigeria	51	(1)	68	(1)	58	(1)	52	(1)	43	(1)
Bhutan	62	(1)	57	(1)	59	(1)	39	(1)	37	(1)
Thailand	48	(1)	38	(1)	33	(1)	36	(1)	47	(1)
Indonesia	29	(0)	34	(1)	41	(1)	32	(0)	58	(1)
Korea, Dem. Peoples Republic	31	(1)	37	(1)	47	(1)	38	(1)	35	(1)
Colombia	36	(1)	37	(1)	25	(0)	33	(1)	43	(1)
Cuba	44	(1)	25	(0)	30	(0)	40	(1)	33	(0)
Liberia	28	(0)	29	(0)	33	(1)	28	(0)	36	(1)
All Others ³	799	(13)	798	(13)	787	(13)	796	(12)	791	(12)

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 5, 2015.

Table 7. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2014

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	25,102	20,306	(81)	0	(0)	185	(1)	3,088	(12)	1523	(6)	21,153	(84)	3,940	(16)
1994	24,206	19,507	(81)	0	(0)	189	(1)	2,917	(12)	1593	(7)	20,318	(84)	3,886	(16)
1995	22,726	18,265	(80)	0	(0)	189	(1)	2,749	(12)	1523	(7)	18,887	(83)	3,834	(17)
1996	21,210	17,154	(81)	0	(0)	131	(1)	2,607	(12)	1318	(6)	17,387	(82)	3,814	(18)
1997	19,751	15,979	(81)	0	(0)	155	(1)	2,411	(12)	1206	(6)	16,239	(82)	3,509	(18)
1998	18,286	14,789	(81)	0	(0)	155	(1)	2,253	(12)	1089	(6)	14,801	(81)	3,483	(19)
1999	17,499	13,994	(80)	0	(0)	172	(1)	2,103	(12)	1230	(7)	14,065	(80)	3,431	(20)
2000	16,308	13,013	(80)	0	(0)	148	(1)	1,950	(12)	1197	(7)	13,085	(80)	3,211	(20)
2001	15,945	12,750	(80)	0	(0)	123	(1)	1,886	(12)	1186	(7)	12,724	(80)	3,217	(20)
2002	15,055	11,974	(80)	0	(0)	104	(1)	1,822	(12)	1155	(8)	11,901	(79)	3,148	(21)
2003	14,835	11,683	(79)	0	(0)	116	(1)	1,783	(12)	1253	(8)	11,805	(80)	3,020	(20)
2004	14,499	11,327	(78)	0	(0)	80	(1)	1,824	(13)	1268	(9)	11,524	(80)	2,971	(20)
2005	14,063	10,956	(78)	0	(0)	96	(1)	1,798	(13)	1213	(9)	11,124	(79)	2,933	(21)
2006	13,728	10,745	(78)	0	(0)	93	(1)	1,629	(12)	1261	(9)	10,853	(79)	2,872	(21)
2007	13,282	10,426	(78)	0	(0)	69	(1)	1,496	(11)	1291	(10)	10,592	(80)	2,687	(20)
2008	12,895	10,022	(78)	18	(0)	60	(0)	1,551	(12)	1244	(10)	10,238	(79)	2,653	(21)
2009	11,523	8,884	(77)	56	(0)	74	(1)	1,782	(15)	727	(6)	9,012	(78)	2,497	(22)
2010	11,161	8,458	(76)	105	(1)	68	(1)	1,880	(17)	650	(6)	8,720	(78)	2,436	(22)
2011	10,510	8,086	(77)	124	(1)	58	(1)	1,683	(16)	559	(5)	8,324	(79)	2,183	(21)
2012	9,941	7,625	(77)	121	(1)	37	(0)	1,631	(16)	527	(5)	7,833	(79)	2,095	(21)
2013	9,565	7,367	(77)	152	(2)	42	(0)	1,504	(16)	500	(5)	7,568	(79)	1,989	(21)
2014	9,421	7,226	(77)	177	(2)	46	(0)	1,494	(16)	478	(5)	7,469	(79)	1,938	(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 5, 2015.

Table 8. Tuberculosis Cases and Percentages, by Resistance to INH¹, Origin of Birth, and Previous History of TB: United States, 1993–2014

Year	All INH-resistant ²	Isoniazid Resistant TB Cases											
		Total INH-resistant						U.S.-born INH-resistant ³					
		Previous TB			No Previous TB			Previous TB			No Previous TB		
		Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)
1993	1,534	982	161	(16.4)	16,600	1,367	(8.2)	668	83	(12.4)	11,809	789	(6.7)
1994	1,543	1,033	175	(16.9)	16,417	1,352	(8.2)	693	81	(11.7)	11,019	709	(6.4)
1995	1,350	958	168	(17.5)	16,021	1,172	(7.3)	593	77	(13.0)	10,350	555	(5.4)
1996	1,284	862	142	(16.5)	15,358	1,133	(7.4)	559	68	(12.2)	9,646	496	(5.1)
1997	1,195	742	109	(14.7)	14,448	1,078	(7.5)	455	35	(7.7)	8,705	435	(5.0)
1998	1,120	749	98	(13.1)	13,418	1,011	(7.5)	485	38	(7.8)	7,711	366	(4.7)
1999	999	669	82	(12.3)	12,655	899	(7.1)	383	25	(6.5)	7,020	283	(4.0)
2000	981	632	84	(13.3)	11,825	889	(7.5)	360	22	(6.1)	6,144	269	(4.4)
2001	897	629	87	(13.8)	11,510	800	(7.0)	324	28	(8.6)	5,583	242	(4.3)
2002	912	569	80	(14.1)	10,813	826	(7.6)	303	23	(7.6)	5,069	206	(4.1)
2003	903	524	65	(12.4)	10,751	822	(7.6)	253	16	(6.3)	4,864	214	(4.4)
2004	872	537	64	(11.9)	10,481	801	(7.6)	274	15	(5.5)	4,698	214	(4.6)
2005	842	507	70	(13.8)	10,064	761	(7.6)	240	18	(7.5)	4,412	188	(4.3)
2006	845	493	67	(13.6)	9,906	770	(7.8)	203	9	(4.4)	4,145	173	(4.2)
2007	798	496	71	(14.3)	9,647	715	(7.4)	206	14	(6.8)	3,878	164	(4.2)
2008	835	429	57	(13.3)	9,305	774	(8.3)	170	13	(7.6)	3,677	189	(5.1)
2009	762	341	52	(15.2)	7,741	651	(8.4)	116	6	(5.2)	3,041	186	(6.1)
2010	699	359	62	(17.3)	7,812	628	(8.0)	128	12	(9.4)	2,970	165	(5.6)
2011	753	345	59	(17.1)	7,546	687	(9.1)	137	9	(6.6)	2,719	172	(6.3)
2012	683	356	56	(15.7)	7,070	627	(8.9)	126	8	(6.3)	2,535	143	(5.6)
2013	668	298	48	(16.1)	6,832	615	(9.0)	97	8	(8.2)	2,297	130	(5.7)
2014	680	322	61	(18.9)	6,556	611	(9.3)	91	4	(4.4)	2,154	161	(7.5)

¹ 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. Cases have been susceptibility tested to at least isoniazid and rifampin.

² This column provides an overall total of all INH-resistant 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 5, 2015.

Table 9. Tuberculosis Cases and Percentages, by Multidrug Resistance¹, Origin of Birth, and Previous History of TB: United States, 1993–2014

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)	16,600	407	(2.5)	668	30	(4.5)	11,809	301	(2.5)
1994	431	1,033	74	(7.2)	16,417	353	(2.2)	693	35	(5.1)	11,019	238	(2.2)
1995	327	958	70	(7.3)	16,021	254	(1.6)	593	28	(4.7)	10,350	169	(1.6)
1996	250	862	43	(5.0)	15,358	207	(1.3)	559	21	(3.8)	9,646	105	(1.1)
1997	201	742	44	(5.9)	14,448	155	(1.1)	455	12	(2.6)	8,705	76	(0.9)
1998	155	749	23	(3.1)	13,418	132	(1.0)	485	6	(1.2)	7,711	55	(0.7)
1999	157	669	28	(4.2)	12,655	127	(1.0)	383	6	(1.6)	7,020	39	(0.6)
2000	146	632	26	(4.1)	11,825	120	(1.0)	360	2	(0.6)	6,144	40	(0.7)
2001	151	629	33	(5.2)	11,510	115	(1.0)	324	7	(2.2)	5,583	34	(0.6)
2002	158	569	26	(4.6)	10,813	132	(1.2)	303	3	(1.0)	5,069	35	(0.7)
2003	119	524	21	(4.0)	10,751	94	(0.9)	253	2	(0.8)	4,864	24	(0.5)
2004	128	537	27	(5.0)	10,481	100	(1.0)	274	4	(1.5)	4,698	26	(0.6)
2005	125	507	23	(4.5)	10,064	98	(1.0)	240	2	(0.8)	4,412	20	(0.5)
2006	124	493	20	(4.1)	9,906	103	(1.0)	203	1	(0.5)	4,145	19	(0.5)
2007	124	496	19	(3.8)	9,647	101	(1.0)	206	3	(1.5)	3,878	19	(0.5)
2008	107	429	19	(4.4)	9,305	88	(0.9)	170	3	(1.8)	3,677	21	(0.6)
2009	114	341	19	(5.6)	7,741	89	(1.1)	116	1	(0.9)	3,041	11	(0.4)
2010	105	359	16	(4.5)	7,812	87	(1.1)	128	2	(1.6)	2,970	14	(0.5)
2011	127	345	27	(7.8)	7,546	100	(1.3)	137	1	(0.7)	2,719	16	(0.6)
2012	87	356	13	(3.7)	7,070	74	(1.0)	126	0	(0.0)	2,535	11	(0.4)
2013	96	298	12	(4.0)	6,832	83	(1.2)	97	2	(2.1)	2,297	7	(0.3)
2014	91	322	23	(7.1)	6,556	67	(1.0)	91	0	(0.0)	2,154	10	(0.5)

¹Resistance 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. Cases have been susceptibility tested to at least isoniazid and rifampin.

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

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

⁴Includes 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 5, 2015.

Table 10. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2012

Year	Initial Drug Regimen ^{1,2}			Directly Observed Therapy ³		Therapy ≤1 Year Indicated ⁴	
	IR	IRZ	IRZE	DOT Only	Both DOT and Self-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)	(83.8)	(56.3)	(32.9)	(85.6)	(93.9)
2008	(1.0)	(3.5)	(84.3)	(56.4)	(33.5)	(86.0)	(93.3)
2009	(0.9)	(3.0)	(84.7)	(59.7)	(30.3)	(88.8)	(95.6)
2010	(0.8)	(2.8)	(84.8)	(59.3)	(31.1)	(89.6)	(96.0)
2011 ⁵	(0.7)	(2.6)	(85.4)	(62.2)	(29.2)	(89.3)	(96.0)
2012 ⁵	(0.6)	(2.0)	(85.4)	(61.8)	(29.2)	(89.4)	(95.4)

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 2014, 0.45% received no initial drug therapy, 0.17% were started on one drug, and 11.90% had an initial drug regimen other than IR, IRZ, or IRZE.

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

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 miliary disease or positive blood culture, and those who moved out of the country within one year of initiating treatment.

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 5, 2015.

See Technical Notes for description of COT calculation.

See Surveillance Slides #30 and #31.

Data complete through 2012 only. See Technical Notes for details.

Table 11. Tuberculosis Cases and Percentages in Persons with HIV Test Results¹ and with HIV Coinfection by Age Group: United States, 1993–2014

Year	25–44 Years Old					All Ages				
	Total No.	HIV Test Results		HIV Positive		Total No.	HIV Test Results		HIV Positive	
		No.	(%)	No.	(%)		No.	(%)	No.	(%)
1993	9,329	4,211	(45)	2,633	(63)	24,052	7,185	(30)	3,466	(48)
1994	8,805	4,288	(49)	2,524	(59)	23,273	7,644	(33)	3,403	(45)
1995	8,016	4,156	(52)	2,063	(50)	21,882	7,940	(36)	2,869	(36)
1996	7,400	4,246	(57)	1,757	(41)	20,441	8,595	(42)	2,461	(29)
1997	6,757	4,058	(60)	1,407	(35)	19,082	8,593	(45)	1,999	(23)
1998	6,261	3,810	(61)	1,194	(31)	17,745	8,158	(46)	1,755	(22)
1999	5,983	3,752	(63)	1,125	(30)	16,968	8,295	(49)	1,658	(20)
2000	5,499	3,476	(63)	917	(26)	15,888	7,990	(50)	1,398	(17)
2001	5,550	3,544	(64)	892	(25)	15,567	8,007	(51)	1,369	(17)
2002	5,237	3,475	(66)	822	(24)	14,725	7,924	(54)	1,344	(17)
2003	5,028	3,396	(68)	786	(23)	14,509	8,037	(55)	1,280	(16)
2004	4,886	3,399	(70)	655	(19)	14,208	8,415	(59)	1,150	(14)
2005	4,698	3,255	(69)	598	(18)	13,770	8,152	(59)	1,017	(12)
2006	4,648	3,270	(70)	546	(17)	13,412	8,231	(61)	927	(11)
2007	4,266	3,133	(73)	468	(15)	12,993	8,266	(64)	846	(10)
2008	4,203	3,089	(73)	399	(13)	12,644	8,166	(65)	792	(10)
2009	3,859	2,838	(74)	385	(14)	11,271	7,338	(65)	688	(9)
2010	3,631	2,757	(76)	308	(11)	10,912	7,434	(68)	593	(8)
2011 ²	3,332	3,047	(91)	331	(11)	10,267	8,712	(85)	649	(7)
2012	3,097	2,876	(93)	326	(11)	9,722	8,417	(87)	609	(7)
2013	2,936	2,779	(95)	259	(9)	9,348	8,329	(89)	537	(6)
2014	2,806	2,622	(93)	228	(9)	9,229	8,168	(89)	492	(6)

¹ Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS for the period 1993–2004, 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–present. 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 5, 2015.
 See Surveillance Slides #26 and #27.

Table 12. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2012

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	23,740	18,043	(76.0)	0	(0.0)	1,120	(4.7)	1,086	(4.6)	223	(0.9)	3,053	(12.9)	215	(0.9)
1994	23,052	17,764	(77.1)	0	(0.0)	1,194	(5.2)	740	(3.2)	183	(0.8)	2,743	(11.9)	428	(1.9)
1995	21,705	17,306	(79.7)	0	(0.0)	969	(4.5)	570	(2.6)	155	(0.7)	2,396	(11.0)	309	(1.4)
1996	20,298	16,528	(81.4)	0	(0.0)	783	(3.9)	525	(2.6)	156	(0.8)	1,998	(9.8)	308	(1.5)
1997	18,930	15,673	(82.8)	0	(0.0)	667	(3.5)	444	(2.3)	119	(0.6)	1,755	(9.3)	272	(1.4)
1998	17,583	14,766	(84.0)	0	(0.0)	533	(3.0)	411	(2.3)	104	(0.6)	1,579	(9.0)	190	(1.1)
1999	16,861	14,234	(84.4)	0	(0.0)	456	(2.7)	359	(2.1)	104	(0.6)	1,437	(8.5)	271	(1.6)
2000	15,784	13,407	(84.9)	0	(0.0)	406	(2.6)	397	(2.5)	112	(0.7)	1,294	(8.2)	168	(1.1)
2001	15,409	13,242	(85.9)	0	(0.0)	378	(2.5)	402	(2.6)	99	(0.6)	1,121	(7.3)	167	(1.1)
2002	14,564	12,482	(85.7)	0	(0.0)	336	(2.3)	412	(2.8)	87	(0.6)	1,080	(7.4)	167	(1.1)
2003	14,379	12,418	(86.4)	0	(0.0)	313	(2.2)	389	(2.7)	84	(0.6)	994	(6.9)	181	(1.3)
2004	14,080	12,118	(86.1)	0	(0.0)	337	(2.4)	370	(2.6)	82	(0.6)	975	(6.9)	198	(1.4)
2005	13,676	11,729	(85.8)	1	(0.0)	323	(2.4)	338	(2.5)	90	(0.7)	986	(7.2)	209	(1.5)
2006	13,317	11,541	(86.7)	0	(0.0)	292	(2.2)	358	(2.7)	79	(0.6)	939	(7.1)	108	(0.8)
2007	12,907	11,348	(87.9)	0	(0.0)	241	(1.9)	327	(2.5)	73	(0.6)	819	(6.3)	99	(0.8)
2008	12,552	10,888	(86.7)	7	(0.1)	257	(2.0)	329	(2.6)	78	(0.6)	843	(6.7)	150	(1.2)
2009	11,187	9,835	(87.9)	22	(0.2)	96	(0.9)	165	(1.5)	82	(0.7)	681	(6.1)	306	(2.7)
2010	10,833	9,537	(88.0)	29	(0.3)	-	(0.0)	158	(1.5)	64	(0.6)	654	(6.0)	391	(3.6)
2011	10,206	8,950	(87.7)	28	(0.3)	-	(0.0)	126	(1.2)	69	(0.7)	686	(6.7)	347	(3.4)
2012	9,666	8,421	(87.1)	31	(0.3)	-	(0.0)	123	(1.3)	56	(0.6)	600	(6.2)	435	(4.5)

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, Unknown, or Moved (from 2010 on).

Note: Data for all years are updated through June 5, 2015.

Data complete through 2012 only. See Technical Notes for details.

**Table 13. National Tuberculosis Genotyping Surveillance Coverage¹:
United States, 2004–2014**

Year	Reported TB Cases	Reported Culture Positive Cases	Cases with Genotype Result	Genotype Surveillance Coverage
	No.	No.	No.	(%)
2004	14,499	11,327	5,956	(52.6)
2005	14,063	10,956	7,500	(68.5)
2006	13,728	10,745	7,528	(70.1)
2007	13,282	10,426	8,431	(80.9)
2008	12,895	10,022	8,180	(81.6)
2009	11,523	8,884	7,714	(86.8)
2010	11,161	8,458	7,749	(91.6)
2011	10,510	8,086	7,616	(94.2)
2012	9,941	7,625	7,226	(94.8)
2013	9,565	7,367	7,044	(95.6)
2014	9,421	7,226	6,887	(95.3)

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, 2004–2014**

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	527	181	85	(47.0)
2008	553	240	72	(30.0)
2009	534	237	206	(86.9)
2010	618	309	271	(87.7)
2011	462	229	191	(83.4)
2012	493	247	225	(91.1)
2013	413	217	197	(90.8)
2014	454	225	208	(92.4)

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, 2004–2014

Year	Total Genotyped Cases	<i>Mycobacterium bovis</i> cases					
		Total		U.S.-born		Foreign-born	
	No.	No. ²	(%)	No.	(%) ³	No.	(%) ³
2004	5,956	73	(1.2)	23	(31.5)	50	(68.5)
2005	7,500	81	(1.1)	23	(28.4)	58	(71.6)
2006	7,528	116	(1.5)	25	(21.6)	90	(77.6)
2007	8,431	112	(1.3)	17	(15.2)	94	(83.9)
2008	8,180	129	(1.6)	29	(22.5)	100	(77.5)
2009	7,714	113	(1.5)	27	(23.9)	86	(76.1)
2010	7,749	108	(1.4)	20	(18.5)	88	(81.5)
2011	7,616	117	(1.5)	30	(25.6)	87	(74.4)
2012	7,226	109	(1.5)	18	(16.5)	91	(83.5)
2013	7,044	96	(1.4)	22	(22.9)	74	(77.1)
2014	6,887	107	(1.6)	24	(22.4)	83	(77.6)

¹ *M. bovis* cases were defined predominantly by spoligotyping results with missing spacers 3, 9, 16, and 39-43. Data exclude 107 cases of Bacillus Calmette-Guérin (BCG) *M. bovis*, which have x, y or z in the second MIRU position. Please see technical notes for details regarding changes in the *M. bovis* definition, which result in a 13.9% reduction in the average of annual *M. bovis* case counts (n=105) compared to average annual counts that would have been reported without these changes (n=122).

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

2014

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, 2014

Country of Origin ²	No. Years in U.S. ³						
	Total Cases	< 1 Year		1 - 4 Years		≥ 5 Years	
	No.	No.	(%)	No.	(%)	No.	(%)
Total	6,215	995	(16)	919	(15)	3,721	(60)
Mexico	1,277	122	(10)	102	(8)	909	(71)
Philippines	748	98	(13)	81	(11)	494	(66)
Vietnam	501	47	(9)	51	(10)	320	(64)
India	479	111	(23)	110	(23)	220	(46)
China	421	48	(11)	53	(13)	286	(68)
Guatemala	180	37	(21)	36	(20)	101	(56)
Haiti	165	27	(16)	40	(24)	92	(56)
Honduras	142	47	(33)	18	(13)	73	(51)
Ethiopia	140	30	(21)	53	(38)	57	(41)
Somalia	105	31	(30)	17	(16)	50	(48)
Myanmar	102	34	(33)	25	(25)	35	(34)
El Salvador	97	21	(22)	12	(12)	61	(63)
Korea, Republic of	92	3	(3)	6	(7)	79	(86)
Peru	91	14	(15)	11	(12)	62	(68)
Pakistan	89	14	(16)	9	(10)	56	(63)
Nepal	79	26	(33)	35	(44)	16	(20)
Cambodia	76	6	(8)	3	(4)	54	(71)
Ecuador	74	8	(11)	10	(14)	53	(72)
Laos	70	1	(1)	1	(1)	52	(74)
Dominican Republic	69	16	(23)	15	(22)	36	(52)
Bhutan	62	24	(39)	29	(47)	9	(15)
Nigeria	51	16	(31)	20	(39)	14	(27)
Kenya	48	7	(15)	15	(31)	23	(48)
Thailand	48	6	(13)	6	(13)	29	(60)
Cuba	44	6	(14)	2	(5)	33	(75)
Bangladesh	42	8	(19)	13	(31)	16	(38)
Colombia	36	7	(19)	7	(19)	17	(47)
Korea Dem People S. Republic	31	0	(0)	0	(0)	24	(77)
Indonesia	29	8	(28)	7	(24)	14	(48)
Taiwan	29	0	(0)	0	(0)	26	(90)
All Others ⁴	798	172	(22)	132	(17)	410	(51)

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.

Table 17 Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2014

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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, 2014

Race/Ethnicity and Sex	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	No.	Rate
Native Hawaiian or Other Pacific Islander	92	16.9	10	24.8	12	15.0	8	9.1	32	18.3	21	17.6	9	21.2	0	--	--	--	--	--
Male	50	18.1	7	33.7	5	12.2	3	6.6	19	21.2	12	20.3	4	20.3	0	--	--	--	--	--
Female	42	15.5	3	15.3	7	17.8	5	11.7	13	15.3	9	14.9	5	21.9	0	--	--	--	--	--
Unknown	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	--	0	--	--
White	1,249	0.6	26	0.3	9	0.0	68	0.3	194	0.4	484	0.8	468	1.3	0	--	--	--	--	--
Male	813	0.8	8	0.2	6	0.1	40	0.3	102	0.4	348	1.2	309	1.9	0	--	--	--	--	--
Female	436	0.4	18	0.4	3	0.0	28	0.2	92	0.4	136	0.5	159	0.8	0	--	--	--	--	--
Unknown	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	--	0	--	--
Multiple Race²	181	2.8	9	1.0	6	0.4	13	1.1	73	5.2	38	4.4	42	12.9	0	--	--	--	--	--
Male	103	3.3	5	1.0	2	0.2	7	1.1	40	6.1	22	5.4	27	18.8	0	--	--	--	--	--
Female	78	2.4	4	0.9	4	0.5	6	1.0	33	4.5	16	3.6	15	8.3	0	--	--	--	--	--
Unknown	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	--	0	--	--
Unknown	28	--	1	--	0	--	1	--	9	--	8	--	9	--	0	--	--	--	--	--
Male	19	--	1	--	0	--	1	--	6	--	5	--	6	--	0	--	--	--	--	--
Female	9	--	0	--	0	--	0	--	3	--	3	--	3	--	0	--	--	--	--	--
Unknown	0	--	0	--	0	--	0	--	0	--	0	--	0	--	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 2014 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/2014/files/NC-EST2014-ALLDATA-R-File10.csv>) (accessed June 25, 2015).

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, 2014

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	3,188	226	131	296	675	1,144	716	0
Male	2,068	111	68	164	392	843	490	0
Female	1,117	115	63	132	282	301	224	0
Unknown	3	0	0	0	1	0	2	0
Hispanic or Latino¹	660	106	67	122	156	130	79	0
Male	398	49	37	73	92	96	51	0
Female	262	57	30	49	64	34	28	0
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	117	1	3	13	26	48	26	0
Male	76	0	2	6	17	39	12	0
Female	38	1	1	7	8	9	12	0
Unknown	3	0	0	0	1	0	2	0
Asian	136	29	13	43	32	11	8	0
Male	65	16	5	20	12	7	5	0
Female	71	13	8	23	20	4	3	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	1,183	47	26	72	290	518	230	0
Male	795	26	14	39	179	383	154	0
Female	388	21	12	33	111	135	76	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	84	10	12	6	30	18	8	0
Male	48	7	5	3	19	10	4	0
Female	36	3	7	3	11	8	4	0
Unknown	0	0	0	0	0	0	0	0
White	969	23	8	40	130	413	355	0
Male	663	7	5	23	68	305	255	0
Female	306	16	3	17	62	108	100	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race²	32	9	2	0	10	4	7	0
Male	18	5	0	0	5	2	6	0
Female	14	4	2	0	5	2	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	7	1	0	0	1	2	3	0
Male	5	1	0	0	0	1	3	0
Female	2	0	0	0	1	1	0	0
Unknown	0	0	0	0	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.

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, 2014

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	6,215	36	67	663	2,140	1,812	1,497	0
Male	3,759	19	35	407	1,222	1,163	913	0
Female	2,456	17	32	256	918	649	584	0
Unknown	0	0	0	0	0	0	0	0
Hispanic or Latino²	2,089	4	13	208	833	615	416	0
Male	1,391	1	7	158	574	416	235	0
Female	698	3	6	50	259	199	181	0
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	1	0	0	1	0	0	0	0
Male	1	0	0	1	0	0	0	0
Female	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
Asian	2,846	19	27	257	793	899	851	0
Male	1,685	11	13	136	397	569	559	0
Female	1,161	8	14	121	396	330	292	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	826	10	22	153	379	186	76	0
Male	435	6	12	87	178	111	41	0
Female	391	4	10	66	201	75	35	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	8	0	0	2	2	3	1	0
Male	2	0	0	0	0	2	0	0
Female	6	0	0	2	2	1	1	0
Unknown	0	0	0	0	0	0	0	0
White	279	3	1	28	64	70	113	0
Male	149	1	1	17	34	42	54	0
Female	130	2	0	11	30	28	59	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race³	147	0	4	13	61	34	35	0
Male	83	0	2	7	33	20	21	0
Female	64	0	2	6	28	14	14	0
Unknown	0	0	0	0	0	0	0	0
Unknown	19	0	0	1	8	5	5	0
Male	13	0	0	1	6	3	3	0
Female	6	0	0	0	2	2	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, 2014**

African Region					
Total Cases = 507					
Algeria	2	Ethiopia	140	Niger	4
Angola	10	Gabon	3	Nigeria	51
Benin	1	Gambia	6	Rwanda	6
Botswana	0	Ghana	21	Sao Tome and Principe	0
Burkina Faso	5	Guinea	12	Senegal	14
Burundi	4	Guinea-Bissau	1	Seychelles	0
Cameroon	23	Kenya	48	Sierra Leone	23
Cape Verde	4	Lesotho	0	South Africa	6
Central African Republic	1	Liberia	28	Swaziland	0
Chad	3	Madagascar	0	Tanzania, UR	6
Comoros	1	Malawi	1	Togo	7
Congo, Republic of	21	Mali	1	Uganda	11
Côte d'Ivoire	7	Mauritania	4	Zambia	3
DR Congo	5	Mauritius	0	Zimbabwe	3
Equatorial Guinea	1	Mozambique	3		
Eritrea	17	Namibia	0		

Americas Region					
Total Cases = 2,314					
Anguilla	0	Costa Rica	4	Netherland Antilles	0
Antigua and Barbuda	0	Cuba	44	Nicaragua	26
Argentina	5	Dominica	0	Panama	5
Bahamas	2	Dominican Republic	69	Paraguay	0
Barbados	0	Ecuador	74	Peru	91
Belize	3	El Salvador	97	St. Kitts and Nevis	0
Bermuda	0	Grenada	1	St. Lucia	0
Bolivia	16	Guatemala	180	St. Vincent & Grenadines	0
Brazil	20	Guyana	19	Suriname	0
British Virgin Islands	0	Haiti	165	Trinidad and Tobago	7
Canada	6	Honduras	142	Turks and Caicos Islands	0
Cayman Islands	0	Jamaica	14	Uruguay	1
Chile	1	Mexico	1,277	Venezuela	9
Colombia	36	Montserrat	0		

Eastern Mediterranean Region					
Total Cases = 313					
Afghanistan	26	Lebanon	2	Sudan	18
Bahrain	0	Libyan Arab Jamahiriya	0	Syrian Arab Republic	5
Djibouti	0	Morocco	13	Tunisia	2
Egypt	6	Oman	0	United Arab Emirates	0
Iran, Islamic Republic of	16	Pakistan	89	West Bank and Gaza	0
Iraq	10	Qatar	0	Yemen	9
Jordan	1	Saudi Arabia	10		
Kuwait	1	Somalia	105		

**Table 20. (Cont'd) Tuberculosis Cases Among Foreign-born Persons¹ by Country of Birth²:
United States, 2014**

European Region					
Total Cases = 159					
Albania	4	Greece	6	Poland	11
Andorra	0	Hungary	1	Portugal	7
Armenia	5	Iceland	0	Romania	6
Austria	0	Ireland	4	Russian Federation	14
Azerbaijan	1	Israel	0	San Marino	0
Belarus	1	Italy	7	Serbia	5
Belgium	0	Kazakhstan	2	Slovakia	0
Bosnia and Herzegovina	16	Kyrgyzstan	4	Slovenia	2
Bulgaria	3	Latvia	0	Spain	3
Croatia	1	Lithuania	1	Sweden	0
Cyprus	0	Luxembourg	0	Switzerland	1
Czech Republic	0	Macedonia, TFYR	0	Tajikistan	0
Denmark	1	Malta	0	Turkey	5
Estonia	0	Moldova, Republic of	4	Turkmenistan	0
Finland	0	Monaco	0	Ukraine	18
France	2	Montenegro	0	United Kingdom	10
Georgia	2	Netherlands	1	Uzbekistan	6
Germany	5	Norway	0		

Southeast Asia Region					
Total Cases = 874					
Bangladesh	42	Korea, DPR	31	Sri Lanka	2
Bhutan	62	Maldives	0	Thailand	48
India	479	Myanmar	102	Timor-Leste	0
Indonesia	29	Nepal	79		

Western Pacific Region					
Total Cases = 1,986					
Australia	1	Kiribati	1	Philippines	748
Brunei Darussalam	0	Korea, Rep.	92	Samoa	0
Cambodia	76	Lao, PDR	70	Singapore	1
China	421	Malaysia	10	Solomon Islands	0
China, Hong Kong SAR	28	Mongolia	10	Tokelau	0
China, Macao SAR	0	Nauru	0	Tonga	5
Cook Islands	2	New Caledonia	0	Tuvalu	0
Fiji	2	New Zealand	0	Vanuatu	1
French Polynesia	0	Niue	0	Vietnam	501
Japan	17	Papua New Guinea	0	Wallis and Futuna	0

Other³					
Total Cases = 34					
Unknown					
Total Cases = 28					

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 2014*, World Health Organization (http://www.who.int/tb/publications/global_report/en/).

Table 21. Tuberculosis Risk Factors¹ by Origin and Race/Ethnicity: United States, 2014

	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. (%)	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9403	10	(0.1)	49	(0.5)	700	(7.4)	255	(2.7)	53	(0.6)	49	(0.5)	1493	(15.9)	215	(2.3)	393	(4.2)	2080	(22.1)	4623	(49.2)	197	(2.1)
U.S.-born Total	3188	6	(0.2)	33	(1.0)	460	(14.4)	115	(3.6)	18	(0.6)	13	(0.4)	373	(11.7)	71	(2.2)	143	(4.5)	855	(26.8)	1311	(41.1)	74	(2.3)
American Indian/ Alaska Native	117	0	(0.0)	2	(1.7)	24	(20.5)	7	(6.0)	0	(0.0)	0	(0.0)	18	(15.4)	2	(1.7)	2	(1.7)	20	(17.1)	53	(45.3)	2	(1.7)
Asian	136	1	(0.7)	0	(0.0)	29	(21.3)	3	(2.2)	0	(0.0)	0	(0.0)	9	(6.6)	0	(0.0)	2	(1.5)	21	(15.4)	73	(53.7)	2	(1.5)
Black/African American	1183	1	(0.1)	13	(1.1)	151	(12.8)	59	(5.0)	5	(0.4)	2	(0.2)	144	(12.2)	38	(3.2)	46	(3.9)	334	(28.2)	486	(41.1)	36	(3.0)
Hispanic ³	660	2	(0.3)	3	(0.5)	129	(19.5)	10	(1.5)	3	(0.5)	2	(0.3)	75	(11.4)	6	(0.9)	14	(2.1)	161	(24.4)	281	(42.6)	8	(1.2)
Multiple races ⁴	32	0	(0.0)	0	(0.0)	5	(15.6)	1	(3.1)	0	(0.0)	0	(0.0)	6	(18.8)	0	(0.0)	1	(3.1)	4	(12.5)	11	(34.4)	5	(15.6)
Native Hawaiian/ Pacific Islander	84	0	(0.0)	1	(1.2)	30	(35.7)	2	(2.4)	0	(0.0)	0	(0.0)	22	(26.2)	5	(6.0)	5	(6.0)	10	(11.9)	22	(26.2)	1	(1.2)
White	969	2	(0.2)	14	(1.4)	92	(9.5)	33	(3.4)	10	(1.0)	9	(0.9)	99	(10.2)	18	(1.9)	73	(7.5)	303	(31.3)	383	(39.5)	19	(2.0)
Unknown	7	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(28.6)	0	(0.0)	2	(28.6)	2	(28.6)	1	(14.3)

U.S.-born

Table 21. (Con't) Tuberculosis Risk Factors¹ by Origin and Race/Ethnicity: United States, 2014

	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.	(%)
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Foreign-born Total	6215	4	(0.1)	16	(0.3)	240	(3.9)	140	(2.3)	35	(0.6)	36	(0.6)	1120	(18.0)	144	(2.3)	250	(4.0)	1225	(19.7)	3312	(53.3)	123	(2.0)
American Indian/ Alaska Native	1	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	(100.0)	0	(0.0)
Asian	2846	3	(0.1)	7	(0.2)	98	(3.4)	64	(2.2)	17	(0.6)	22	(0.8)	553	(19.4)	75	(2.6)	128	(4.5)	606	(21.3)	1450	(50.9)	62	(2.2)
Black/African American	826	1	(0.1)	5	(0.6)	41	(5.0)	32	(3.9)	1	(0.1)	1	(0.1)	63	(7.6)	9	(1.1)	28	(3.4)	125	(15.1)	537	(65.0)	12	(1.5)
Hispanic ³	2089	0	(0.0)	4	(0.2)	94	(4.5)	35	(1.7)	12	(0.6)	11	(0.5)	435	(20.8)	49	(2.3)	68	(3.3)	391	(18.7)	1094	(52.4)	29	(1.4)
Multiple races ⁴	147	0	(0.0)	0	(0.0)	4	(2.7)	1	(0.7)	1	(0.7)	1	(0.7)	23	(15.6)	3	(2.0)	12	(8.2)	38	(25.9)	73	(49.7)	3	(2.0)
Native Hawaiian/ Pacific Islander	8	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(37.5)	2	(25.0)	0	(0.0)	1	(12.5)	2	(25.0)	1	(12.5)
White	279	0	(0.0)	0	(0.0)	3	(1.1)	7	(2.5)	4	(1.4)	1	(0.4)	41	(14.7)	6	(2.2)	14	(5.0)	60	(21.5)	147	(52.7)	12	(4.3)
Unknown	19	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.3)	0	(0.0)	0	(0.0)	2	(10.5)	0	(0.0)	0	(0.0)	4	(21.1)	8	(42.1)	4	(21.1)

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 18 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, 2012–2014

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.	(%)
Total	16,531	78.4	4,544	21.6	2,600	57.2	22.8	908	20.0
Race and Ethnicity									
Hispanic or Latino	4,584	76.5	1,407	23.5	956	68	20.6	161	11.4
American Indian/Alaska Native	152	48.1	164	51.9	18	11	23.8	107	65.2
Asian	5,810	86.6	901	13.4	754	83.7	10	57	6.3
Black or African American	3,029	68.7	1,379	31.3	546	39.6	29	433	31.4
Native Hawaiian/Other Pacific Islander	82	55.4	66	44.6	28	42.4	10	15.2	15.2
White	2,527	81.2	587	18.8	272	46.3	30.8	134	22.8
Multiple Race	306	90.3	33	9.7	23	69.7	18.2	4	12.1
Unknown or Missing	41	85.4	7	14.6	3	42.9	28.6	2	28.6
Age Group (Years)									
0–4	75	37.0	128	63.0	54	42.2	34.4	30	23.4
5–14	110	60.4	72	39.6	38	52.8	20.8	19	26.4
15–24	1,593	71.5	634	28.5	381	60.1	20.7	122	19.2
25–44	5,173	78.8	1,390	21.2	770	55.4	25.7	263	18.9
45–64	4,979	74.9	1,672	25.1	893	53.4	22.4	405	24.2
≥65	4,599	87.7	648	12.3	464	71.6	17.8	69	10.6
Unknown	2	100.0	0	0.0	0	0	0	0	0
Origin of Birth									
U.S-born	4,637	64.5	2,551	35.5	1,044	40.9	29	767	30.1
Foreign-born	11,876	85.7	1,985	14.3	1,553	78.2	14.9	137	6.9
Unknown or Missing	18	69.2	8	30.8	3	37.5	12.5	4	50
Disease Site									
Pulmonary Only	11,734	76.4	3,622	23.6	2,019	55.7	23.3	759	21
Extrapulmonary	2,948	86.7	453	13.3	305	67.3	18.8	63	13.9
Both	1,836	79.8	465	20.2	274	58.9	22.8	85	18.3
Unknown	13	76.5	4	23.5	2	50	25	1	25
Sputum Smear									
Positive	7,704	75.8	2,459	24.2	1,360	55.3	24.4	499	20.3
Negative	6,680	80.5	1,620	19.5	981	60.6	19.1	329	20.3
Not Done	2,134	82.1	465	17.9	259	55.7	27.1	80	17.2
Unknown or Missing	13	100.0	0	0.0	0	0	0	0	0
Cavitary disease									
Yes	183	79.6	47	20.4	23	48.9	38.3	6	12.8
No	1,292	78.4	356	21.6	213	59.8	21.4	67	18.8
Unknown or Missing	361	85.3	62	14.7	38	61.3	19.4	12	19.4

Table 22. (Con't) Epidemiologic Characteristics of Cases in GENType Clusters¹ by Alert Levels Based on Log-likelihood Ratios (LLR)²: United States, 2012–2014

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	654	52.6	590	47.4	209	35.4	108	18.3	273	46.3
No	15,758	80.1	3,919	19.9	2,370	60.5	920	23.5	629	16
Unknown or Missing	119	77.3	35	22.7	21	60	8	22.9	6	17.1
Excess Alcohol Use Within the Past Year										
Yes	1,626	63.3	944	36.7	374	39.6	249	26.4	321	34
No	14,659	80.6	3,521	19.4	2,180	61.9	771	21.9	570	16.2
Unknown or Missing	246	75.7	79	24.3	46	58.2	16	20.3	17	21.5
Injecting Illicit Drug Use Within Past Year										
Yes	184	58.6	130	41.4	64	49.2	28	21.6	38	29.2
No	16,138	78.8	4,331	21.2	2,487	57.4	993	22.9	851	19.7
Unknown or Missing	209	71.6	83	28.4	49	59	15	18.1	19	22.9
Non-Injecting Illicit Drug Use Within Past Year										
Yes	903	56.2	703	43.8	277	39.4	174	24.8	252	35.8
No	15,401	80.4	3,761	19.6	2,279	60.6	847	22.5	635	16.9
Unknown or Missing	227	73.9	80	26.1	44	55	15	18.8	21	26.2
Resident of a Correction Facility at the Time of Diagnosis										
Yes	586	72.7	220	27.3	117	53.2	59	26.8	44	20
No	15,898	78.7	4,313	21.3	2,478	57.4	976	22.6	859	20
Unknown or Missing	47	81.0	11	19.0	5	45.5	1	9	5	45.5
HIV Status										
Positive	917	71.9	359	28.1	180	50.1	74	20.6	105	29.3
Negative	13,473	78.2	3,758	21.8	2,170	57.7	861	22.9	727	19.4
Refused	654	86.9	99	13.1	67	67.7	18	18.2	14	14.1
Not Offered	1,124	81.1	262	18.9	142	54.2	67	25.6	53	20.2
Unknown, Missing or Indeterminate	363	84.6	66	15.4	41	62.1	16	24.2	9	13.6
Multi-Drug Resistant TB										
Yes	225	85.2	39	14.8	37	94.9	1	2.6	1	2.6
No	14,912	78.4	4,390	21.6	2,512	57.2	1,006	22.9	872	19.9
Unknown or Missing	394	77.4	115	22.6	51	44.3	29	25.2	35	30.4

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 4,544 cases in 1,494 alerted clusters: 908 cases were in 93 (6.2%) high alert clusters; 1,036 cases were in 338 (22.6%) medium alert clusters, and 2,600 cases were in 1,063 (71.2%) 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, 2012–2014

Cluster Status	Cases	
	No.	(%)
Total	21,075	(100.0)
Unique ²	16,531	(78.4)
Clustered ³	4,544	(21.6)

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, 2012–2014

Cluster Size	Clusters		Cases ²	
	No.	(%) ³	No.	(%) ⁴
Total	1,494	(100.0)	4,544	(100.0)
2 case cluster	968	64.8	1936	42.6
3 case cluster	262	17.5	786	17.3
4 case cluster	113	7.6	452	9.9
5 case cluster	55	3.7	275	6.1
6 case cluster	24	1.6	144	3.2
7 case cluster	16	1.1	112	2.5
8 case cluster	11	0.7	88	1.9
9 case cluster	10	0.7	90	2.0
≥10 case cluster	35	2.3	661	14.5

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, 2012–2014

GENType	PCRType ²	Spoligotype	24-locus MIRU-VNTR		TB Cases with GENType ³		Reporting Areas ⁴ with GENType
					No.	(%)	No.
G00010	PCR00002	000000000003771	223325173533	444534423428	177	(0.8)	24
G00012	PCR00002	000000000003771	223325173533	445644423328	140	(0.7)	26
G05056	PCR00041	677777477413771	254326223432	14a943263217	115	(0.5)	22
G00016	PCR00041	677777477413771	254326223432	14a843263217	112	(0.5)	27
G00013	PCR00016	700036777760731	222325143223	434534412334	87	(0.4)	21
G10345	PCR00160	777776777760601	224325143323	244234423337	83	(0.4)	9
G00011	PCR00015	777776777760601	224325153323	444234423337	81	(0.4)	24
G00017	PCR00803	000000000003771	222325173533	445644423328	70	(0.3)	15
G00020	PCR01328	776377777760751	333325153222	351544223229	64	(0.3)	10
G00019	PCR00309	000000000003771	222325173543	445644423328	61	(0.3)	16

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 21,157 cases with GENTypes during 2012–2014.

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 GENTypes¹ Among Genotyped Tuberculosis Cases: United States Affiliates², 2012–2014

GENType	PCRTYPE ³	Spoligotype	24-locus MIRU-VNTR		TB Cases with GENType ⁴		Reporting Areas with GENType
					No.	(%)	No.
G00017	PCR00803	000000000003771	222325173533	445644423328	150	(22.8)	3
G01967	PCR03284	000000007720771	225413153223	133532423434	21	(3.2)	1
G01284	PCR00002	000000000003771	223325173533	44474442334A	20	(3.0)	3
G00318	PCR00306	000000000003771	221325173533	444644423348	13	(2.0)	2
G04701	PCR00117	677777477413771	254326223422	147843263217	13	(2.0)	2

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 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.

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 2012–2014 (n=630).

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Morbidity Tables

2012

Table 27. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2012

Type of Move	Total Cases	Completed Therapy	Adverse Event	Lost	Refused	Died	Other ⁵	Unknown
	No.	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Moved in state ¹	303	256 (84.5)	1 (0.3)	9 (3.0)	2 (0.7)	14 (4.6)	20 (6.6)	1 (0.3)
Moved out of state ²	287	220 (76.7)	1 (0.3)	18 (6.3)	3 (1.0)	6 (2.1)	38 (13.2)	1 (0.3)
Moved out of country ³	415	163 (39.3)	0 (0.0)	26 (6.3)	0 (0.0)	11 (2.7)	197 (47.5)	18 (4.3)
Did not move ⁴	8646	7752 (89.7)	29 (0.3)	68 (0.8)	51 (0.6)	566 (6.5)	46 (0.5)	134 (1.5)

¹ Includes patients who were alive at diagnosis, started on treatment, and moved in state.

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

³ Includes patients who were alive at diagnosis, started on treatment, and moved out of the country; transnational referrals were provided for 282 (68.0%) TB patients who moved out of the country.

⁴ Includes patients who were alive at diagnosis, started on treatment, and did not indicate having moved.

⁵ 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).

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, 2012

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	TB not a cause of death	Unknown/ Missing	Total died during therapy	Related to TB therapy/disease ³	Unrelated to TB therapy/disease	Unknown/ Missing
	No.	No. (%)	No.	No. (%)	No. (%)	No. (%)	No.	No. (%)	No. (%)	No. (%)
Total	819	278 (33.9)	219	69 (31.5)	100 (45.7)	50 (22.8)	600	209 (34.8)	286 (47.7)	105 (17.5)
0-4	1	1 (100.0)	1	1 (100.0)	0 (0.0)	0 (0.0)	0	0 ...	0 ...	0 ...
5-14	0	0 ...	0	0 ...	0 ...	0 ...	0	0 ...	0 ...	0 ...
15-24	2	2 (100.0)	1	1 (100.0)	0 (0.0)	0 (0.0)	1	1 (100.0)	0 (0.0)	0 (0.0)
25-44	65	27 (41.5)	21	7 (33.3)	8 (38.1)	6 (28.6)	44	20 (45.5)	19 (43.2)	5 (11.4)
45-64	252	89 (35.3)	65	24 (36.9)	25 (38.5)	16 (24.6)	187	65 (34.8)	86 (46.0)	36 (19.3)
65+	499	159 (31.9)	131	36 (27.5)	67 (51.1)	28 (21.4)	368	123 (33.4)	181 (49.2)	64 (17.4)

¹ Among patients alive at diagnosis. Excludes 13 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 Eight 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, 2012

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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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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, 2014

Table 30. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2014 and 2013

Reporting Area	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2014
	2014	2013	2014	2013	2014	2013	
United States	9,421	9,565	3.0	3.0	--	--	318,857,056
Alabama	133	108	2.7	2.2	14	21	4,849,377
Alaska	62	71	8.4	9.6	2	1	736,732
Arizona	193	184	2.9	2.8	12	15	6,731,484
Arkansas	93	72	3.1	2.4	9	18	2,966,369
California	2,145	2,166	5.5	5.6	3	3	38,802,500
Colorado	64	74	1.2	1.4	39	36	5,355,866
Connecticut	60	62	1.7	1.7	31	29	3,596,677
Delaware	22	19	2.4	2.1	22	26	935,614
District of Columbia ¹	32	37	4.9	5.7	--	--	658,893
Florida	595	651	3.0	3.3	10	8	19,893,297
Georgia	335	338	3.3	3.4	7	7	10,097,343
Hawaii	136	115	9.6	8.2	1	2	1,419,561
Idaho	11	11	0.7	0.7	47	48	1,634,464
Illinois	320	327	2.5	2.5	18	17	12,880,580
Indiana	108	94	1.6	1.4	32	34	6,596,855
Iowa	54	47	1.7	1.5	30	33	3,107,126
Kansas	40	36	1.4	1.2	36	39	2,904,021
Kentucky	80	59	1.8	1.3	29	37	4,413,457
Louisiana	121	139	2.6	3.0	17	10	4,649,676
Maine	14	15	1.1	1.1	42	42	1,330,089
Maryland	198	175	3.3	2.9	8	13	5,976,407
Massachusetts	199	201	3.0	3.0	11	12	6,745,408
Michigan	105	141	1.1	1.4	40	35	9,909,877
Minnesota	147	151	2.7	2.8	15	14	5,457,173
Mississippi	74	65	2.5	2.2	19	24	2,994,079
Missouri	79	104	1.3	1.7	38	30	6,063,589
Montana	6	6	0.6	0.6	48	49	1,023,579
Nebraska	38	21	2.0	1.1	25	43	1,881,503
Nevada	74	92	2.6	3.3	16	9	2,839,099
New Hampshire	11	15	0.8	1.1	44	41	1,326,813
New Jersey	308	320	3.4	3.6	6	6	8,938,175
New Mexico	50	50	2.4	2.4	20	19	2,085,572
New York	787	865	4.0	4.4	5	5	19,746,227
North Carolina	195	216	2.0	2.2	27	23	9,943,964
North Dakota	15	12	2.0	1.7	24	32	739,482
Ohio	156	148	1.3	1.3	37	38	11,594,163
Oklahoma	59	70	1.5	1.8	35	28	3,878,051
Oregon	77	73	1.9	1.9	28	27	3,970,239
Pennsylvania	209	214	1.6	1.7	34	31	12,787,209
Rhode Island	21	27	2.0	2.6	26	16	1,055,173
South Carolina	79	112	1.6	2.3	33	20	4,832,482
South Dakota	8	9	0.9	1.1	43	44	853,175
Tennessee	151	143	2.3	2.2	23	22	6,549,352
Texas	1,269	1,222	4.7	4.6	4	4	26,956,958
Utah	31	33	1.1	1.1	41	40	2,942,902
Vermont	2	5	0.3	0.8	50	46	626,562
Virginia	198	179	2.4	2.2	21	25	8,326,289
Washington	195	209	2.8	3.0	13	11	7,061,530
West Virginia	13	13	0.7	0.7	46	47	1,850,326
Wisconsin	47	49	0.8	0.9	45	45	5,757,564
Wyoming	2	...	0.3	...	49	50	584,153
American Samoa ^{1,2}	1	2	1.8	3.7	--	--	54,517
Fed. States of Micronesia ^{1,2}	165	128	156.1	120.6	--	--	105,681
Guam ^{1,2}	56	48	34.8	29.9	--	--	161,001
Marshall Islands ^{1,2}	151	153	212.7	219.4	--	--	70,983
N. Mariana Islands ^{1,2}	23	24	44.7	46.9	--	--	51,483
Puerto Rico ^{1,2}	44	49	1.2	1.3	--	--	3,620,897
Republic of Palau ^{1,2}	14	7	66.1	33.2	--	--	21,186
U.S. Virgin Islands ^{1,2}	...	2	...	1.9	--	--	104,170

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 2013 and 2014 rates for states, the District of Columbia, and Puerto Rico were obtained from U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 2014) (<http://www.census.gov/popest/data/national/totals/2014/index.html>) (accessed July 17, 2015) and totals for USAPI were obtained from the International Data Base (<http://www.census.gov/population/international/data/idb/informationGateway.php>) (accessed July 17, 2015).

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, 2014 and 2013

Reporting Area	2014		2013		2013–2014 % Change		Overall Rank by 2014 Rate
	No.	Rate	No.	Rate	No.	Rate	
Total	9,421	3.0	9,565	3.0	-1.5	-2.2	--
>=500 Cases in 2014							
California	2,145	5.5	2,166	5.6	-1.0	-1.9	3
Texas	1,269	4.7	1,222	4.6	3.8	2.1	4
New York ¹	787	4.0	865	4.4	-9.0	-9.2	5
Florida	595	3.0	651	3.3	-8.6	-9.9	10
100 - 499 cases in 2014							
Georgia	335	3.3	338	3.4	-0.9	-1.9	7
Illinois	320	2.5	327	2.5	-2.1	-2.1	18
New Jersey	308	3.4	320	3.6	-3.8	-4.0	6
Pennsylvania	209	1.6	214	1.7	-2.3	-2.4	34
Massachusetts	199	3.0	201	3.0	-1.0	-1.5	11
Virginia	198	2.4	179	2.2	10.6	9.9	21
Maryland	198	3.3	175	2.9	13.1	12.4	8
Washington	195	2.8	209	3.0	-6.7	-7.9	13
North Carolina	195	2.0	216	2.2	-9.7	-10.6	27
Arizona	193	2.9	184	2.8	4.9	3.4	12
Ohio	156	1.3	148	1.3	5.4	5.2	37
Tennessee	151	2.3	143	2.2	5.6	4.8	23
Minnesota	147	2.7	151	2.8	-2.6	-3.3	15
Hawaii	136	9.6	115	8.2	18.3	17.4	1
Alabama	133	2.7	108	2.2	23.1	22.8	14
Louisiana	121	2.6	139	3.0	-12.9	-13.4	17
Indiana	108	1.6	94	1.4	14.9	14.4	32
Michigan	105	1.1	141	1.4	-25.5	-25.6	40
< 100 cases in 2014							
Arkansas	93	3.1	72	2.4	29.2	28.9	9
Kentucky	80	1.8	59	1.3	35.6	35.2	29
South Carolina	79	1.6	112	2.3	-29.5	-30.3	33
Missouri	79	1.3	104	1.7	-24.0	-24.2	38
Oregon	77	1.9	73	1.9	5.5	4.4	28
Nevada	74	2.6	92	3.3	-19.6	-20.9	16
Mississippi	74	2.5	65	2.2	13.8	13.8	19
Colorado	64	1.2	74	1.4	-13.5	-14.9	39
Alaska	62	8.4	71	9.6	-12.7	-12.6	2
Connecticut	60	1.7	62	1.7	-3.2	-3.2	31
Oklahoma	59	1.5	70	1.8	-15.7	-16.3	35
Iowa	54	1.7	47	1.5	14.9	14.3	30
New Mexico	50	2.4	50	2.4	0.0	0.0	20
Wisconsin	47	0.8	49	0.9	-4.1	-4.3	45
Kansas	40	1.4	36	1.2	11.1	10.8	36
Nebraska	38	2.0	21	1.1	81.0	79.7	25
District of Columbia	32	4.9	37	5.7	-13.5	-14.8	--
Utah	31	1.1	33	1.1	-6.1	-7.4	41
Delaware	22	2.4	19	2.1	15.8	14.5	22
Rhode Island	21	2.0	27	2.6	-22.2	-22.4	26
North Dakota	15	2.0	12	1.7	25.0	22.3	24
Maine	14	1.1	15	1.1	-6.7	-6.7	42
West Virginia	13	0.7	13	0.7	0.0	0.3	46
New Hampshire	11	0.8	15	1.1	-26.7	-26.9	44
Idaho	11	0.7	11	0.7	0.0	-1.3	47
South Dakota	8	0.9	9	1.1	-11.1	-11.8	43
Montana	6	0.6	6	0.6	0.0	-0.8	48
Wyoming	2	0.3	0	0.0	.	.	49
Vermont	2	0.3	5	0.8	-60.0	-60.0	50

¹ Includes New York City.

Note: Denominators for computing 2013 and 2014 rates for states, the District of Columbia, and Puerto Rico were obtained from U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 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, 2014

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.	(%)	No.	(%)
United States	9,421	262	(2.8)	198	(2.1)	961	(10.2)	2,823	(30.0)	2,961	(31.4)	2,216	(23.5)	0	(0.0)	
Alabama	133	5	(3.8)	3	(2.3)	8	(6.0)	38	(28.6)	47	(35.3)	32	(24.1)	0	(0.0)	
Alaska	62	0	(0.0)	2	(3.2)	7	(11.3)	14	(22.6)	28	(45.2)	11	(17.7)	0	(0.0)	
Arizona	193	7	(3.6)	6	(3.1)	33	(17.1)	62	(32.1)	41	(21.2)	44	(22.8)	0	(0.0)	
Arkansas	93	5	(5.4)	9	(9.7)	9	(9.7)	22	(23.7)	26	(28.0)	22	(23.7)	0	(0.0)	
California	2,145	56	(2.6)	35	(1.6)	186	(8.7)	529	(24.7)	662	(30.9)	677	(31.6)	0	(0.0)	
Colorado	64	2	(3.1)	0	(0.0)	7	(10.9)	18	(28.1)	19	(29.7)	18	(28.1)	0	(0.0)	
Connecticut	60	1	(1.7)	1	(1.7)	13	(21.7)	19	(31.7)	13	(21.7)	13	(21.7)	0	(0.0)	
Delaware	22	1	(4.5)	1	(4.5)	3	(13.6)	6	(27.3)	4	(18.2)	7	(31.8)	0	(0.0)	
District of Columbia	32	0	(0.0)	0	(0.0)	2	(6.3)	16	(50.0)	9	(28.1)	5	(15.6)	0	(0.0)	
Florida	595	15	(2.5)	8	(1.3)	68	(11.4)	164	(27.6)	232	(39.0)	108	(18.2)	0	(0.0)	
Georgia	335	15	(4.5)	12	(3.6)	23	(6.9)	119	(35.5)	110	(32.8)	56	(16.7)	0	(0.0)	
Hawaii	136	0	(0.0)	2	(1.5)	13	(9.6)	29	(21.3)	47	(34.6)	45	(33.1)	0	(0.0)	
Idaho	11	2	(18.2)	1	(9.1)	0	(0.0)	3	(27.3)	4	(36.4)	1	(9.1)	0	(0.0)	
Illinois	320	9	(2.8)	5	(1.6)	33	(10.3)	88	(27.5)	112	(35.0)	73	(22.8)	0	(0.0)	
Indiana	108	2	(1.9)	1	(0.9)	13	(12.0)	41	(38.0)	28	(25.9)	23	(21.3)	0	(0.0)	
Iowa	54	4	(7.4)	0	(0.0)	3	(5.6)	23	(42.6)	15	(27.8)	9	(16.7)	0	(0.0)	
Kansas	40	1	(2.5)	2	(5.0)	9	(22.5)	8	(20.0)	11	(27.5)	9	(22.5)	0	(0.0)	
Kentucky	80	1	(1.3)	3	(3.8)	4	(5.0)	26	(32.5)	28	(35.0)	18	(22.5)	0	(0.0)	
Louisiana	121	1	(0.8)	4	(3.3)	10	(8.3)	29	(24.0)	60	(49.6)	17	(14.0)	0	(0.0)	
Maine	14	0	(0.0)	2	(14.3)	1	(7.1)	7	(50.0)	1	(7.1)	3	(21.4)	0	(0.0)	
Maryland	198	5	(2.5)	4	(2.0)	26	(13.1)	72	(36.4)	47	(23.7)	44	(22.2)	0	(0.0)	
Massachusetts	199	3	(1.5)	4	(2.0)	21	(10.6)	73	(36.7)	53	(26.6)	45	(22.6)	0	(0.0)	
Michigan	105	1	(1.0)	0	(0.0)	7	(6.7)	30	(28.6)	31	(29.5)	36	(34.3)	0	(0.0)	
Minnesota	147	8	(5.4)	11	(7.5)	27	(18.4)	43	(29.3)	35	(23.8)	23	(15.6)	0	(0.0)	
Mississippi	74	0	(0.0)	1	(1.4)	1	(1.4)	20	(27.0)	21	(28.4)	31	(41.9)	0	(0.0)	
Missouri	79	0	(0.0)	2	(2.5)	8	(10.1)	31	(39.2)	22	(27.8)	16	(20.3)	0	(0.0)	
Montana	6	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	0	(0.0)	
Nebraska	38	1	(2.6)	0	(0.0)	5	(13.2)	16	(42.1)	8	(21.1)	8	(21.1)	0	(0.0)	
Nevada	74	8	(10.8)	4	(5.4)	8	(10.8)	13	(17.6)	30	(40.5)	11	(14.9)	0	(0.0)	
New Hampshire	11	1	(9.1)	0	(0.0)	1	(9.1)	5	(45.5)	4	(36.4)	0	(0.0)	0	(0.0)	
New Jersey	308	7	(2.3)	6	(1.9)	35	(11.4)	126	(40.9)	81	(26.3)	53	(17.2)	0	(0.0)	

Table 32. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2014

Reporting Area	Under 5		5-14		15-24		25-44		45-64		≥65		Unknown or Missing	
	Total Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.
New Mexico	50	0	(0.0)	1	(2.0)	3	(6.0)	12	(24.0)	14	(28.0)	20	(40.0)	0
New York	787	10	(1.3)	11	(1.4)	92	(11.7)	254	(32.3)	235	(29.9)	185	(23.5)	0
North Carolina	195	4	(2.1)	7	(3.6)	16	(8.2)	70	(35.9)	60	(30.8)	38	(19.5)	0
North Dakota	15	0	(0.0)	1	(6.7)	3	(20.0)	5	(33.3)	4	(26.7)	2	(13.3)	0
Ohio	156	5	(3.2)	4	(2.6)	10	(6.4)	45	(28.8)	47	(30.1)	45	(28.8)	0
Oklahoma	59	9	(15.3)	2	(3.4)	5	(8.5)	13	(22.0)	22	(37.3)	8	(13.6)	0
Oregon	77	0	(0.0)	0	(0.0)	7	(9.1)	23	(29.9)	28	(36.4)	19	(24.7)	0
Pennsylvania	209	1	(0.5)	1	(0.5)	18	(8.6)	57	(27.3)	71	(34.0)	61	(29.2)	0
Rhode Island	21	0	(0.0)	0	(0.0)	4	(19.0)	7	(33.3)	6	(28.6)	4	(19.0)	0
South Carolina	79	2	(2.5)	0	(0.0)	9	(11.4)	22	(27.8)	26	(32.9)	20	(25.3)	0
South Dakota	8	1	(12.5)	0	(0.0)	3	(37.5)	2	(25.0)	1	(12.5)	1	(12.5)	0
Tennessee	151	7	(4.6)	6	(4.0)	19	(12.6)	41	(27.2)	53	(35.1)	25	(16.6)	0
Texas	1,269	49	(3.9)	25	(2.0)	139	(11.0)	414	(32.6)	429	(33.8)	213	(16.8)	0
Utah	31	2	(6.5)	0	(0.0)	2	(6.5)	11	(35.5)	9	(29.0)	7	(22.6)	0
Vermont	2	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)	0
Virginia	198	4	(2.0)	5	(2.5)	20	(10.1)	70	(35.4)	49	(24.7)	50	(25.3)	0
Washington	195	7	(3.6)	6	(3.1)	23	(11.8)	69	(35.4)	53	(27.2)	37	(19.0)	0
West Virginia	13	0	(0.0)	0	(0.0)	1	(7.7)	2	(15.4)	6	(46.2)	4	(30.8)	0
Wisconsin	47	0	(0.0)	0	(0.0)	3	(6.4)	15	(31.9)	17	(36.2)	12	(25.5)	0
Wyoming	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0
American Samoa ¹	1	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0
Fed. States of Micronesia ¹	165	18	(10.9)	20	(12.1)	43	(26.1)	51	(30.9)	27	(16.4)	6	(3.6)	0
Guam ¹	56	2	(3.6)	6	(10.7)	3	(5.4)	14	(25.0)	17	(30.4)	14	(25.0)	0
Marshall Islands ¹	151	14	(9.3)	18	(11.9)	36	(23.8)	45	(29.8)	31	(20.5)	7	(4.6)	0
N. Mariana Islands ¹	23	0	(0.0)	0	(0.0)	2	(8.7)	7	(30.4)	7	(30.4)	7	(30.4)	0
Puerto Rico ¹	44	0	(0.0)	0	(0.0)	2	(4.5)	7	(15.9)	22	(50.0)	13	(29.5)	0
Republic of Palau ¹	14	0	(0.0)	1	(7.1)	1	(7.1)	6	(42.9)	4	(28.6)	2	(14.3)	0
U.S. Virgin Islands ¹	...	...	...	...	...	...	...	...	...	...	...	...	...	...

¹Not included in U.S. totals.

Table 33. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2014

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.	(%)	No.	(%)
United States	9,421	2,758 (29.3)	118	(1.3)	2,985 (31.7)	2,010 (21.3)	92	(1.0)	1,249 (13.3)	181	(1.9)	28	(0.3)					
Alabama	133	11 (8.3)	1	(0.8)	10 (7.5)	73 (54.9)	1	(0.8)	36 (27.1)	1	(0.8)	0	(0.0)					
Alaska	62	0 (0.0)	48 (77.4)		12 (19.4)	0 (0.0)	1	(1.6)	1 (1.6)	0	(0.0)	0	(0.0)					
Arizona	193	110 (57.0)	13 (6.7)		28 (14.5)	23 (11.9)	0	(0.0)	19 (9.8)	0	(0.0)	0	(0.0)					
Arkansas	93	10 (10.8)	1 (1.1)		10 (10.8)	22 (23.7)	23 (24.7)	27 (29.0)	0	(0.0)	0	(0.0)						
California	2,145	770 (35.9)	3 (0.1)		975 (45.5)	116 (5.4)	11 (0.5)	162 (7.6)	98 (4.6)	10 (0.5)								
Colorado	64	16 (25.0)	0 (0.0)		23 (35.9)	16 (25.0)	2 (3.1)	7 (10.9)	0	(0.0)	0	(0.0)						
Connecticut	60	16 (26.7)	0 (0.0)		18 (30.0)	14 (23.3)	0	(0.0)	12 (20.0)	0	(0.0)	0	(0.0)					
Delaware	22	4 (18.2)	0 (0.0)		2 (9.1)	7 (31.8)	0	(0.0)	5 (22.7)	4 (18.2)	0	(0.0)						
District of Columbia	32	3 (9.4)	0 (0.0)		1 (3.1)	27 (84.4)	0	(0.0)	1 (3.1)	0	(0.0)	0	(0.0)					
Florida	595	195 (32.8)	0 (0.0)		80 (13.4)	207 (34.8)	0	(0.0)	113 (19.0)	0	(0.0)	0	(0.0)					
Georgia	335	58 (17.3)	0 (0.0)		73 (21.8)	158 (47.2)	0	(0.0)	44 (13.1)	2 (0.6)	0	(0.0)						
Hawaii	136	3 (2.2)	0 (0.0)		110 (80.9)	0 (0.0)	21 (15.4)	1 (0.7)	1 (0.7)	0	(0.0)							
Idaho	11	4 (36.4)	0 (0.0)		3 (27.3)	0 (0.0)	0	(0.0)	2 (18.2)	0	(0.0)	2 (18.2)						
Illinois	320	93 (29.1)	0 (0.0)		98 (30.6)	78 (24.4)	0	(0.0)	51 (15.9)	0	(0.0)	0	(0.0)					
Indiana	108	14 (13.0)	0 (0.0)		32 (29.6)	25 (23.1)	1 (0.9)	34 (31.5)	2 (1.9)	0	(0.0)							
Iowa	54	10 (18.5)	0 (0.0)		17 (31.5)	6 (11.1)	3 (5.6)	15 (27.8)	3 (5.6)	0	(0.0)							
Kansas	40	11 (27.5)	0 (0.0)		14 (35.0)	5 (12.5)	1 (2.5)	9 (22.5)	0	(0.0)	0	(0.0)						
Kentucky	80	16 (20.0)	0 (0.0)		14 (17.5)	15 (18.8)	1 (1.3)	33 (41.3)	1 (1.3)	0	(0.0)							
Louisiana	121	18 (14.9)	0 (0.0)		21 (17.4)	56 (46.3)	0	(0.0)	25 (20.7)	1 (0.8)	0	(0.0)						
Maine	14	1 (7.1)	0 (0.0)		4 (28.6)	7 (50.0)	0	(0.0)	2 (14.3)	0	(0.0)	0	(0.0)					
Maryland	198	39 (19.7)	0 (0.0)		60 (30.3)	80 (40.4)	0	(0.0)	18 (9.1)	1 (0.5)	0	(0.0)						
Massachusetts	199	33 (16.6)	0 (0.0)		87 (43.7)	47 (23.6)	0	(0.0)	28 (14.1)	4 (2.0)	0	(0.0)						
Michigan	105	14 (13.3)	0 (0.0)		39 (37.1)	33 (31.4)	0	(0.0)	9 (8.6)	5 (4.8)	5 (4.8)							
Minnesota	147	12 (8.2)	4 (2.7)		47 (32.0)	61 (41.5)	0	(0.0)	22 (15.0)	1 (0.7)	0	(0.0)						
Mississippi	74	8 (10.8)	0 (0.0)		6 (8.1)	42 (56.8)	0	(0.0)	18 (24.3)	0	(0.0)	0	(0.0)					
Missouri	79	6 (7.6)	0 (0.0)		25 (31.6)	29 (36.7)	1 (1.3)	18 (22.8)	0	(0.0)	0	(0.0)						
Montana	6	0 (0.0)	4 (66.7)		0 (0.0)	0 (0.0)	0	(0.0)	2 (33.3)	0	(0.0)	0	(0.0)					
Nebraska	38	14 (36.8)	0 (0.0)		6 (15.8)	11 (28.9)	0	(0.0)	3 (7.9)	3 (7.9)	1 (2.6)							
Nevada	74	16 (21.6)	0 (0.0)		36 (48.6)	11 (14.9)	0	(0.0)	8 (10.8)	3 (4.1)	0	(0.0)						
New Hampshire	11	0 (0.0)	0 (0.0)		7 (63.6)	1 (9.1)	0	(0.0)	3 (27.3)	0	(0.0)	0	(0.0)					
New Jersey	308	103 (33.4)	0 (0.0)		137 (44.5)	43 (14.0)	0	(0.0)	24 (7.8)	1 (0.3)	0	(0.0)						

Table 33. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2014

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	26	(52.0)	12	(24.0)	7	(14.0)	0	(0.0)	1	(2.0)	4	(8.0)	0	(0.0)	0	(0.0)
New York	787	195	(24.8)	0	(0.0)	336	(42.7)	150	(19.1)	0	(0.0)	71	(9.0)	25	(3.2)	10	(1.3)
North Carolina	195	38	(19.5)	5	(2.6)	26	(13.3)	84	(43.1)	0	(0.0)	38	(19.5)	4	(2.1)	0	(0.0)
North Dakota	15	1	(6.7)	4	(26.7)	2	(13.3)	2	(13.3)	0	(0.0)	5	(33.3)	1	(6.7)	0	(0.0)
Ohio	156	12	(7.7)	0	(0.0)	37	(23.7)	56	(35.9)	0	(0.0)	51	(32.7)	0	(0.0)	0	(0.0)
Oklahoma	59	10	(16.9)	8	(13.6)	16	(27.1)	3	(5.1)	2	(3.4)	14	(23.7)	6	(10.2)	0	(0.0)
Oregon	77	12	(15.6)	1	(1.3)	30	(39.0)	11	(14.3)	1	(1.3)	22	(28.6)	0	(0.0)	0	(0.0)
Pennsylvania	209	27	(12.9)	0	(0.0)	81	(38.8)	51	(24.4)	0	(0.0)	42	(20.1)	8	(3.8)	0	(0.0)
Rhode Island	21	11	(52.4)	0	(0.0)	2	(9.5)	6	(28.6)	0	(0.0)	2	(9.5)	0	(0.0)	0	(0.0)
South Carolina	79	10	(12.7)	0	(0.0)	7	(8.9)	50	(63.3)	0	(0.0)	12	(15.2)	0	(0.0)	0	(0.0)
South Dakota	8	2	(25.0)	3	(37.5)	0	(0.0)	2	(25.0)	0	(0.0)	1	(12.5)	0	(0.0)	0	(0.0)
Tennessee	151	24	(15.9)	0	(0.0)	24	(15.9)	66	(43.7)	0	(0.0)	37	(24.5)	0	(0.0)	0	(0.0)
Texas	1,269	696	(54.8)	3	(0.2)	227	(17.9)	222	(17.5)	2	(0.2)	114	(9.0)	5	(0.4)	0	(0.0)
Utah	31	13	(41.9)	1	(3.2)	8	(25.8)	4	(12.9)	0	(0.0)	5	(16.1)	0	(0.0)	0	(0.0)
Vermont	2	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	198	33	(16.7)	0	(0.0)	80	(40.4)	49	(24.7)	0	(0.0)	36	(18.2)	0	(0.0)	0	(0.0)
Washington	195	29	(14.9)	5	(2.6)	86	(44.1)	32	(16.4)	19	(9.7)	23	(11.8)	1	(0.5)	0	(0.0)
West Virginia	13	1	(7.7)	0	(0.0)	0	(0.0)	1	(7.7)	1	(7.7)	10	(76.9)	0	(0.0)	0	(0.0)
Wisconsin	47	10	(21.3)	1	(2.1)	21	(44.7)	6	(12.8)	0	(0.0)	9	(19.1)	0	(0.0)	0	(0.0)
Wyoming	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)
American Samoa ³	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ³	165	0	(0.0)	0	(0.0)	1	(0.6)	0	(0.0)	163	(98.8)	0	(0.0)	1	(0.6)	0	(0.0)
Guam ³	56	1	(1.8)	0	(0.0)	24	(42.9)	0	(0.0)	25	(44.6)	0	(0.0)	0	(0.0)	6	(10.7)
Marshall Islands ³	151	1	(0.7)	0	(0.0)	3	(2.0)	0	(0.0)	146	(96.7)	0	(0.0)	0	(0.0)	1	(0.7)
N. Mariana Islands ³	23	0	(0.0)	0	(0.0)	12	(52.2)	0	(0.0)	10	(43.5)	0	(0.0)	0	(0.0)	1	(4.3)
Puerto Rico ³	44	43	(97.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.3)	0	(0.0)	0	(0.0)	0	(0.0)
Republic of Palau ³	14	0	(0.0)	0	(0.0)	6	(42.9)	0	(0.0)	6	(42.9)	0	(0.0)	0	(0.0)	2	(14.3)
U.S. Virgin Islands ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	U.S.-born Persons		Foreign-born Persons ¹		Unknown Origin	
		No.	(%)	No.	(%)	No.	(%)
United States	9,421	3,188	(33.8)	6,215	(66.0)	18	(0.2)
Alabama	133	111	(83.5)	22	(16.5)	0	(0.0)
Alaska	62	50	(80.6)	12	(19.4)	0	(0.0)
Arizona	193	47	(24.4)	146	(75.6)	0	(0.0)
Arkansas	93	77	(82.8)	16	(17.2)	0	(0.0)
California	2,145	468	(21.8)	1,661	(77.4)	16	(0.7)
Colorado	64	11	(17.2)	53	(82.8)	0	(0.0)
Connecticut	60	14	(23.3)	46	(76.7)	0	(0.0)
Delaware	22	7	(31.8)	15	(68.2)	0	(0.0)
District of Columbia	32	15	(46.9)	17	(53.1)	0	(0.0)
Florida	595	237	(39.8)	358	(60.2)	0	(0.0)
Georgia	335	184	(54.9)	151	(45.1)	0	(0.0)
Hawaii	136	29	(21.3)	107	(78.7)	0	(0.0)
Idaho	11	3	(27.3)	8	(72.7)	0	(0.0)
Illinois	320	104	(32.5)	216	(67.5)	0	(0.0)
Indiana	108	49	(45.4)	59	(54.6)	0	(0.0)
Iowa	54	19	(35.2)	35	(64.8)	0	(0.0)
Kansas	40	12	(30.0)	28	(70.0)	0	(0.0)
Kentucky	80	40	(50.0)	40	(50.0)	0	(0.0)
Louisiana	121	87	(71.9)	34	(28.1)	0	(0.0)
Maine	14	1	(7.1)	13	(92.9)	0	(0.0)
Maryland	198	38	(19.2)	160	(80.8)	0	(0.0)
Massachusetts	199	33	(16.6)	166	(83.4)	0	(0.0)
Michigan	105	42	(40.0)	62	(59.0)	1	(1.0)
Minnesota	147	39	(26.5)	108	(73.5)	0	(0.0)
Mississippi	74	63	(85.1)	11	(14.9)	0	(0.0)
Missouri	79	36	(45.6)	43	(54.4)	0	(0.0)
Montana	6	6	(100.0)	0	(0.0)	0	(0.0)
Nebraska	38	7	(18.4)	31	(81.6)	0	(0.0)
Nevada	74	24	(32.4)	50	(67.6)	0	(0.0)
New Hampshire	11	3	(27.3)	8	(72.7)	0	(0.0)
New Jersey	308	56	(18.2)	252	(81.8)	0	(0.0)
New Mexico	50	21	(42.0)	29	(58.0)	0	(0.0)
New York	787	134	(17.0)	652	(82.8)	1	(0.1)
North Carolina	195	111	(56.9)	84	(43.1)	0	(0.0)
North Dakota	15	8	(53.3)	7	(46.7)	0	(0.0)
Ohio	156	71	(45.5)	85	(54.5)	0	(0.0)
Oklahoma	59	31	(52.5)	28	(47.5)	0	(0.0)
Oregon	77	26	(33.8)	51	(66.2)	0	(0.0)
Pennsylvania	209	76	(36.4)	133	(63.6)	0	(0.0)
Rhode Island	21	5	(23.8)	16	(76.2)	0	(0.0)
South Carolina	79	62	(78.5)	17	(21.5)	0	(0.0)
South Dakota	8	4	(50.0)	4	(50.0)	0	(0.0)
Tennessee	151	85	(56.3)	66	(43.7)	0	(0.0)
Texas	1,269	505	(39.8)	764	(60.2)	0	(0.0)
Utah	31	4	(12.9)	27	(87.1)	0	(0.0)
Vermont	2	1	(50.0)	1	(50.0)	0	(0.0)
Virginia	198	51	(25.8)	147	(74.2)	0	(0.0)
Washington	195	55	(28.2)	140	(71.8)	0	(0.0)
West Virginia	13	10	(76.9)	3	(23.1)	0	(0.0)
Wisconsin	47	14	(29.8)	33	(70.2)	0	(0.0)
Wyoming	2	2	(100.0)	0	(0.0)	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, 2014

Reporting Area		Total Cases		Country of Origin														All Others ²		Unknown or Missing	
				Mexico		Philippines		India		Vietnam		China		Haiti		Guatemala					
				No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)					No.	(%)
United States				6,215	1,277 (20.5)	748	(12.0)	501	(8.1)	479	(7.7)	421	(6.8)	180	(2.9)	165	(2.7)	2,433	(39.1)	11	(0.2)
Alabama	22	5	(22.7)	2	(9.1)	3	(13.6)	4	(18.2)	1	(4.5)	3	(13.6)	0	(0.0)	0	(0.0)	4	(18.2)	0	(0.0)
Alaska	12	0	(0.0)	6	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(50.0)	0	(0.0)
Arizona	146	77	(52.7)	8	(5.5)	3	(2.1)	7	(4.8)	2	(1.4)	10	(6.8)	0	(0.0)	0	(0.0)	39	(26.7)	0	(0.0)
Arkansas	16	6	(37.5)	0	(0.0)	3	(18.8)	1	(6.3)	1	(6.3)	1	(6.3)	0	(0.0)	0	(0.0)	4	(25.0)	0	(0.0)
California	1,661	448	(27.0)	352	(21.2)	205	(12.3)	96	(5.8)	144	(8.7)	36	(2.2)	4	(0.2)	4	(0.2)	376	(22.6)	0	(0.0)
Colorado	53	14	(26.4)	3	(5.7)	3	(5.7)	4	(7.5)	2	(3.8)	0	(0.0)	0	(0.0)	0	(0.0)	27	(50.9)	0	(0.0)
Connecticut	46	3	(6.5)	2	(4.3)	1	(2.2)	5	(10.9)	5	(10.9)	4	(8.7)	6	(13.0)	20	(43.5)	0	(0.0)	0	(0.0)
Delaware	15	3	(20.0)	0	(0.0)	0	(0.0)	5	(33.3)	0	(0.0)	0	(0.0)	1	(6.7)	6	(40.0)	0	(0.0)	0	(0.0)
District of Columbia	17	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.9)	0	(0.0)	16	(94.1)	0	(0.0)	0	(0.0)
Florida	358	37	(10.3)	25	(7.0)	23	(6.4)	12	(3.4)	6	(1.7)	22	(6.1)	81	(22.6)	152	(42.5)	0	(0.0)	0	(0.0)
Georgia	151	28	(18.5)	3	(2.0)	24	(15.9)	15	(9.9)	5	(3.3)	6	(4.0)	2	(1.3)	68	(45.0)	0	(0.0)	0	(0.0)
Hawaii	107	3	(2.8)	80	(74.8)	9	(8.4)	0	(0.0)	6	(5.6)	0	(0.0)	0	(0.0)	9	(8.4)	0	(0.0)	0	(0.0)
Idaho	8	2	(25.0)	0	(0.0)	0	(0.0)	2	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(50.0)	0	(0.0)	0	(0.0)
Illinois	216	65	(30.1)	22	(10.2)	2	(0.9)	27	(12.5)	14	(6.5)	4	(1.9)	0	(0.0)	82	(38.0)	0	(0.0)	0	(0.0)
Indiana	59	9	(15.3)	5	(8.5)	2	(3.4)	9	(15.3)	1	(1.7)	1	(1.7)	0	(0.0)	32	(54.2)	0	(0.0)	0	(0.0)
Iowa	35	5	(14.3)	3	(8.6)	2	(5.7)	3	(8.6)	3	(8.6)	2	(5.7)	0	(0.0)	17	(48.6)	0	(0.0)	0	(0.0)
Kansas	28	9	(32.1)	2	(7.1)	3	(10.7)	4	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	10	(35.7)	0	(0.0)	0	(0.0)
Kentucky	40	8	(20.0)	2	(5.0)	1	(2.5)	0	(0.0)	0	(0.0)	4	(10.0)	0	(0.0)	25	(62.5)	0	(0.0)	0	(0.0)
Louisiana	34	5	(14.7)	2	(5.9)	9	(26.5)	4	(11.8)	2	(5.9)	0	(0.0)	0	(0.0)	12	(35.3)	0	(0.0)	0	(0.0)
Maine	13	0	(0.0)	0	(0.0)	1	(7.7)	0	(0.0)	1	(7.7)	0	(0.0)	0	(0.0)	11	(84.6)	0	(0.0)	0	(0.0)
Maryland	160	3	(1.9)	19	(11.9)	4	(2.5)	8	(5.0)	4	(2.5)	7	(4.4)	3	(1.9)	111	(69.4)	1	(0.6)	0	(0.0)
Massachusetts	166	1	(0.6)	2	(1.2)	19	(11.4)	12	(7.2)	23	(13.9)	2	(1.2)	15	(9.0)	92	(55.4)	0	(0.0)	0	(0.0)
Michigan	62	10	(16.1)	6	(9.7)	4	(6.5)	11	(17.7)	8	(12.9)	0	(0.0)	0	(0.0)	23	(37.1)	0	(0.0)	0	(0.0)
Minnesota	108	3	(2.8)	6	(5.6)	7	(6.5)	8	(7.4)	4	(3.7)	0	(0.0)	0	(0.0)	80	(74.1)	0	(0.0)	0	(0.0)
Mississippi	11	2	(18.2)	0	(0.0)	3	(27.3)	3	(27.3)	0	(0.0)	2	(18.2)	0	(0.0)	1	(9.1)	0	(0.0)	0	(0.0)
Missouri	43	4	(9.3)	5	(11.6)	8	(18.6)	6	(14.0)	3	(7.0)	2	(4.7)	0	(0.0)	15	(34.9)	0	(0.0)	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)	0	(0.0)

Table 35. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Top 7 Countries of Birth: Reporting Areas, 2014

Reporting Area	Total Cases	Country of Origin																Unknown or Missing	
		Mexico		Philippines		India		Vietnam		China		Haiti		Guatemala		All Others ²			
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Nebraska	31	9	(29.0)	1	(3.2)	4	(12.9)	0	(0.0)	0	(0.0)	2	(6.5)	0	(0.0)	15	(48.4)	0	(0.0)
Nevada	50	4	(8.0)	23	(46.0)	2	(4.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	21	(42.0)	0	(0.0)
New Hampshire	8	0	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(75.0)	0	(0.0)
New Jersey	252	16	(6.3)	35	(13.9)	7	(2.8)	58	(23.0)	7	(2.8)	6	(2.4)	15	(6.0)	108	(42.9)	0	(0.0)
New Mexico	29	18	(62.1)	2	(6.9)	1	(3.4)	2	(6.9)	0	(0.0)	2	(6.9)	0	(0.0)	4	(13.8)	0	(0.0)
New York	652	37	(5.7)	37	(5.7)	5	(0.8)	50	(7.7)	131	(20.1)	9	(1.4)	30	(4.6)	352	(54.0)	1	(0.2)
North Carolina	84	20	(23.8)	5	(6.0)	4	(4.8)	4	(4.8)	0	(0.0)	0	(0.0)	2	(2.4)	41	(48.8)	8	(9.5)
North Dakota	7	1	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(85.7)	0	(0.0)
Ohio	85	3	(3.5)	7	(8.2)	1	(1.2)	6	(7.1)	4	(4.7)	2	(2.4)	1	(1.2)	61	(71.8)	0	(0.0)
Oklahoma	28	7	(25.0)	0	(0.0)	2	(7.1)	1	(3.6)	0	(0.0)	0	(0.0)	1	(3.6)	17	(60.7)	0	(0.0)
Oregon	51	7	(13.7)	6	(11.8)	6	(11.8)	6	(11.8)	3	(5.9)	0	(0.0)	0	(0.0)	23	(45.1)	0	(0.0)
Pennsylvania	133	5	(3.8)	8	(6.0)	24	(18.0)	13	(9.8)	8	(6.0)	3	(2.3)	2	(1.5)	70	(52.6)	0	(0.0)
Rhode Island	16	1	(6.3)	0	(0.0)	0	(0.0)	1	(6.3)	1	(6.3)	0	(0.0)	0	(0.0)	13	(81.3)	0	(0.0)
South Carolina	17	4	(23.5)	1	(5.9)	0	(0.0)	4	(23.5)	0	(0.0)	3	(17.6)	0	(0.0)	5	(29.4)	0	(0.0)
South Dakota	4	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)
Tennessee	66	10	(15.2)	3	(4.5)	1	(1.5)	7	(10.6)	2	(3.0)	8	(12.1)	1	(1.5)	34	(51.5)	0	(0.0)
Texas	764	342	(44.8)	31	(4.1)	66	(8.6)	43	(5.6)	15	(2.0)	35	(4.6)	0	(0.0)	232	(30.4)	0	(0.0)
Utah	27	9	(33.3)	2	(7.4)	3	(11.1)	1	(3.7)	0	(0.0)	0	(0.0)	0	(0.0)	12	(44.4)	0	(0.0)
Vermont	1	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)
Virginia	147	5	(3.4)	9	(6.1)	16	(10.9)	17	(11.6)	3	(2.0)	1	(0.7)	1	(0.7)	95	(64.6)	0	(0.0)
Washington	140	17	(12.1)	20	(14.3)	20	(14.3)	13	(9.3)	10	(7.1)	2	(1.4)	0	(0.0)	57	(40.7)	1	(0.7)
West Virginia	3	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)
Wisconsin	33	9	(27.3)	2	(6.1)	0	(0.0)	5	(15.2)	2	(6.1)	0	(0.0)	0	(0.0)	15	(45.5)	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)	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 134 countries.

Note: See Surveillance Slide #19.

Table 36. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Immigration Status at First Entry: Reporting Areas, 2014

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		Not Applicable ³	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	6215	30	(0.5)	113	(1.8)	172	(2.8)	1486	(23.9)	402	(6.5)	152	(2.4)	109	(1.8)	1510	(24.3)	1693	(27.2)	548	(8.8)
Alabama	22	0	(0.0)	1	(4.5)	5	(22.7)	3	(13.6)	2	(9.1)	1	(4.5)	0	(0.0)	3	(13.6)	6	(27.3)	1	(4.5)
Alaska	12	0	(0.0)	0	(0.0)	1	(8.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	11	(91.7)	0	(0.0)
Arizona	146	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	146	(100.0)	0	(0.0)
Arkansas	16	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)	3	(18.8)	0	(0.0)	10	(62.5)	0	(0.0)	2	(12.5)
California	1661	9	(0.5)	35	(2.1)	76	(4.6)	684	(41.2)	68	(4.1)	39	(2.3)	44	(2.6)	389	(23.4)	315	(19.0)	2	(0.1)
Colorado	53	1	(1.9)	3	(5.7)	1	(1.9)	27	(50.9)	8	(15.1)	1	(1.9)	1	(1.9)	8	(15.1)	3	(5.7)	0	(0.0)
Connecticut	46	0	(0.0)	2	(4.3)	7	(15.2)	15	(32.6)	2	(4.3)	5	(10.9)	4	(8.7)	11	(23.9)	0	(0.0)	0	(0.0)
Delaware	15	0	(0.0)	1	(6.7)	3	(20.0)	2	(13.3)	0	(0.0)	1	(6.7)	0	(0.0)	3	(20.0)	4	(26.7)	1	(6.7)
District of Columbia	17	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	16	(94.1)	1	(5.9)
Florida	358	4	(1.1)	17	(4.7)	3	(0.8)	105	(29.3)	5	(1.4)	12	(3.4)	1	(0.3)	65	(18.2)	146	(40.8)	0	(0.0)
Georgia	151	1	(0.7)	7	(4.6)	11	(7.3)	37	(24.5)	23	(15.2)	5	(3.3)	6	(4.0)	46	(30.5)	15	(9.9)	0	(0.0)
Hawaii	107	0	(0.0)	0	(0.0)	0	(0.0)	46	(43.0)	2	(1.9)	3	(2.8)	1	(0.9)	2	(1.9)	29	(27.1)	24	(22.4)
Idaho	8	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	3	(37.5)	0	(0.0)	1	(12.5)	1	(12.5)	2	(25.0)	0	(0.0)
Illinois	216	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	216	(100.0)	0	(0.0)
Indiana	59	0	(0.0)	0	(0.0)	0	(0.0)	18	(30.5)	14	(23.7)	2	(3.4)	0	(0.0)	4	(6.8)	21	(35.6)	0	(0.0)
Iowa	35	0	(0.0)	2	(5.7)	3	(8.6)	6	(17.1)	12	(34.3)	6	(17.1)	1	(2.9)	5	(14.3)	0	(0.0)	0	(0.0)
Kansas	28	0	(0.0)	1	(3.6)	3	(10.7)	8	(28.6)	5	(17.9)	5	(17.9)	0	(0.0)	6	(21.4)	0	(0.0)	0	(0.0)
Kentucky	40	0	(0.0)	1	(2.5)	1	(2.5)	3	(7.5)	12	(30.0)	2	(5.0)	2	(5.0)	16	(40.0)	0	(0.0)	3	(7.5)
Louisiana	34	0	(0.0)	1	(2.9)	0	(0.0)	9	(26.5)	1	(2.9)	1	(2.9)	0	(0.0)	6	(17.6)	15	(44.1)	1	(2.9)
Maine	13	3	(23.1)	0	(0.0)	0	(0.0)	1	(7.7)	2	(15.4)	0	(0.0)	1	(7.7)	4	(30.8)	2	(15.4)	0	(0.0)
Maryland	160	3	(1.9)	4	(2.5)	12	(7.5)	67	(41.9)	10	(6.3)	4	(2.5)	7	(4.4)	39	(24.4)	14	(8.8)	0	(0.0)
Massachusetts	166	2	(1.2)	0	(0.0)	3	(1.8)	6	(3.6)	4	(2.4)	4	(2.4)	1	(0.6)	3	(1.8)	143	(86.1)	0	(0.0)
Michigan	62	0	(0.0)	4	(6.5)	1	(1.6)	29	(46.8)	2	(3.2)	3	(4.8)	1	(1.6)	14	(22.6)	7	(11.3)	1	(1.6)
Minnesota	108	3	(2.8)	5	(4.6)	10	(9.3)	22	(20.4)	47	(43.5)	3	(2.8)	6	(5.6)	3	(2.8)	9	(8.3)	0	(0.0)
Mississippi	11	1	(9.1)	0	(0.0)	0	(0.0)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	9	(81.8)	0	(0.0)
Missouri	43	0	(0.0)	0	(0.0)	4	(9.3)	7	(16.3)	4	(9.3)	5	(11.6)	0	(0.0)	1	(2.3)	18	(41.9)	4	(9.3)
Montana	0	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
Nebraska	31	0	(0.0)	0	(0.0)	1	(3.2)	5	(16.1)	9	(29.0)	0	(0.0)	0	(0.0)	1	(3.2)	14	(45.2)	1	(3.2)

Table 36. (Con't) Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Immigration Status at First Entry: Reporting Areas, 2014

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		Not Applicable ³	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Nevada	50	0	(0.0)	0	(0.0)	0	(0.0)	35	(70.0)	7	(14.0)	0	(0.0)	1	(2.0)	1	(2.0)	6	(12.0)	0	(0.0)
New Hampshire	8	0	(0.0)	1	(12.5)	0	(0.0)	1	(12.5)	4	(50.0)	0	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)	0	(0.0)
New Jersey	252	0	(0.0)	5	(2.0)	1	(0.4)	149	(59.1)	1	(0.4)	8	(3.2)	7	(2.8)	54	(21.4)	25	(9.9)	2	(0.8)
New Mexico	29	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(6.9)	0	(0.0)	0	(0.0)	16	(55.2)	6	(20.7)	5	(17.2)
New York State ⁴	161	0	(0.0)	1	(0.6)	2	(1.2)	27	(16.8)	23	(14.3)	13	(8.1)	4	(2.5)	90	(55.9)	0	(0.0)	1	(0.6)
New York City	491	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)	491	(100.0)
North Carolina	84	1	(1.2)	3	(3.6)	2	(2.4)	5	(6.0)	9	(10.7)	2	(2.4)	0	(0.0)	27	(32.1)	35	(41.7)	0	(0.0)
North Dakota	7	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)	4	(57.1)	0	(0.0)	0	(0.0)	2	(28.6)	0	(0.0)	0	(0.0)
Ohio	85	0	(0.0)	2	(2.4)	3	(3.5)	8	(9.4)	7	(8.2)	3	(3.5)	0	(0.0)	4	(4.7)	58	(68.2)	0	(0.0)
Oklahoma	28	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	9	(32.1)	3	(10.7)	0	(0.0)	3	(10.7)	13	(46.4)	0	(0.0)
Oregon	51	0	(0.0)	0	(0.0)	3	(5.9)	22	(43.1)	6	(11.8)	3	(5.9)	4	(7.8)	1	(2.0)	12	(23.5)	0	(0.0)
Pennsylvania	133	0	(0.0)	5	(3.8)	1	(0.8)	67	(50.4)	16	(12.0)	2	(1.5)	7	(5.3)	30	(22.6)	5	(3.8)	0	(0.0)
Rhode Island	16	0	(0.0)	0	(0.0)	0	(0.0)	4	(25.0)	0	(0.0)	1	(6.3)	0	(0.0)	2	(12.5)	9	(56.3)	0	(0.0)
South Carolina	17	0	(0.0)	1	(5.9)	1	(5.9)	0	(0.0)	0	(0.0)	1	(5.9)	1	(5.9)	0	(0.0)	13	(76.5)	0	(0.0)
South Dakota	4	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)
Tennessee	66	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.5)	0	(0.0)	0	(0.0)	2	(3.0)	60	(90.9)	3	(4.5)
Texas	764	1	(0.1)	11	(1.4)	13	(1.7)	46	(6.0)	58	(7.6)	6	(0.8)	7	(0.9)	620	(81.2)	0	(0.0)	2	(0.3)
Utah	27	1	(3.7)	0	(0.0)	0	(0.0)	10	(37.0)	7	(25.9)	3	(11.1)	1	(3.7)	5	(18.5)	0	(0.0)	0	(0.0)
Vermont	1	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)
Virginia	147	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	146	(99.3)	1	(0.7)
Washington	140	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	139	(99.3)	1	(0.7)
West Virginia	3	0	(0.0)	0	(0.0)	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)
Wisconsin	33	0	(0.0)	0	(0.0)	0	(0.0)	8	(24.2)	11	(33.3)	1	(3.0)	0	(0.0)	10	(30.3)	2	(6.1)	1	(3.0)
Wyoming	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 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 (ie. undocumented).

³ Immigration status is not applicable to persons who are U.S.-born (or born abroad to a parent who was a U.S. citizen) or persons who were born in one of the U.S. territories, U.S. island areas, or U.S. outlying areas.

⁴ Excludes New York City.

Note: 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, 2014

Reporting Area	Total Cases	<1 Year		1–4		5–9		10–19		≥20		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	6,215	995	(16.0)	919	(14.8)	848	(13.6)	1,168	(18.8)	1,705	(27.4)	580	(9.3)
Alabama	22	3	(13.6)	5	(22.7)	5	(22.7)	5	(22.7)	4	(18.2)	0	(0.0)
Alaska	12	1	(8.3)	0	(0.0)	2	(16.7)	2	(16.7)	6	(50.0)	1	(8.3)
Arizona	146	57	(39.0)	15	(10.3)	12	(8.2)	17	(11.6)	38	(26.0)	7	(4.8)
Arkansas	16	2	(12.5)	2	(12.5)	2	(12.5)	7	(43.8)	3	(18.8)	0	(0.0)
California	1,661	164	(9.9)	147	(8.9)	157	(9.5)	302	(18.2)	600	(36.1)	291	(17.5)
Colorado	53	11	(20.8)	4	(7.5)	5	(9.4)	7	(13.2)	16	(30.2)	10	(18.9)
Connecticut	46	9	(19.6)	13	(28.3)	9	(19.6)	6	(13.0)	9	(19.6)	0	(0.0)
Delaware	15	4	(26.7)	3	(20.0)	3	(20.0)	2	(13.3)	3	(20.0)	0	(0.0)
District of Columbia	17	3	(17.6)	6	(35.3)	3	(17.6)	4	(23.5)	1	(5.9)	0	(0.0)
Florida	358	56	(15.6)	62	(17.3)	70	(19.6)	69	(19.3)	84	(23.5)	17	(4.7)
Georgia	151	20	(13.2)	22	(14.6)	27	(17.9)	39	(25.8)	40	(26.5)	3	(2.0)
Hawaii	107	15	(14.0)	8	(7.5)	12	(11.2)	14	(13.1)	40	(37.4)	18	(16.8)
Idaho	8	3	(37.5)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	3	(37.5)
Illinois	216	22	(10.2)	32	(14.8)	30	(13.9)	54	(25.0)	73	(33.8)	5	(2.3)
Indiana	59	8	(13.6)	11	(18.6)	10	(16.9)	9	(15.3)	4	(6.8)	17	(28.8)
Iowa	35	1	(2.9)	2	(5.7)	0	(0.0)	1	(2.9)	0	(0.0)	31	(88.6)
Kansas	28	3	(10.7)	7	(25.0)	8	(28.6)	4	(14.3)	6	(21.4)	0	(0.0)
Kentucky	40	16	(40.0)	7	(17.5)	7	(17.5)	7	(17.5)	3	(7.5)	0	(0.0)
Louisiana	34	5	(14.7)	5	(14.7)	7	(20.6)	9	(26.5)	8	(23.5)	0	(0.0)
Maine	13	4	(30.8)	5	(38.5)	1	(7.7)	0	(0.0)	3	(23.1)	0	(0.0)
Maryland	160	40	(25.0)	33	(20.6)	24	(15.0)	36	(22.5)	25	(15.6)	2	(1.3)
Massachusetts	166	28	(16.9)	42	(25.3)	23	(13.9)	22	(13.3)	46	(27.7)	5	(3.0)
Michigan	62	9	(14.5)	5	(8.1)	5	(8.1)	12	(19.4)	19	(30.6)	12	(19.4)
Minnesota	108	25	(23.1)	24	(22.2)	15	(13.9)	22	(20.4)	22	(20.4)	0	(0.0)
Mississippi	11	0	(0.0)	2	(18.2)	1	(9.1)	6	(54.5)	1	(9.1)	1	(9.1)
Missouri	43	12	(27.9)	11	(25.6)	4	(9.3)	4	(9.3)	11	(25.6)	1	(2.3)
Montana	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	31	5	(16.1)	5	(16.1)	7	(22.6)	4	(12.9)	4	(12.9)	6	(19.4)
Nevada	50	11	(22.0)	8	(16.0)	9	(18.0)	6	(12.0)	16	(32.0)	0	(0.0)
New Hampshire	8	2	(25.0)	4	(50.0)	0	(0.0)	1	(12.5)	1	(12.5)	0	(0.0)
New Jersey	252	32	(12.7)	39	(15.5)	32	(12.7)	59	(23.4)	50	(19.8)	40	(15.9)
New Mexico	29	13	(44.8)	3	(10.3)	1	(3.4)	5	(17.2)	5	(17.2)	2	(6.9)
New York	652	100	(15.3)	112	(17.2)	109	(16.7)	123	(18.9)	164	(25.2)	44	(6.7)
North Carolina	84	11	(13.1)	13	(15.5)	11	(13.1)	7	(8.3)	8	(9.5)	34	(40.5)
North Dakota	7	2	(28.6)	2	(28.6)	1	(14.3)	2	(28.6)	0	(0.0)	0	(0.0)
Ohio	85	22	(25.9)	20	(23.5)	10	(11.8)	12	(14.1)	18	(21.2)	3	(3.5)
Oklahoma	28	9	(32.1)	5	(17.9)	3	(10.7)	4	(14.3)	6	(21.4)	1	(3.6)
Oregon	51	8	(15.7)	6	(11.8)	6	(11.8)	4	(7.8)	10	(19.6)	17	(33.3)
Pennsylvania	133	20	(15.0)	27	(20.3)	22	(16.5)	36	(27.1)	28	(21.1)	0	(0.0)
Rhode Island	16	5	(31.3)	5	(31.3)	0	(0.0)	3	(18.8)	3	(18.8)	0	(0.0)
South Carolina	17	4	(23.5)	4	(23.5)	4	(23.5)	3	(17.6)	1	(5.9)	1	(5.9)
South Dakota	4	2	(50.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	66	13	(19.7)	7	(10.6)	18	(27.3)	17	(25.8)	11	(16.7)	0	(0.0)
Texas	764	164	(21.5)	108	(14.1)	121	(15.8)	147	(19.2)	224	(29.3)	0	(0.0)
Utah	27	6	(22.2)	4	(14.8)	0	(0.0)	13	(48.1)	4	(14.8)	0	(0.0)
Vermont	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	147	20	(13.6)	37	(25.2)	25	(17.0)	28	(19.0)	36	(24.5)	1	(0.7)
Washington	140	19	(13.6)	27	(19.3)	18	(12.9)	26	(18.6)	45	(32.1)	5	(3.6)
West Virginia	3	0	(0.0)	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	33	5	(15.2)	5	(15.2)	7	(21.2)	8	(24.2)	6	(18.2)	2	(6.1)
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, 2014

Reporting Area	Total Cases	Pulmonary ¹		Extrapulmonary ²		Pulmonary and Extrapulmonary Cases		
		No.	(%)	No.	(%)	Total ³	Miliary	
		No.	(%)	No.	(%)	No.	(%)	No.
United States	9,421	6,491	68.9	1,938	20.6	978	10.4	357
Alabama	133	107	80.5	23	17.3	3	2.3	6
Alaska	62	55	88.7	6	9.7	1	1.6	2
Arizona	193	140	72.5	31	16.1	22	11.4	9
Arkansas	93	66	71	16	17.2	11	11.8	1
California	2,145	1,455	67.8	443	20.7	246	11.5	68
Colorado	64	36	56.3	19	29.7	9	14.1	2
Connecticut	60	32	53.3	19	31.7	9	15	3
Delaware	22	17	77.3	4	18.2	1	4.5	2
District of Columbia	32	23	71.9	8	25	1	3.1	1
Florida	595	473	79.5	83	13.9	39	6.6	26
Georgia	335	259	77.3	55	16.4	19	5.7	6
Hawaii	136	103	75.7	9	6.6	24	17.6	5
Idaho	11	7	63.6	3	27.3	1	9.1	1
Illinois	320	208	65	89	27.8	23	7.2	11
Indiana	108	72	66.7	22	20.4	14	13	5
Iowa	54	36	66.7	8	14.8	6	11.1	7
Kansas	40	32	80	6	15	2	5	0
Kentucky	80	59	73.8	17	21.3	4	5	3
Louisiana	121	99	81.8	18	14.9	4	3.3	4
Maine	14	8	57.1	6	42.9	0	0	1
Maryland	198	126	63.6	55	27.8	17	8.6	9
Massachusetts	199	114	57.3	57	28.6	28	14.1	15
Michigan	105	67	63.8	37	35.2	1	1	8
Minnesota	147	86	58.5	46	31.3	15	10.2	10
Mississippi	74	55	74.3	12	16.2	7	9.5	3
Missouri	79	52	65.8	23	29.1	3	3.8	5
Montana	6	4	66.7	0	0	2	33.3	0
Nebraska	38	24	63.2	13	34.2	1	2.6	2
Nevada	74	57	77	14	18.9	2	2.7	2
New Hampshire	11	6	54.5	3	27.3	2	18.2	0
New Jersey	308	186	60.4	69	22.4	53	17.2	19
New Mexico	50	34	68	16	32	0	0	1
New York	787	508	64.5	153	19.4	126	16	27
North Carolina	195	123	63.1	53	27.2	19	9.7	6
North Dakota	15	8	53.3	5	33.3	2	13.3	1
Ohio	156	119	76.3	36	23.1	1	0.6	8
Oklahoma	59	36	61	17	28.8	3	5.1	1
Oregon	77	50	64.9	14	18.2	13	16.9	2
Pennsylvania	209	137	65.6	51	24.4	21	10	14
Rhode Island	21	13	61.9	6	28.6	2	9.5	0
South Carolina	79	45	57	22	27.8	12	15.2	5
South Dakota	8	3	37.5	2	25	3	37.5	1
Tennessee	151	97	64.2	35	23.2	19	12.6	2
Texas	1,269	946	74.5	210	16.5	113	8.9	43
Utah	31	16	51.6	11	35.5	4	12.9	1
Vermont	2	1	50	0	0	1	50	0
Virginia	198	132	66.7	32	16.2	34	17.2	3
Washington	195	117	60	47	24.1	29	14.9	2
West Virginia	13	10	76.9	2	15.4	1	7.7	0
Wisconsin	47	31	66	11	23.4	5	10.6	4
Wyoming	2	1	50	1	50	0	0	0
American Samoa ⁴	1	1	100	0	0	0	0	1
Fed. States of Micronesia ⁴	165	141	85.5	23	13.9	1	0.6	0
Guam ⁴	56	50	89.3	3	5.4	3	5.4	1
Marshall Islands ⁴	151	109	72.2	39	25.8	3	2	4
N. Mariana Islands ⁴	23	22	95.7	1	4.3	0	0	0
Puerto Rico ⁴	44	38	86.4	5	11.4	1	2.3	0
Republic of Palau ⁴	14	11	78.6	3	21.4	0	0	0
U.S. Virgin Islands ⁴	...	...	...	...	...	...	...	...

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

Table 39. (Con't) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2014

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 York	153	166	26	(15.7)	75	(45.2)	17	(10.2)	8	(4.8)	9	(5.4)	9	(5.4)	1	(0.6)	21	(12.7)
North Carolina	53	56	9	(16.1)	13	(23.2)	10	(17.9)	0	(0.0)	4	(7.1)	1	(1.8)	0	(0.0)	19	(33.9)
North Dakota	5	5	0	(0.0)	3	(60.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(20.0)
Ohio	36	36	4	(11.1)	10	(27.8)	6	(16.7)	2	(5.6)	2	(5.6)	3	(8.3)	0	(0.0)	9	(25.0)
Oklahoma	17	18	3	(16.7)	11	(61.1)	1	(5.6)	1	(5.6)	0	(0.0)	0	(0.0)	0	(0.0)	2	(11.1)
Oregon	14	15	1	(6.7)	9	(60.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(20.0)	0	(0.0)	2	(13.3)
Pennsylvania	51	54	10	(18.5)	18	(33.3)	6	(11.1)	2	(3.7)	3	(5.6)	4	(7.4)	0	(0.0)	11	(20.4)
Rhode Island	6	6	1	(16.7)	2	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	2	(33.3)
South Carolina	22	23	3	(13.0)	9	(39.1)	5	(21.7)	1	(4.3)	1	(4.3)	1	(4.3)	0	(0.0)	3	(13.0)
South Dakota	2	2	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	35	36	3	(8.3)	17	(47.2)	0	(0.0)	0	(0.0)	3	(8.3)	3	(8.3)	1	(2.8)	9	(25.0)
Texas	210	218	35	(16.1)	81	(37.2)	27	(12.4)	21	(9.6)	10	(4.6)	10	(4.6)	2	(0.9)	32	(14.7)
Utah	11	12	0	(0.0)	3	(25.0)	1	(8.3)	2	(16.7)	1	(8.3)	0	(0.0)	0	(0.0)	5	(41.7)
Virginia	32	34	2	(5.9)	13	(38.2)	5	(14.7)	1	(2.9)	2	(5.9)	2	(5.9)	0	(0.0)	9	(26.5)
Washington	47	55	8	(14.5)	30	(54.5)	3	(5.5)	2	(3.6)	2	(3.6)	6	(10.9)	0	(0.0)	4	(7.3)
West Virginia	2	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Wisconsin	11	11	0	(0.0)	5	(45.5)	0	(0.0)	0	(0.0)	1	(9.1)	1	(9.1)	0	(0.0)	4	(36.4)
Wyoming	1	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)
American Samoa ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia ³	23	23	14	(60.9)	7	(30.4)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.3)	0	(0.0)	1	(4.3)
Guam ³	3	3	1	(33.3)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)
Marshall Islands ³	39	39	24	(61.5)	5	(12.8)	1	(2.6)	0	(0.0)	0	(0.0)	8	(20.5)	0	(0.0)	1	(2.6)
N. Mariana Islands ³	1	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico ³	5	5	1	(20.0)	3	(60.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)
Republic of Palau ³	3	3	0	(0.0)	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
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, 2014

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		Missing ²	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9421	10	(0.1)	49	(0.5)	701	(7.4)	255	(2.7)	1493	(15.8)	215	(2.3)	53	(0.6)	49	(0.5)	393	(4.2)	2085	(22.1)	4630	(49.1)	202	(2.1)
Alabama	133	0	(0.0)	2	(1.5)	34	(25.6)	10	(7.5)	17	(12.8)	2	(1.5)	0	(0.0)	2	(1.5)	10	(7.5)	11	(8.3)	54	(40.6)	2	(1.5)
Alaska	62	0	(0.0)	0	(0.0)	14	(22.6)	0	(0.0)	1	(1.6)	1	(1.6)	0	(0.0)	0	(0.0)	0	(0.0)	5	(8.1)	41	(66.1)	0	(0.0)
Arizona	193	0	(0.0)	1	(0.5)	15	(7.8)	1	(0.5)	27	(14.0)	4	(2.1)	4	(2.1)	0	(0.0)	4	(2.1)	26	(13.5)	119	(61.7)	0	(0.0)
Arkansas	93	0	(0.0)	2	(2.2)	28	(30.1)	18	(19.4)	13	(14.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(3.2)	14	(15.1)	36	(38.7)	0	(0.0)
California	2145	2	(0.1)	9	(0.4)	97	(4.5)	28	(1.3)	441	(20.6)	73	(3.4)	18	(0.8)	21	(1.0)	99	(4.6)	624	(29.1)	916	(42.7)	40	(1.9)
Colorado	64	1	(1.6)	0	(0.0)	2	(3.1)	2	(3.1)	11	(17.2)	3	(4.7)	1	(1.6)	0	(0.0)	0	(0.0)	2	(3.1)	44	(68.8)	0	(0.0)
Connecticut	60	0	(0.0)	0	(0.0)	3	(5.0)	1	(1.7)	6	(10.0)	1	(1.7)	0	(0.0)	0	(0.0)	1	(1.7)	11	(18.3)	38	(63.3)	0	(0.0)
Delaware	22	0	(0.0)	0	(0.0)	2	(9.1)	1	(4.5)	3	(13.6)	1	(4.5)	1	(4.5)	0	(0.0)	2	(9.1)	10	(45.5)	8	(36.4)	0	(0.0)
District of Columbia	32	0	(0.0)	0	(0.0)	2	(6.3)	0	(0.0)	2	(6.3)	1	(3.1)	0	(0.0)	0	(0.0)	1	(3.1)	3	(9.4)	24	(75.0)	0	(0.0)
Florida	595	2	(0.3)	8	(1.3)	61	(10.3)	10	(1.7)	70	(11.8)	9	(1.5)	0	(0.0)	3	(0.5)	49	(8.2)	122	(20.5)	296	(49.7)	0	(0.0)
Georgia	335	0	(0.0)	1	(0.3)	36	(10.7)	16	(4.8)	39	(11.6)	9	(2.7)	0	(0.0)	1	(0.3)	6	(1.8)	72	(21.5)	186	(55.5)	1	(0.3)
Hawaii	136	0	(0.0)	0	(0.0)	7	(5.1)	8	(5.9)	45	(33.1)	5	(3.7)	0	(0.0)	0	(0.0)	8	(5.9)	20	(14.7)	55	(40.4)	0	(0.0)
Idaho	11	0	(0.0)	0	(0.0)	2	(18.2)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(9.1)	2	(18.2)	5	(45.5)
Illinois	320	0	(0.0)	2	(0.6)	27	(8.4)	4	(1.3)	50	(15.6)	8	(2.5)	4	(1.3)	2	(0.6)	10	(3.1)	37	(11.6)	178	(55.6)	15	(4.7)
Indiana	108	0	(0.0)	2	(1.9)	8	(7.4)	10	(9.3)	11	(10.2)	2	(1.9)	0	(0.0)	0	(0.0)	4	(3.7)	29	(26.9)	47	(43.5)	0	(0.0)
Iowa	54	0	(0.0)	0	(0.0)	8	(14.8)	2	(3.7)	8	(14.8)	1	(1.9)	0	(0.0)	0	(0.0)	4	(7.4)	0	(0.0)	28	(51.9)	6	(11.1)
Kansas	40	0	(0.0)	0	(0.0)	8	(20.0)	2	(5.0)	8	(20.0)	3	(7.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	24	(60.0)	0	(0.0)
Kentucky	80	1	(1.3)	1	(1.3)	7	(8.8)	7	(8.8)	11	(13.8)	0	(0.0)	1	(1.3)	2	(2.5)	5	(6.3)	28	(35.0)	24	(30.0)	0	(0.0)
Louisiana	121	0	(0.0)	3	(2.5)	5	(4.1)	3	(2.5)	13	(10.7)	2	(1.7)	0	(0.0)	1	(0.8)	3	(2.5)	40	(33.1)	56	(46.3)	1	(0.8)
Maine	14	0	(0.0)	0	(0.0)	1	(7.1)	3	(21.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(21.4)	7	(50.0)	0	(0.0)
Maryland	198	0	(0.0)	0	(0.0)	8	(4.0)	6	(3.0)	26	(13.1)	2	(1.0)	1	(0.5)	0	(0.0)	8	(4.0)	29	(14.6)	123	(62.1)	0	(0.0)
Massachusetts	199	1	(0.5)	4	(2.0)	6	(3.0)	9	(4.5)	19	(9.5)	3	(1.5)	1	(0.5)	0	(0.0)	0	(0.0)	41	(20.6)	119	(59.8)	4	(2.0)
Michigan	105	0	(0.0)	0	(0.0)	9	(8.6)	8	(7.6)	16	(15.2)	1	(1.0)	1	(1.0)	0	(0.0)	2	(1.9)	26	(24.8)	0	(0.0)	51	(48.6)
Minnesota	147	0	(0.0)	0	(0.0)	11	(7.5)	15	(10.2)	22	(15.0)	6	(4.1)	0	(0.0)	1	(0.7)	11	(7.5)	58	(39.5)	56	(38.1)	0	(0.0)
Mississippi	74	0	(0.0)	0	(0.0)	4	(5.4)	1	(1.4)	4	(5.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	69	(93.2)	3	(4.1)	1	(1.4)
Missouri	79	0	(0.0)	1	(1.3)	11	(13.9)	0	(0.0)	11	(13.9)	2	(2.5)	0	(0.0)	0	(0.0)	7	(8.9)	15	(19.0)	42	(53.2)	0	(0.0)
Montana	6	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	0	(0.0)	0	(0.0)
Nebraska	38	0	(0.0)	0	(0.0)	3	(7.9)	1	(2.6)	3	(7.9)	1	(2.6)	1	(2.6)	0	(0.0)	2	(5.3)	22	(57.9)	3	(7.9)	5	(13.2)
Nevada	74	0	(0.0)	1	(1.4)	3	(4.1)	0	(0.0)	9	(12.2)	0	(0.0)	1	(1.4)	0	(0.0)	1	(1.4)	1	(1.4)	38	(51.4)	20	(27.0)
New Hampshire	11	0	(0.0)	0	(0.0)	1	(9.1)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(18.2)	7	(63.6)	0	(0.0)
New Jersey	308	0	(0.0)	0	(0.0)	17	(5.5)	4	(1.3)	33	(10.7)	6	(1.9)	5	(1.6)	0	(0.0)	14	(4.5)	32	(10.4)	214	(69.5)	0	(0.0)
New Mexico	50	0	(0.0)	0	(0.0)	1	(2.0)	2	(4.0)	14	(28.0)	1	(2.0)	0	(0.0)	0	(0.0)	1	(2.0)	10	(20.0)	22	(44.0)	1	(2.0)

Table 40. (Con't) Tuberculosis Risk Factors¹: Reporting Areas, 2014

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 suppression		Immuno-suppression		Other		None		Missing ²	
		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 State ³	202	0	(0.0)	0	(0.0)	16	(7.9)	8	(4.0)	25	(12.4)	5	(2.5)	1	(0.5)	4	(2.0)	8	(4.0)	29	(14.4)	118	(58.4)	0	(0.0)
New York City	585	0	(0.0)	2	(0.3)	27	(4.6)	9	(1.5)	98	(16.8)	12	(2.1)	0	(0.0)	4	(0.7)	31	(5.3)	62	(10.6)	364	(62.2)	10	(1.7)
North Carolina	195	0	(0.0)	3	(1.5)	8	(4.1)	10	(5.1)	27	(13.8)	4	(2.1)	2	(1.0)	0	(0.0)	10	(5.1)	40	(20.5)	84	(43.1)	32	(16.4)
North Dakota	15	0	(0.0)	0	(0.0)	2	(13.3)	3	(20.0)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	7	(46.7)	1	(6.7)
Ohio	156	0	(0.0)	0	(0.0)	12	(7.7)	5	(3.2)	18	(11.5)	1	(0.6)	0	(0.0)	0	(0.0)	7	(4.5)	18	(11.5)	95	(60.9)	0	(0.0)
Oklahoma	59	0	(0.0)	1	(1.7)	13	(22.0)	4	(6.8)	10	(16.9)	0	(0.0)	0	(0.0)	0	(0.0)	3	(5.1)	5	(8.5)	32	(54.2)	0	(0.0)
Oregon	77	0	(0.0)	1	(1.3)	7	(9.1)	3	(3.9)	13	(16.9)	3	(3.9)	0	(0.0)	0	(0.0)	5	(6.5)	11	(14.3)	46	(59.7)	0	(0.0)
Pennsylvania	209	0	(0.0)	0	(0.0)	8	(3.8)	5	(2.4)	28	(13.4)	9	(4.3)	3	(1.4)	2	(1.0)	11	(5.3)	49	(23.4)	108	(51.7)	0	(0.0)
Rhode Island	21	0	(0.0)	0	(0.0)	2	(9.5)	0	(0.0)	2	(9.5)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.8)	5	(23.8)	11	(52.4)	0	(0.0)
South Carolina	79	0	(0.0)	0	(0.0)	7	(8.9)	1	(1.3)	8	(10.1)	2	(2.5)	0	(0.0)	0	(0.0)	1	(1.3)	6	(7.6)	55	(69.6)	0	(0.0)
South Dakota	8	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)	5	(62.5)	0	(0.0)
Tennessee	151	0	(0.0)	2	(1.3)	19	(12.6)	11	(7.3)	23	(15.2)	2	(1.3)	0	(0.0)	0	(0.0)	10	(6.6)	20	(13.2)	70	(46.4)	1	(0.7)
Texas	1269	0	(0.0)	1	(0.1)	97	(7.6)	9	(0.7)	225	(17.7)	16	(1.3)	4	(0.3)	3	(0.2)	26	(2.0)	372	(29.3)	591	(46.6)	0	(0.0)
Utah	31	0	(0.0)	0	(0.0)	2	(6.5)	3	(9.7)	3	(9.7)	1	(3.2)	1	(3.2)	0	(0.0)	2	(6.5)	2	(6.5)	17	(54.8)	0	(0.0)
Vermont	2	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)
Virginia	198	1	(0.5)	0	(0.0)	10	(5.1)	2	(1.0)	33	(16.7)	3	(1.5)	1	(0.5)	3	(1.5)	10	(5.1)	28	(14.1)	121	(61.1)	2	(1.0)
Washington	195	0	(0.0)	2	(1.0)	27	(13.8)	5	(2.6)	40	(20.5)	6	(3.1)	1	(0.5)	0	(0.0)	8	(4.1)	36	(18.5)	81	(41.5)	4	(2.1)
West Virginia	13	0	(0.0)	0	(0.0)	1	(7.7)	0	(0.0)	0	(0.0)	1	(7.7)	0	(0.0)	0	(0.0)	1	(7.7)	8	(61.5)	3	(23.1)	0	(0.0)
Wisconsin	47	1	(2.1)	0	(0.0)	1	(2.1)	3	(6.4)	4	(8.5)	2	(4.3)	1	(2.1)	0	(0.0)	3	(6.4)	23	(48.9)	11	(23.4)	0	(0.0)
Wyoming	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)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
American Samoa ⁴	1	0	(0.0)	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)
Fed. States of Micronesia ⁴	165	3	(1.8)	6	(3.6)	80	(48.5)	0	(0.0)	6	(3.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	27	(16.4)	27	(16.4)	16	(9.7)
Guam ⁴	56	0	(0.0)	1	(1.8)	1	(1.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(5.4)	0	(0.0)	23	(41.1)	28	(50.0)
Marshall Islands ⁴	151	3	(2.0)	0	(0.0)	23	(15.2)	0	(0.0)	33	(21.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.7)	4	(2.6)	80	(53.0)	8	(5.3)
N. Mariana Islands ⁴	23	0	(0.0)	0	(0.0)	2	(8.7)	1	(4.3)	6	(26.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	9	(39.1)	6	(26.1)
Puerto Rico ⁴	44	0	(0.0)	0	(0.0)	2	(4.5)	0	(0.0)	13	(29.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(18.2)	22	(50.0)	0	(0.0)
Republic of Palau ⁴	14	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(28.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(57.1)	2	(14.3)
U.S. Virgin Islands ⁴	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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, 2014

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.	(%)
United States	9421	5423	(57.6)	1934	(20.5)	374	(4.0)	317	(3.4)	23	(0.2)	73	(0.8)	203	(2.2)	1018	(10.8)	56	(0.6)
Alabama	133	47	(35.3)	51	(38.3)	15	(11.3)	1	(0.8)	0	(0.0)	1	(0.8)	2	(1.5)	16	(12.0)	0	(0.0)
Alaska	62	29	(46.8)	10	(16.1)	10	(16.1)	9	(14.5)	0	(0.0)	2	(3.2)	1	(1.6)	1	(1.6)	0	(0.0)
Arizona	193	77	(39.9)	35	(18.1)	7	(3.6)	39	(20.2)	0	(0.0)	1	(0.5)	2	(1.0)	32	(16.6)	0	(0.0)
Arkansas	93	39	(41.9)	25	(26.9)	13	(14.0)	3	(3.2)	0	(0.0)	0	(0.0)	0	(0.0)	13	(14.0)	0	(0.0)
California	2145	1333	(62.1)	395	(18.4)	60	(2.8)	72	(3.4)	2	(0.1)	16	(0.7)	55	(2.6)	192	(9.0)	20	(0.9)
Colorado	64	45	(70.3)	6	(9.4)	3	(4.7)	7	(10.9)	0	(0.0)	1	(1.6)	0	(0.0)	1	(1.6)	1	(1.6)
Connecticut	60	43	(71.7)	5	(8.3)	1	(1.7)	3	(5.0)	0	(0.0)	1	(1.7)	1	(1.7)	6	(10.0)	0	(0.0)
Delaware	22	11	(50.0)	7	(31.8)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.5)	0	(0.0)	3	(13.6)	0	(0.0)
District of Columbia	32	27	(84.4)	2	(6.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(9.4)	0	(0.0)
Florida	595	229	(38.5)	212	(35.6)	17	(2.9)	6	(1.0)	1	(0.2)	0	(0.0)	9	(1.5)	121	(20.3)	0	(0.0)
Georgia	335	190	(56.7)	73	(21.8)	21	(6.3)	12	(3.6)	1	(0.3)	0	(0.0)	8	(2.4)	30	(9.0)	0	(0.0)
Hawaii	136	69	(50.7)	20	(14.7)	3	(2.2)	3	(2.2)	4	(2.9)	15	(11.0)	11	(8.1)	11	(8.1)	0	(0.0)
Idaho	11	5	(45.5)	0	(0.0)	2	(18.2)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	3	(27.3)	0	(0.0)
Illinois	320	184	(57.5)	57	(17.8)	6	(1.9)	8	(2.5)	2	(0.6)	1	(0.3)	5	(1.6)	57	(17.8)	0	(0.0)
Indiana	108	51	(47.2)	39	(36.1)	2	(1.9)	3	(2.8)	0	(0.0)	0	(0.0)	2	(1.9)	11	(10.2)	0	(0.0)
Iowa	54	27	(50.0)	9	(16.7)	4	(7.4)	1	(1.9)	0	(0.0)	8	(14.8)	2	(3.7)	3	(5.6)	0	(0.0)
Kansas	40	13	(32.5)	3	(7.5)	6	(15.0)	5	(12.5)	0	(0.0)	1	(2.5)	2	(5.0)	10	(25.0)	0	(0.0)
Kentucky	80	34	(42.5)	23	(28.8)	6	(7.5)	2	(2.5)	0	(0.0)	0	(0.0)	3	(3.8)	12	(15.0)	0	(0.0)
Louisiana	121	74	(61.2)	29	(24.0)	4	(3.3)	0	(0.0)	0	(0.0)	0	(0.0)	2	(1.7)	7	(5.8)	5	(4.1)
Maine	14	8	(57.1)	1	(7.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(7.1)	3	(21.4)	1	(7.1)
Maryland	198	126	(63.6)	43	(21.7)	1	(0.5)	5	(2.5)	0	(0.0)	0	(0.0)	4	(2.0)	16	(8.1)	3	(1.5)
Massachusetts	199	154	(77.4)	30	(15.1)	3	(1.5)	2	(1.0)	1	(0.5)	2	(1.0)	2	(1.0)	5	(2.5)	0	(0.0)
Michigan	105	54	(51.4)	31	(29.5)	3	(2.9)	2	(1.9)	0	(0.0)	0	(0.0)	2	(1.9)	12	(11.4)	1	(1.0)
Minnesota	147	112	(76.2)	4	(2.7)	9	(6.1)	8	(5.4)	0	(0.0)	2	(1.4)	12	(8.2)	0	(0.0)	0	(0.0)
Mississippi	74	28	(37.8)	25	(33.8)	4	(5.4)	2	(2.7)	0	(0.0)	0	(0.0)	0	(0.0)	14	(18.9)	1	(1.4)
Missouri	79	54	(68.4)	13	(16.5)	2	(2.5)	3	(3.8)	1	(1.3)	0	(0.0)	2	(2.5)	2	(2.5)	2	(2.5)
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	38	31	(81.6)	2	(5.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.6)	3	(7.9)	1	(2.6)	0	(0.0)
Nevada	74	27	(36.5)	24	(32.4)	6	(8.1)	0	(0.0)	0	(0.0)	0	(0.0)	8	(10.8)	9	(12.2)	0	(0.0)
New Hampshire	11	4	(36.4)	4	(36.4)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(9.1)	1	(9.1)	0	(0.0)
New Jersey	308	175	(56.8)	63	(20.5)	12	(3.9)	1	(0.3)	3	(1.0)	1	(0.3)	3	(1.0)	50	(16.2)	0	(0.0)
New Mexico	50	34	(68.0)	12	(24.0)	0	(0.0)	1	(2.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(6.0)	0	(0.0)

Table 41. (Con't) Primary Reason for Tuberculosis Evaluation¹: Reporting Areas, 2014

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	202	116	(57.4)	42	(20.8)	9	(4.5)	4	(2.0)	1	(0.5)	1	(0.5)	3	(1.5)	23	(11.4)	3	(1.5)
New York City	585	321	(54.9)	123	(21.0)	10	(1.7)	7	(1.2)	1	(0.2)	1	(0.2)	5	(0.9)	108	(18.5)	9	(1.5)
North Carolina	195	66	(33.8)	64	(32.8)	7	(3.6)	1	(0.5)	0	(0.0)	4	(2.1)	0	(0.0)	53	(27.2)	0	(0.0)
North Dakota	15	6	(40.0)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)	1	(6.7)	1	(6.7)	4	(26.7)	2	(13.3)
Ohio	156	63	(40.4)	62	(39.7)	5	(3.2)	0	(0.0)	2	(1.3)	1	(0.6)	6	(3.8)	17	(10.9)	0	(0.0)
Oklahoma	59	32	(54.2)	6	(10.2)	3	(5.1)	2	(3.4)	0	(0.0)	0	(0.0)	8	(13.6)	4	(6.8)	4	(6.8)
Oregon	77	70	(90.9)	1	(1.3)	2	(2.6)	1	(1.3)	0	(0.0)	0	(0.0)	2	(2.6)	1	(1.3)	0	(0.0)
Pennsylvania	209	131	(62.7)	42	(20.1)	5	(2.4)	7	(3.3)	1	(0.5)	5	(2.4)	5	(2.4)	12	(5.7)	1	(0.5)
Rhode Island	21	10	(47.6)	8	(38.1)	1	(4.8)	0	(0.0)	0	(0.0)	0	(0.0)	2	(9.5)	0	(0.0)	0	(0.0)
South Carolina	79	24	(30.4)	32	(40.5)	5	(6.3)	2	(2.5)	1	(1.3)	0	(0.0)	0	(0.0)	15	(19.0)	0	(0.0)
South Dakota	8	4	(50.0)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)	0	(0.0)
Tennessee	151	67	(44.4)	42	(27.8)	14	(9.3)	1	(0.7)	0	(0.0)	2	(1.3)	3	(2.0)	22	(14.6)	0	(0.0)
Texas	1269	856	(67.5)	178	(14.0)	64	(5.0)	88	(6.9)	2	(0.2)	0	(0.0)	18	(1.4)	63	(5.0)	0	(0.0)
Utah	31	21	(67.7)	3	(9.7)	2	(6.5)	0	(0.0)	0	(0.0)	1	(3.2)	1	(3.2)	3	(9.7)	0	(0.0)
Vermont	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)	0	(0.0)
Virginia	198	145	(73.2)	34	(17.2)	7	(3.5)	1	(0.5)	0	(0.0)	1	(0.5)	2	(1.0)	7	(3.5)	1	(0.5)
Washington	195	111	(56.9)	29	(14.9)	18	(9.2)	3	(1.5)	0	(0.0)	2	(1.0)	2	(1.0)	28	(14.4)	2	(1.0)
West Virginia	13	6	(46.2)	5	(38.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(7.7)	1	(7.7)	0	(0.0)
Wisconsin	47	32	(68.1)	8	(17.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.1)	6	(12.8)	0	(0.0)
Wyoming	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
American Samoa ³	1	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)
Fed. States of Micronesia ³	165	63	(38.2)	20	(12.1)	75	(45.5)	0	(0.0)	0	(0.0)	4	(2.4)	1	(0.6)	1	(0.6)	1	(0.6)
Guam ³	56	26	(46.4)	3	(5.4)	4	(7.1)	0	(0.0)	0	(0.0)	0	(0.0)	3	(5.4)	20	(35.7)	0	(0.0)
Marshall Islands ³	151	125	(82.8)	11	(7.3)	10	(6.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(2.6)	1	(0.7)
N. Mariana Islands ³	23	17	(73.9)	6	(26.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico ³	44	17	(38.6)	22	(50.0)	1	(2.3)	0	(0.0)	0	(0.0)	1	(2.3)	0	(0.0)	3	(6.8)	0	(0.0)
Republic of Palau ³	14	6	(42.9)	1	(7.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(7.1)	3	(21.4)	2	(14.3)	1	(7.1)
U.S. Virgin Islands ³	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Cases Reported As Residents of Correctional Facilities ²	
		No.	(%)	No.	(%)
United States	8,961	8,935	(99.7)	376	(4.2)
Alabama	125	125	(100.0)	14	(11.2)
Alaska	60	58	(96.7)	2	(3.4)
Arizona	180	180	(100.0)	44	(24.4)
Arkansas	79	79	(100.0)	1	(1.3)
California	2,054	2,051	(99.9)	63	(3.1)
Colorado	62	62	(100.0)	0	(0.0)
Connecticut	58	58	(100.0)	0	(0.0)
Delaware	20	20	(100.0)	1	(5.0)
District of Columbia	32	32	(100.0)	0	(0.0)
Florida	572	572	(100.0)	19	(3.3)
Georgia	308	308	(100.0)	9	(2.9)
Hawaii	134	134	(100.0)	1	(0.7)
Idaho	8	8	(100.0)	0	(0.0)
Illinois	306	306	(100.0)	4	(1.3)
Indiana	105	105	(100.0)	5	(4.8)
Iowa	50	50	(100.0)	0	(0.0)
Kansas	37	37	(100.0)	0	(0.0)
Kentucky	76	76	(100.0)	1	(1.3)
Louisiana	116	116	(100.0)	3	(2.6)
Maine	12	12	(100.0)	0	(0.0)
Maryland	189	188	(99.5)	2	(1.1)
Massachusetts	192	192	(100.0)	4	(2.1)
Michigan	104	101	(97.1)	3	(3.0)
Minnesota	128	128	(100.0)	1	(0.8)
Mississippi	73	73	(100.0)	5	(6.8)
Missouri	77	77	(100.0)	2	(2.6)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	37	36	(97.3)	1	(2.8)
Nevada	62	61	(98.4)	0	(0.0)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	295	(100.0)	2	(0.7)
New Mexico	49	49	(100.0)	5	(10.2)
New York State ⁵	195	195	(100.0)	3	(1.5)
New York City	571	560	(98.1)	6	(1.1)
North Carolina	184	184	(100.0)	6	(3.3)
North Dakota	14	14	(100.0)	1	(7.1)
Ohio	147	147	(100.0)	2	(1.4)
Oklahoma	48	45	(93.8)	2	(4.4)
Oregon	77	77	(100.0)	1	(1.3)
Pennsylvania	207	207	(100.0)	6	(2.9)
Rhode Island	21	21	(100.0)	1	(4.8)
South Carolina	77	77	(100.0)	6	(7.8)
South Dakota	7	7	(100.0)	0	(0.0)
Tennessee	138	138	(100.0)	2	(1.4)
Texas	1,195	1,195	(100.0)	145	(12.1)
Utah	29	29	(100.0)	0	(0.0)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	189	(100.0)	0	(0.0)
Washington	182	181	(99.5)	2	(1.1)
West Virginia	13	13	(100.0)	1	(7.7)
Wisconsin	47	47	(100.0)	0	(0.0)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ⁶	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ⁶	127	127	(100.0)	0	(0.0)
Guam ⁶	48	48	(100.0)	1	(2.1)
Marshall Islands ⁶	119	119	(100.0)	0	(0.0)
N. Mariana Islands ⁶	23	23	(100.0)	0	(0.0)
Puerto Rico ⁶	44	44	(100.0)	1	(2.3)
Republic of Palau ⁶	13	13	(100.0)	0	(0.0)
U.S. Virgin Islands ⁶	...	...	...	...	...

Table 42. (Con't) Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities,¹ Age ≥ 15: Reporting Areas, 2014

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.	(%)
62	(16.5)	76	(20.2)	128	(34.0)	0	(0.0)	103	(27.4)	7	(1.9)	370	(98.4)	154	(41.6)
0	(0.0)	12	(85.7)	2	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	13	(92.9)	0	(0.0)
0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)
3	(6.8)	3	(6.8)	22	(50.0)	0	(0.0)	16	(36.4)	0	(0.0)	44	(100.0)	33	(75.0)
1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	1	(100.0)
23	(36.5)	6	(9.5)	26	(41.3)	0	(0.0)	7	(11.1)	1	(1.6)	63	(100.0)	23	(36.5)
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)	0	(0.0)	1	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
5	(26.3)	6	(31.6)	6	(31.6)	0	(0.0)	2	(10.5)	0	(0.0)	19	(100.0)	8	(42.1)
1	(11.1)	3	(33.3)	3	(33.3)	0	(0.0)	2	(22.2)	0	(0.0)	9	(100.0)	3	(33.3)
0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	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)
1	...	4	...	0	...	0	...	0	...	0	...	5	...	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)	0	(0.0)
0	(0.0)	1	(33.3)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	1	(33.3)
0	...	0	...	0	...	0	...	0	...	0	...	0	...	0	...
0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
1	(25.0)	1	(25.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(100.0)	0	(0.0)
0	(0.0)	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	3	(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)
3	(60.0)	0	(0.0)	1	(20.0)	0	(0.0)	1	(20.0)	0	(0.0)	4	(80.0)	0	(0.0)
1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
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)	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)	1	(20.0)	0	(0.0)	3	(60.0)	1	(20.0)	4	(80.0)	4	(100.0)
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	3	(100.0)	1	(33.3)
0	(0.0)	1	(16.7)	2	(33.3)	0	(0.0)	2	(33.3)	1	(16.7)	5	(83.3)	3	(60.0)
2	(33.3)	3	(50.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	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)
0	(0.0)	1	(50.0)	1	(50.0)	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)	2	(100.0)	0	(0.0)	2	(100.0)	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)
2	(33.3)	0	(0.0)	4	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	6	(100.0)	2	(33.3)
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	(16.7)	3	(50.0)	2	(33.3)	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)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
18	(12.4)	23	(15.9)	38	(26.2)	0	(0.0)	66	(45.5)	0	(0.0)	145	(100.0)	72	(49.7)
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)	2	(100.0)	0	(0.0)	2	(100.0)	1	(50.0)
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)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
0	...	0	...	0	...	0	...	0	...	0	...	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, 2014**

Reporting Area	Total Cases	Cases with Information on Homeless Status		Cases Reported As Being Homeless ²	
		No.	(%)	No.	(%)
United States	8,961	8,894	(99.3)	502	(5.6)
Alabama	125	125	(100.0)	4	(3.2)
Alaska	60	58	(96.7)	14	(24.1)
Arizona	180	171	(95.0)	9	(5.3)
Arkansas	79	79	(100.0)	5	(6.3)
California	2,054	2,043	(99.5)	104	(5.1)
Colorado	62	62	(100.0)	1	(1.6)
Connecticut	58	58	(100.0)	2	(3.4)
Delaware	20	19	(95.0)	1	(5.3)
District of Columbia	32	32	(100.0)	1	(3.1)
Florida	572	570	(99.7)	46	(8.1)
Georgia	308	308	(100.0)	59	(19.2)
Hawaii	134	134	(100.0)	10	(7.5)
Idaho	8	7	(87.5)	1	(14.3)
Illinois	306	303	(99.0)	20	(6.6)
Indiana	105	105	(100.0)	10	(9.5)
Iowa	50	50	(100.0)	1	(2.0)
Kansas	37	37	(100.0)	6	(16.2)
Kentucky	76	76	(100.0)	6	(7.9)
Louisiana	116	115	(99.1)	6	(5.2)
Maine	12	12	(100.0)	1	(8.3)
Maryland	189	188	(99.5)	6	(3.2)
Massachusetts	192	192	(100.0)	8	(4.2)
Michigan	104	102	(98.1)	4	(3.9)
Minnesota	128	128	(100.0)	6	(4.7)
Mississippi	73	72	(98.6)	5	(6.9)
Missouri	77	77	(100.0)	3	(3.9)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	37	36	(97.3)	1	(2.8)
Nevada	62	62	(100.0)	4	(6.5)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	295	(100.0)	12	(4.1)
New Mexico	49	44	(89.8)	2	(4.5)
New York State ³	195	194	(99.5)	2	(1.0)
New York City	571	562	(98.4)	17	(3.0)
North Carolina	184	184	(100.0)	8	(4.3)
North Dakota	14	14	(100.0)	3	(21.4)
Ohio	147	147	(100.0)	8	(5.4)
Oklahoma	48	34	(70.8)	--	--
Oregon	77	76	(98.7)	9	(11.8)
Pennsylvania	207	206	(99.5)	4	(1.9)
Rhode Island	21	21	(100.0)	0	(0.0)
South Carolina	77	77	(100.0)	5	(6.5)
South Dakota	7	7	(100.0)	0	(0.0)
Tennessee	138	138	(100.0)	12	(8.7)
Texas	1,195	1,195	(100.0)	57	(4.8)
Utah	29	29	(100.0)	1	(3.4)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	189	(100.0)	1	(0.5)
Washington	182	181	(99.5)	14	(7.7)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	47	47	(100.0)	1	(2.1)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ⁴	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	127	127	(100.0)	0	(0.0)
Guam ⁴	48	48	(100.0)	2	(4.2)
Marshall Islands ⁴	119	119	(100.0)	0	(0.0)
N. Mariana Islands ⁴	23	23	(100.0)	0	(0.0)
Puerto Rico ⁴	44	44	(100.0)	5	(11.4)
Republic of Palau ⁴	13	13	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	...	...	...	...	...

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, 2014**

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	8,961	8,939	(99.8)	198	(2.2)
Alabama	125	125	(100.0)	4	(3.2)
Alaska	60	58	(96.7)	1	(1.7)
Arizona	180	179	(99.4)	4	(2.2)
Arkansas	79	79	(100.0)	3	(3.8)
California	2,054	2,053	(100.0)	64	(3.1)
Colorado	62	62	(100.0)	1	(1.6)
Connecticut	58	58	(100.0)	3	(5.2)
Delaware	20	20	(100.0)	0	(0.0)
District of Columbia	32	32	(100.0)	1	(3.1)
Florida	572	572	(100.0)	4	(0.7)
Georgia	308	308	(100.0)	8	(2.6)
Hawaii	134	134	(100.0)	4	(3.0)
Idaho	8	8	(100.0)	0	(0.0)
Illinois	306	306	(100.0)	4	(1.3)
Indiana	105	105	(100.0)	2	(1.9)
Iowa	50	50	(100.0)	0	(0.0)
Kansas	37	37	(100.0)	3	(8.1)
Kentucky	76	76	(100.0)	11	(14.5)
Louisiana	116	116	(100.0)	4	(3.4)
Maine	12	12	(100.0)	0	(0.0)
Maryland	189	189	(100.0)	5	(2.6)
Massachusetts	192	192	(100.0)	1	(0.5)
Michigan	104	103	(99.0)	6	(5.8)
Minnesota	128	127	(99.2)	0	(0.0)
Mississippi	73	73	(100.0)	2	(2.7)
Missouri	77	77	(100.0)	2	(2.6)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	37	36	(97.3)	1	(2.8)
Nevada	62	62	(100.0)	0	(0.0)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	295	(100.0)	2	(0.7)
New Mexico	49	49	(100.0)	1	(2.0)
New York State ³	195	195	(100.0)	2	(1.0)
New York City	571	561	(98.2)	16	(2.9)
North Carolina	184	184	(100.0)	1	(0.5)
North Dakota	14	14	(100.0)	0	(0.0)
Ohio	147	147	(100.0)	5	(3.4)
Oklahoma	48	44	(91.7)	1	(2.3)
Oregon	77	77	(100.0)	3	(3.9)
Pennsylvania	207	207	(100.0)	7	(3.4)
Rhode Island	21	21	(100.0)	0	(0.0)
South Carolina	77	77	(100.0)	4	(5.2)
South Dakota	7	7	(100.0)	0	(0.0)
Tennessee	138	138	(100.0)	1	(0.7)
Texas	1,195	1,195	(100.0)	11	(0.9)
Utah	29	29	(100.0)	1	(3.4)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	189	(100.0)	4	(2.1)
Washington	182	182	(100.0)	1	(0.5)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	47	47	(100.0)	0	(0.0)
Wyoming	2	1	(50.0)	--	--
American Samoa ⁴	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	127	127	(100.0)	0	(0.0)
Guam ⁴	48	48	(100.0)	0	(0.0)
Marshall Islands ⁴	119	118	(99.2)	0	(0.0)
N. Mariana Islands ⁴	23	23	(100.0)	1	(4.3)
Puerto Rico ⁴	44	44	(100.0)	1	(2.3)
Republic of Palau ⁴	13	13	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Cases Reporting Injecting Drug Use	
		No.	(%)	No.	(%)
United States	8,961	8,839	(98.6)	137	(1.5)
Alabama	125	125	(100.0)	0	(0.0)
Alaska	60	54	(90.0)	1	(1.9)
Arizona	180	169	(93.9)	6	(3.6)
Arkansas	79	79	(100.0)	1	(1.3)
California	2,054	2,013	(98.0)	29	(1.4)
Colorado	62	62	(100.0)	1	(1.6)
Connecticut	58	58	(100.0)	1	(1.7)
Delaware	20	20	(100.0)	2	(10.0)
District of Columbia	32	32	(100.0)	0	(0.0)
Florida	572	569	(99.5)	8	(1.4)
Georgia	308	307	(99.7)	1	(0.3)
Hawaii	134	134	(100.0)	1	(0.7)
Idaho	8	7	(87.5)	0	(0.0)
Illinois	306	299	(97.7)	3	(1.0)
Indiana	105	105	(100.0)	4	(3.8)
Iowa	50	50	(100.0)	0	(0.0)
Kansas	37	37	(100.0)	3	(8.1)
Kentucky	76	76	(100.0)	3	(3.9)
Louisiana	116	115	(99.1)	0	(0.0)
Maine	12	12	(100.0)	0	(0.0)
Maryland	189	189	(100.0)	2	(1.1)
Massachusetts	192	192	(100.0)	3	(1.6)
Michigan	104	102	(98.1)	1	(1.0)
Minnesota	128	128	(100.0)	0	(0.0)
Mississippi	73	72	(98.6)	0	(0.0)
Missouri	77	77	(100.0)	4	(5.2)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	37	34	(91.9)	0	(0.0)
Nevada	62	61	(98.4)	1	(1.6)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	294	(99.7)	3	(1.0)
New Mexico	49	47	(95.9)	0	(0.0)
New York State ²	195	189	(96.9)	1	(0.5)
New York City	571	559	(97.9)	2	(0.4)
North Carolina	184	184	(100.0)	1	(0.5)
North Dakota	14	9	(64.3)	--	--
Ohio	147	147	(100.0)	0	(0.0)
Oklahoma	48	46	(95.8)	0	(0.0)
Oregon	77	75	(97.4)	2	(2.7)
Pennsylvania	207	206	(99.5)	3	(1.5)
Rhode Island	21	18	(85.7)	0	(0.0)
South Carolina	77	74	(96.1)	1	(1.4)
South Dakota	7	7	(100.0)	0	(0.0)
Tennessee	138	137	(99.3)	0	(0.0)
Texas	1,195	1,195	(100.0)	45	(3.8)
Utah	29	29	(100.0)	0	(0.0)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	188	(99.5)	0	(0.0)
Washington	182	177	(97.3)	3	(1.7)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	47	47	(100.0)	0	(0.0)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ³	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ³	127	127	(100.0)	0	(0.0)
Guam ³	48	48	(100.0)	0	(0.0)
Marshall Islands ³	119	118	(99.2)	0	(0.0)
N. Mariana Islands ³	23	23	(100.0)	0	(0.0)
Puerto Rico ³	44	44	(100.0)	6	(13.6)
Republic of Palau ³	13	13	(100.0)	0	(0.0)
U.S. Virgin Islands ³	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Cases Reporting Noninjecting Drug Use	
		No.	(%)	No.	(%)
United States	8,961	8,838	(98.6)	661	(7.5)
Alabama	125	125	(100.0)	7	(5.6)
Alaska	60	51	(85.0)	5	(9.8)
Arizona	180	169	(93.9)	13	(7.7)
Arkansas	79	79	(100.0)	7	(8.9)
California	2,054	2,019	(98.3)	144	(7.1)
Colorado	62	62	(100.0)	1	(1.6)
Connecticut	58	58	(100.0)	4	(6.9)
Delaware	20	20	(100.0)	4	(20.0)
District of Columbia	32	32	(100.0)	2	(6.3)
Florida	572	569	(99.5)	68	(12.0)
Georgia	308	307	(99.7)	34	(11.1)
Hawaii	134	134	(100.0)	6	(4.5)
Idaho	8	7	(87.5)	1	(14.3)
Illinois	306	300	(98.0)	28	(9.3)
Indiana	105	105	(100.0)	7	(6.7)
Iowa	50	50	(100.0)	4	(8.0)
Kansas	37	37	(100.0)	3	(8.1)
Kentucky	76	76	(100.0)	4	(5.3)
Louisiana	116	115	(99.1)	21	(18.3)
Maine	12	12	(100.0)	0	(0.0)
Maryland	189	189	(100.0)	3	(1.6)
Massachusetts	192	192	(100.0)	9	(4.7)
Michigan	104	102	(98.1)	4	(3.9)
Minnesota	128	128	(100.0)	2	(1.6)
Mississippi	73	72	(98.6)	11	(15.3)
Missouri	77	77	(100.0)	6	(7.8)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	37	35	(94.6)	2	(5.7)
Nevada	62	61	(98.4)	3	(4.9)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	294	(99.7)	7	(2.4)
New Mexico	49	46	(93.9)	2	(4.3)
New York State ²	195	188	(96.4)	3	(1.6)
New York City	571	559	(97.9)	22	(3.9)
North Carolina	184	184	(100.0)	22	(12.0)
North Dakota	14	8	(57.1)	--	--
Ohio	147	147	(100.0)	7	(4.8)
Oklahoma	48	45	(93.8)	4	(8.9)
Oregon	77	75	(97.4)	12	(16.0)
Pennsylvania	207	206	(99.5)	10	(4.9)
Rhode Island	21	18	(85.7)	1	(5.6)
South Carolina	77	74	(96.1)	11	(14.9)
South Dakota	7	7	(100.0)	1	(14.3)
Tennessee	138	137	(99.3)	15	(10.9)
Texas	1,195	1,195	(100.0)	127	(10.6)
Utah	29	29	(100.0)	0	(0.0)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	188	(99.5)	1	(0.5)
Washington	182	175	(96.2)	7	(4.0)
West Virginia	13	13	(100.0)	2	(15.4)
Wisconsin	47	47	(100.0)	3	(6.4)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ³	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ³	127	127	(100.0)	2	(1.6)
Guam ³	48	48	(100.0)	0	(0.0)
Marshall Islands ³	119	118	(99.2)	0	(0.0)
N. Mariana Islands ³	23	23	(100.0)	0	(0.0)
Puerto Rico ³	44	44	(100.0)	9	(20.5)
Republic of Palau ³	13	13	(100.0)	0	(0.0)
U.S. Virgin Islands ³	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Cases Reporting Excess Alcohol Use	
		No.	(%)	No.	(%)
United States	8,961	8,820	(98.4)	954	(10.8)
Alabama	125	125	(100.0)	19	(15.2)
Alaska	60	50	(83.3)	22	(44.0)
Arizona	180	170	(94.4)	21	(12.4)
Arkansas	79	79	(100.0)	4	(5.1)
California	2,054	2,025	(98.6)	162	(8.0)
Colorado	62	62	(100.0)	3	(4.8)
Connecticut	58	58	(100.0)	8	(13.8)
Delaware	20	20	(100.0)	3	(15.0)
District of Columbia	32	32	(100.0)	4	(12.5)
Florida	572	567	(99.1)	90	(15.9)
Georgia	308	306	(99.4)	34	(11.1)
Hawaii	134	134	(100.0)	23	(17.2)
Idaho	8	7	(87.5)	0	(0.0)
Illinois	306	301	(98.4)	45	(15.0)
Indiana	105	105	(100.0)	13	(12.4)
Iowa	50	50	(100.0)	9	(18.0)
Kansas	37	37	(100.0)	2	(5.4)
Kentucky	76	76	(100.0)	10	(13.2)
Louisiana	116	115	(99.1)	21	(18.3)
Maine	12	12	(100.0)	1	(8.3)
Maryland	189	188	(99.5)	9	(4.8)
Massachusetts	192	192	(100.0)	11	(5.7)
Michigan	104	98	(94.2)	4	(4.1)
Minnesota	128	128	(100.0)	6	(4.7)
Mississippi	73	72	(98.6)	5	(6.9)
Missouri	77	77	(100.0)	11	(14.3)
Montana	6	6	(100.0)	1	(16.7)
Nebraska	37	35	(94.6)	4	(11.4)
Nevada	62	61	(98.4)	7	(11.5)
New Hampshire	10	10	(100.0)	0	(0.0)
New Jersey	295	295	(100.0)	11	(3.7)
New Mexico	49	45	(91.8)	5	(11.1)
New York State ²	195	185	(94.9)	13	(7.0)
New York City	571	548	(96.0)	14	(2.6)
North Carolina	184	184	(100.0)	25	(13.6)
North Dakota	14	8	(57.1)	--	--
Ohio	147	147	(100.0)	18	(12.2)
Oklahoma	48	36	(75.0)	7	(19.4)
Oregon	77	75	(97.4)	12	(16.0)
Pennsylvania	207	206	(99.5)	14	(6.8)
Rhode Island	21	21	(100.0)	2	(9.5)
South Carolina	77	74	(96.1)	19	(25.7)
South Dakota	7	7	(100.0)	2	(28.6)
Tennessee	138	138	(100.0)	22	(15.9)
Texas	1,195	1,194	(99.9)	209	(17.5)
Utah	29	29	(100.0)	0	(0.0)
Vermont	2	2	(100.0)	0	(0.0)
Virginia	189	188	(99.5)	7	(3.7)
Washington	182	178	(97.8)	10	(5.6)
West Virginia	13	13	(100.0)	4	(30.8)
Wisconsin	47	47	(100.0)	5	(10.6)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ³	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ³	127	127	(100.0)	1	(0.8)
Guam ³	48	48	(100.0)	2	(4.2)
Marshall Islands ³	119	118	(99.2)	11	(9.3)
N. Mariana Islands ³	23	23	(100.0)	0	(0.0)
Puerto Rico ³	44	44	(100.0)	9	(20.5)
Republic of Palau ³	13	13	(100.0)	1	(7.7)
U.S. Virgin Islands ³	...	...	...	...	...

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, 2014**

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	8,961	8,746	(97.6)	(25.4)	(3.7)	(0.1)	(1.5)	(17.2)	(16.7)	(35.4)
Alabama	125	124	(99.2)	(12.1)	(3.2)	(0.8)	(0.8)	(18.5)	(37.9)	(26.6)
Alaska	60	51	(85.0)	(47.1)	(0.0)	(0.0)	(0.0)	(11.8)	(23.5)	(17.6)
Arizona	180	151	(83.9)	(17.9)	(4.6)	(0.0)	(2.6)	(22.5)	(22.5)	(29.8)
Arkansas	79	79	(100.0)	(24.1)	(3.8)	(0.0)	(0.0)	(32.9)	(6.3)	(32.9)
California	2,054	2,031	(98.9)	(20.7)	(3.9)	(0.0)	(2.8)	(24.2)	(17.2)	(31.3)
Colorado	62	62	(100.0)	(6.5)	(6.5)	(0.0)	(0.0)	(17.7)	(33.9)	(35.5)
Connecticut	58	58	(100.0)	(15.5)	(0.0)	(0.0)	(0.0)	(20.7)	(17.2)	(46.6)
Delaware	20	20	(100.0)	(30.0)	(5.0)	(0.0)	(0.0)	(15.0)	(30.0)	(20.0)
District of Columbia	32	32	(100.0)	(53.1)	(9.4)	(0.0)	(0.0)	(12.5)	(0.0)	(25.0)
Florida	572	561	(98.1)	(60.1)	(1.4)	(0.0)	(2.3)	(4.6)	(2.5)	(29.1)
Georgia	308	307	(99.7)	(38.1)	(2.0)	(0.3)	(1.3)	(10.7)	(12.1)	(35.5)
Hawaii	134	131	(97.8)	(19.8)	(5.3)	(0.8)	(2.3)	(20.6)	(9.9)	(41.2)
Idaho	8	7	(87.5)	(14.3)	(0.0)	(0.0)	(0.0)	(14.3)	(71.4)	(0.0)
Illinois	306	297	(97.1)	(21.2)	(4.4)	(0.3)	(0.0)	(19.9)	(12.8)	(41.4)
Indiana	105	105	(100.0)	(24.8)	(2.9)	(0.0)	(0.0)	(14.3)	(23.8)	(34.3)
Iowa	50	49	(98.0)	(4.1)	(12.2)	(0.0)	(0.0)	(14.3)	(24.5)	(44.9)
Kansas	37	37	(100.0)	(5.4)	(0.0)	(0.0)	(0.0)	(8.1)	(48.6)	(37.8)
Kentucky	76	76	(100.0)	(14.5)	(1.3)	(0.0)	(3.9)	(14.5)	(28.9)	(36.8)
Louisiana	116	107	(92.2)	(29.9)	(2.8)	(0.0)	(3.7)	(17.8)	(15.0)	(30.8)
Maine	12	11	(91.7)	(18.2)	(0.0)	(0.0)	(9.1)	(18.2)	(18.2)	(36.4)
Maryland	189	187	(98.9)	(15.0)	(5.9)	(0.0)	(0.5)	(14.4)	(19.3)	(44.9)
Massachusetts	192	192	(100.0)	(25.0)	(5.7)	(0.0)	(0.0)	(19.8)	(9.4)	(40.1)
Michigan	104	87	(83.7)	(63.2)	(3.4)	(0.0)	(3.4)	(0.0)	(0.0)	(29.9)
Minnesota	128	128	(100.0)	(9.4)	(7.8)	(0.0)	(0.0)	(14.1)	(36.7)	(32.0)
Mississippi	73	71	(97.3)	(43.7)	(0.0)	(0.0)	(0.0)	(25.4)	(4.2)	(26.8)
Missouri	77	66	(85.7)	(24.2)	(6.1)	(1.5)	(0.0)	(18.2)	(16.7)	(33.3)
Montana	6	6	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)
Nebraska	37	36	(97.3)	(11.1)	(2.8)	(0.0)	(2.8)	(13.9)	(19.4)	(50.0)
Nevada	62	60	(96.8)	(13.3)	(3.3)	(0.0)	(0.0)	(13.3)	(28.3)	(41.7)
New Hampshire	10	10	(100.0)	(40.0)	(0.0)	(0.0)	(0.0)	(0.0)	(10.0)	(50.0)
New Jersey	295	295	(100.0)	(22.4)	(7.1)	(0.3)	(1.4)	(12.9)	(19.0)	(36.9)
New Mexico	49	43	(87.8)	(14.0)	(0.0)	(0.0)	(2.3)	(16.3)	(44.2)	(23.3)
New York State ²	195	184	(94.4)	(20.1)	(6.0)	(0.0)	(2.2)	(20.7)	(10.9)	(40.2)
New York City	571	544	(95.3)	(31.3)	(4.0)	(0.0)	(1.5)	(15.6)	(4.2)	(43.4)
North Carolina	184	184	(100.0)	(33.2)	(4.3)	(0.5)	(1.1)	(17.9)	(6.5)	(36.4)
North Dakota	14	0	(0.0)	--	--	--	--	--	--	--
Ohio	147	147	(100.0)	(17.7)	(7.5)	(0.0)	(0.0)	(23.1)	(20.4)	(31.3)
Oklahoma	48	31	(64.6)	--	--	--	--	--	--	--
Oregon	77	76	(98.7)	(22.4)	(2.6)	(0.0)	(2.6)	(22.4)	(18.4)	(31.6)
Pennsylvania	207	206	(99.5)	(23.8)	(3.4)	(0.0)	(0.0)	(28.2)	(11.7)	(33.0)
Rhode Island	21	21	(100.0)	(23.8)	(0.0)	(0.0)	(0.0)	(9.5)	(38.1)	(28.6)
South Carolina	77	76	(98.7)	(30.3)	(1.3)	(0.0)	(3.9)	(17.1)	(17.1)	(30.3)
South Dakota	7	7	(100.0)	(14.3)	(0.0)	(0.0)	(0.0)	(14.3)	(42.9)	(28.6)
Tennessee	138	137	(99.3)	(18.2)	(4.4)	(0.0)	(1.5)	(17.5)	(21.2)	(37.2)
Texas	1,195	1,194	(99.9)	(25.8)	(2.0)	(0.3)	(0.3)	(11.8)	(21.3)	(38.6)
Utah	29	29	(100.0)	(20.7)	(0.0)	(0.0)	(0.0)	(20.7)	(24.1)	(34.5)
Vermont	2	2	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(50.0)	(50.0)
Virginia	189	189	(100.0)	(10.6)	(2.6)	(0.0)	(1.1)	(16.9)	(24.3)	(44.4)
Washington	182	180	(98.9)	(10.6)	(4.4)	(0.0)	(2.8)	(11.1)	(28.9)	(42.2)
West Virginia	13	13	(100.0)	(23.1)	(7.7)	(0.0)	(0.0)	(30.8)	(23.1)	(15.4)
Wisconsin	47	47	(100.0)	(0.0)	(4.3)	(0.0)	(4.3)	(6.4)	(36.2)	(48.9)
Wyoming	2	2	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)
American Samoa ³	1	1	(100.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Fed. States of Micronesia ³	127	126	(99.2)	(29.4)	(2.4)	(0.0)	(1.6)	(0.8)	(55.6)	(10.3)
Guam ³	48	48	(100.0)	(31.3)	(2.1)	(0.0)	(0.0)	(14.6)	(18.8)	(33.3)
Marshall Islands ³	119	118	(99.2)	(49.2)	(1.7)	(0.0)	(0.0)	(2.5)	(22.0)	(24.6)
N. Mariana Islands ³	23	23	(100.0)	(0.0)	(0.0)	(0.0)	(30.4)	(8.7)	(47.8)	(13.0)
Puerto Rico ³	44	44	(100.0)	(38.6)	(2.3)	(2.3)	(0.0)	(6.8)	(22.7)	(27.3)
Republic of Palau ³	13	13	(100.0)	(7.7)	(0.0)	(0.0)	(46.2)	(30.8)	(7.7)	(7.7)
U.S. Virgin Islands ³	...	...	...	...	...	...	...	...	...	...

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, 2014**

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	9,421	9,226	9,169	(99.4)	(0.3)	(2.1)	(85.4)
Alabama	133	128	128	(100.0)	(0.0)	(2.3)	(84.4)
Alaska	62	61	59	(96.7)	(0.0)	(3.4)	(93.2)
Arizona	193	190	189	(99.5)	(0.0)	(1.6)	(93.1)
Arkansas	93	91	90	(98.9)	(1.1)	(14.4)	(82.2)
California	2,145	2,104	2,082	(99.0)	(0.3)	(0.9)	(90.4)
Colorado	64	64	64	(100.0)	(0.0)	(4.7)	(76.6)
Connecticut	60	60	60	(100.0)	(1.7)	(0.0)	(18.3)
Delaware	22	22	22	(100.0)	(0.0)	(0.0)	(81.8)
District of Columbia	32	30	30	(100.0)	(0.0)	(0.0)	(96.7)
Florida	595	580	576	(99.3)	(0.0)	(3.1)	(88.7)
Georgia	335	328	325	(99.1)	(0.6)	(4.0)	(41.5)
Hawaii	136	134	134	(100.0)	(0.0)	(0.0)	(85.1)
Idaho	11	10	10	(100.0)	(0.0)	(0.0)	(80.0)
Illinois	320	312	309	(99.0)	(0.6)	(4.2)	(87.7)
Indiana	108	106	106	(100.0)	(0.0)	(0.9)	(92.5)
Iowa	54	53	53	(100.0)	(0.0)	(3.8)	(94.3)
Kansas	40	39	39	(100.0)	(2.6)	(0.0)	(97.4)
Kentucky	80	77	77	(100.0)	(0.0)	(2.6)	(84.4)
Louisiana	121	118	118	(100.0)	(0.8)	(2.5)	(89.8)
Maine	14	14	14	(100.0)	(0.0)	(7.1)	(85.7)
Maryland	198	195	194	(99.5)	(0.5)	(2.6)	(91.8)
Massachusetts	199	196	195	(99.5)	(0.0)	(2.1)	(73.8)
Michigan	105	102	102	(100.0)	(1.0)	(2.0)	(52.9)
Minnesota	147	147	146	(99.3)	(1.4)	(1.4)	(88.4)
Mississippi	74	72	72	(100.0)	(0.0)	(2.8)	(81.9)
Missouri	79	78	75	(96.2)	(0.0)	(1.3)	(82.7)
Montana	6	6	6	(100.0)	(0.0)	(0.0)	(100.0)
Nebraska	38	38	38	(100.0)	(0.0)	(0.0)	(84.2)
Nevada	74	73	73	(100.0)	(0.0)	(1.4)	(97.3)
New Hampshire	11	11	11	(100.0)	(0.0)	(0.0)	(90.9)
New Jersey	308	300	297	(99.0)	(0.7)	(1.7)	(92.3)
New Mexico	50	45	45	(100.0)	(0.0)	(6.7)	(93.3)
New York State ⁴	202	198	198	(100.0)	(0.5)	(3.0)	(84.8)
New York City	585	573	572	(99.8)	(0.0)	(1.0)	(85.3)
North Carolina	195	192	192	(100.0)	(0.0)	(0.5)	(84.4)
North Dakota	15	15	15	(100.0)	(0.0)	(0.0)	(66.7)
Ohio	156	149	149	(100.0)	(0.0)	(6.0)	(86.6)
Oklahoma	59	59	59	(100.0)	(3.4)	(10.2)	(79.7)
Oregon	77	75	75	(100.0)	(1.3)	(1.3)	(90.7)
Pennsylvania	209	205	205	(100.0)	(0.5)	(0.5)	(56.6)
Rhode Island	21	21	20	(95.2)	(0.0)	(5.0)	(75.0)
South Carolina	79	78	78	(100.0)	(0.0)	(2.6)	(91.0)
South Dakota	8	7	7	(100.0)	(0.0)	(14.3)	(42.9)
Tennessee	151	150	149	(99.3)	(0.0)	(3.4)	(86.6)
Texas	1,269	1,243	1,235	(99.4)	(0.2)	(2.3)	(91.2)
Utah	31	29	29	(100.0)	(0.0)	(0.0)	(86.2)
Vermont	2	2	2	(100.0)	(0.0)	(50.0)	(50.0)
Virginia	198	193	193	(100.0)	(0.0)	(1.0)	(92.7)
Washington	195	191	190	(99.5)	(1.1)	(1.1)	(87.4)
West Virginia	13	13	13	(100.0)	(0.0)	(7.7)	(84.6)
Wisconsin	47	47	47	(100.0)	(0.0)	(4.3)	(89.4)
Wyoming	2	2	2	(100.0)	(0.0)	(0.0)	(100.0)
American Samoa ⁵	1	1	1	(100.0)	(0.0)	(0.0)	(100.0)
Fed. States of Micronesia ⁵	165	163	162	(99.4)	(0.0)	(0.0)	(100.0)
Guam ⁵	56	56	55	(98.2)	(0.0)	(7.3)	(87.3)
Marshall Islands ⁵	151	148	148	(100.0)	(0.0)	(0.0)	(98.0)
N. Mariana Islands ⁵	23	23	0	(0.0)	--	--	--
Puerto Rico ⁵	44	44	44	(100.0)	(0.0)	(0.0)	(100.0)
Republic of Palau ⁵	14	14	14	(100.0)	(0.0)	(0.0)	(92.9)
U.S. Virgin Islands ⁵	...	...	...	...	...	...	...

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, 41 (0.44%) persons were not started on any drugs, 16 (0.17%) were started on one drug, and 1,096 (11.90%) 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, 2014

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	7,226	6,949	(96.2)	680	(9.8)	91	(1.3)
Alabama	104	101	(97.1)	3	(3.0)	1	(1.0)
Alaska	47	40	(85.1)	5	(12.5)	1	(2.5)
Arizona	152	152	(100.0)	21	(13.8)	2	(1.3)
Arkansas	60	58	(96.7)	2	(3.4)	0	(0.0)
California	1,721	1,627	(94.5)	160	(9.8)	17	(1.0)
Colorado	43	43	(100.0)	3	(7.0)	1	(2.3)
Connecticut	46	44	(95.7)	2	(4.5)	1	(2.3)
Delaware	11	6	(54.5)	--	--	--	--
District of Columbia	28	28	(100.0)	0	(0.0)	0	(0.0)
Florida	474	458	(96.6)	46	(10.0)	10	(2.2)
Georgia	245	243	(99.2)	55	(22.6)	5	(2.1)
Hawaii	97	94	(96.9)	5	(5.3)	1	(1.1)
Idaho	6	5	(83.3)	0	(0.0)	0	(0.0)
Illinois	257	238	(92.6)	15	(6.3)	1	(0.4)
Indiana	85	85	(100.0)	9	(10.6)	2	(2.4)
Iowa	39	32	(82.1)	0	(0.0)	0	(0.0)
Kansas	32	32	(100.0)	2	(6.3)	1	(3.1)
Kentucky	60	60	(100.0)	9	(15.0)	2	(3.3)
Louisiana	94	78	(83.0)	7	(9.0)	0	(0.0)
Maine	11	11	(100.0)	3	(27.3)	0	(0.0)
Maryland	153	152	(99.3)	15	(9.9)	2	(1.3)
Massachusetts	150	147	(98.0)	27	(18.4)	4	(2.7)
Michigan	75	71	(94.7)	7	(9.9)	0	(0.0)
Minnesota	106	105	(99.1)	19	(18.1)	1	(1.0)
Mississippi	57	57	(100.0)	3	(5.3)	0	(0.0)
Missouri	58	42	(72.4)	--	--	--	--
Montana	6	6	(100.0)	1	(16.7)	0	(0.0)
Nebraska	31	31	(100.0)	2	(6.5)	0	(0.0)
Nevada	46	43	(93.5)	6	(14.0)	0	(0.0)
New Hampshire	8	8	(100.0)	1	(12.5)	0	(0.0)
New Jersey	246	242	(98.4)	24	(9.9)	4	(1.7)
New Mexico	38	38	(100.0)	3	(7.9)	0	(0.0)
New York State ³	164	163	(99.4)	13	(8.0)	2	(1.2)
New York City	452	446	(98.7)	49	(11.0)	9	(2.0)
North Carolina	152	151	(99.3)	10	(6.6)	1	(0.7)
North Dakota	9	0	(0.0)	--	--	--	--
Ohio	116	115	(99.1)	9	(7.8)	5	(4.3)
Oklahoma	39	38	(97.4)	0	(0.0)	0	(0.0)
Oregon	63	63	(100.0)	5	(7.9)	1	(1.6)
Pennsylvania	160	154	(96.3)	5	(3.2)	1	(0.6)
Rhode Island	15	15	(100.0)	4	(26.7)	1	(6.7)
South Carolina	55	55	(100.0)	7	(12.7)	1	(1.8)
South Dakota	7	7	(100.0)	1	(14.3)	0	(0.0)
Tennessee	101	99	(98.0)	9	(9.1)	1	(1.0)
Texas	931	897	(96.3)	73	(8.1)	6	(0.7)
Utah	19	19	(100.0)	1	(5.3)	1	(5.3)
Vermont	2	2	(100.0)	0	(0.0)	0	(0.0)
Virginia	151	149	(98.7)	12	(8.1)	3	(2.0)
Washington	153	151	(98.7)	16	(10.6)	1	(0.7)
West Virginia	12	12	(100.0)	2	(16.7)	0	(0.0)
Wisconsin	37	35	(94.6)	4	(11.4)	2	(5.7)
Wyoming	2	1	(50.0)	--	--	--	--
American Samoa ⁴	1	1	(100.0)	1	(100.0)	1	(100.0)
Fed. States of Micronesia ⁴	67	63	(94.0)	0	(0.0)	0	(0.0)
Guam ⁴	32	32	(100.0)	3	(9.4)	1	(3.1)
Marshall Islands ⁴	61	55	(90.2)	0	(0.0)	0	(0.0)
N. Mariana Islands ⁴	18	15	(83.3)	1	(6.7)	0	(0.0)
Puerto Rico ⁴	40	38	(95.0)	1	(2.6)	0	(0.0)
Republic of Palau ⁴	6	5	(83.3)	1	(20.0)	1	(20.0)
U.S. Virgin Islands ⁴	...	...	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Cases with Information on HIV Status ¹		Cases in Persons with HIV-Positive Results ²	
		No.	(%)	No.	(%)
United States	9,229	8,168	(88.5)	492	(6.0)
Alabama	128	128	(100.0)	7	(5.5)
Alaska	61	56	(91.8)	0	(0.0)
Arizona	190	182	(95.8)	9	(4.9)
Arkansas	91	77	(84.6)	4	(5.2)
California	2,104	1,855	(88.2)	87	(4.7)
Colorado	64	63	(98.4)	0	(0.0)
Connecticut	60	56	(93.3)	0	(0.0)
Delaware	22	15	(68.2)	1	(6.7)
District of Columbia	30	30	(100.0)	3	(10.0)
Florida	580	503	(86.7)	60	(11.9)
Georgia	328	308	(93.9)	37	(12.0)
Hawaii	134	133	(99.3)	0	(0.0)
Idaho	10	7	(70.0)	1	(14.3)
Illinois	312	282	(90.4)	16	(5.7)
Indiana	106	92	(86.8)	6	(6.5)
Iowa	53	36	(67.9)	0	(0.0)
Kansas	39	39	(100.0)	0	(0.0)
Kentucky	77	74	(96.1)	2	(2.7)
Louisiana	118	106	(89.8)	7	(6.6)
Maine	14	13	(92.9)	0	(0.0)
Maryland	195	186	(95.4)	14	(7.5)
Massachusetts	196	107	(54.6)	13	(12.1)
Michigan	104	91	(87.5)	4	(4.4)
Minnesota	147	139	(94.6)	4	(2.9)
Mississippi	72	71	(98.6)	2	(2.8)
Missouri	78	64	(82.1)	5	(7.8)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	38	33	(86.8)	0	(0.0)
Nevada	74	73	(98.6)	4	(5.5)
New Hampshire	11	11	(100.0)	1	(9.1)
New Jersey	300	244	(81.3)	14	(5.7)
New Mexico	45	40	(88.9)	2	(5.0)
New York State ³	198	169	(85.4)	6	(3.6)
New York City	573	475	(82.9)	39	(8.2)
North Carolina	192	186	(96.9)	8	(4.3)
North Dakota	15	15	(100.0)	0	(0.0)
Ohio	149	128	(85.9)	9	(7.0)
Oklahoma	59	48	(81.4)	2	(4.2)
Oregon	75	73	(97.3)	2	(2.7)
Pennsylvania	205	180	(87.8)	14	(7.8)
Rhode Island	21	19	(90.5)	0	(0.0)
South Carolina	78	75	(96.2)	7	(9.3)
South Dakota	7	6	(85.7)	1	(16.7)
Tennessee	150	145	(96.7)	17	(11.7)
Texas	1,243	1,084	(87.2)	65	(6.0)
Utah	29	29	(100.0)	2	(6.9)
Vermont	2	0	(0.0)	0	(0.0)
Virginia	193	191	(99.0)	10	(5.2)
Washington	191	169	(88.5)	6	(3.6)
West Virginia	13	13	(100.0)	0	(0.0)
Wisconsin	47	41	(87.2)	1	(2.4)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa ⁴	1	1	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	163	107	(65.6)	--	--
Guam ⁴	56	55	(98.2)	0	(0.0)
Marshall Islands ⁴	148	119	(80.4)	0	(0.0)
N. Mariana Islands ⁴	23	20	(87.0)	0	(0.0)
Puerto Rico ⁴	44	39	(88.6)	6	(15.4)
Republic of Palau ⁴	14	12	(85.7)	0	(0.0)
U.S. Virgin Islands ⁴	...	...	...	...	...

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, 2014

Reporting Area	Nucleic Acid Amplification Test					Sputum Culture					Culture of Tissue or Other Fluids				
	Total ¹		Commercial Lab		Public Health Lab	Other Lab	Missing	Total ²		Commercial Lab		Public Health Lab	Other Lab	Missing	
	No.	(%)	(29.3)	(55.4)	(10.9)	(4.5)	(%)	No.	(%)	(27.2)	(51.9)	(15.1)	(5.8)	(%)	
United States	5297							7837							
Alabama	58	(10.3)	(79.3)	(8.6)	(1.7)			119	(2.5)	(92.4)	(1.7)	(3.4)	57	(26.3)	
Alaska	44	(0.0)	(100.0)	(0.0)	(0.0)			54	(0.0)	(100.0)	(0.0)	(0.0)	11	(0.0)	
Arizona	82	(26.8)	(70.7)	(1.2)	(1.2)			166	(19.3)	(77.7)	(3.0)	(0.0)	95	(52.6)	
Arkansas	64	(6.3)	(90.6)	(3.1)	(0.0)			77	(5.2)	(87.0)	(6.5)	(1.3)	45	(17.8)	
California	1190	(37.2)	(52.3)	(8.6)	(1.9)			1815	(41.9)	(43.1)	(12.5)	(2.5)	969	(55.9)	
Colorado	30	(10.0)	(23.3)	(33.3)	(33.3)			51	(7.8)	(33.3)	(15.7)	(43.1)	36	(25.0)	
Connecticut	27	(48.1)	(51.9)	(0.0)	(0.0)			43	(41.9)	(58.1)	(0.0)	(0.0)	39	(43.6)	
Delaware	11	(0.0)	(100.0)	(0.0)	(0.0)			9	(33.3)	(66.7)	(0.0)	(0.0)	8	(12.5)	
District of Columbia	17	(100.0)	(0.0)	(0.0)	(0.0)			32	(100.0)	(0.0)	(0.0)	(0.0)	16	(100.0)	
Florida	489	(12.9)	(79.3)	(7.8)	(0.0)			521	(15.7)	(80.6)	(3.6)	(0.0)	238	(42.4)	
Georgia	207	(45.4)	(46.4)	(2.4)	(5.8)			292	(27.7)	(57.9)	(14.4)	(0.0)	128	(72.7)	
Hawaii	101	(98.0)	(0.0)	(0.0)	(2.0)			131	(96.9)	(0.0)	(2.3)	(0.8)	56	(92.9)	
Idaho	9	(11.1)	(88.9)	(0.0)	(0.0)			7	(0.0)	(85.7)	(0.0)	(14.3)	5	(20.0)	
Illinois	134	(47.0)	(38.1)	(14.9)	(0.0)			237	(35.4)	(33.8)	(30.8)	(0.0)	177	(61.0)	
Indiana	70	(38.6)	(47.1)	(14.3)	(0.0)			78	(10.3)	(69.2)	(19.2)	(1.3)	41	(31.7)	
Iowa	34	(29.4)	(70.6)	(0.0)	(0.0)			35	(8.6)	(91.4)	(0.0)	(0.0)	28	(25.0)	
Kansas	12	(33.3)	(66.7)	(0.0)	(0.0)			35	(14.3)	(85.7)	(0.0)	(0.0)	16	(62.5)	
Kentucky	54	(24.1)	(57.4)	(18.5)	(0.0)			73	(6.8)	(75.3)	(17.8)	(0.0)	46	(23.9)	
Louisiana	73	(26.0)	(69.9)	(4.1)	(0.0)			106	(44.3)	(44.3)	(10.4)	(0.9)	36	(52.8)	
Maine	8	(0.0)	(87.5)	(12.5)	(0.0)			8	(0.0)	(100.0)	(0.0)	(0.0)	8	(0.0)	
Maryland	119	(37.8)	(58.0)	(4.2)	(0.0)			181	(10.5)	(83.4)	(5.5)	(0.6)	92	(55.4)	
Massachusetts	117	(3.4)	(57.3)	(0.0)	(39.3)			147	(23.8)	(36.7)	(0.0)	(39.5)	117	(35.9)	
Michigan	62	(9.7)	(53.2)	(17.7)	(19.4)			72	(0.0)	(100.0)	(0.0)	(0.0)	44	(11.4)	
Minnesota	71	(69.0)	(31.0)	(0.0)	(0.0)			102	(56.9)	(43.1)	(0.0)	(0.0)	87	(57.5)	
Mississippi	58	(1.7)	(0.0)	(56.9)	(41.4)			69	(4.3)	(0.0)	(59.4)	(36.2)	39	(7.7)	
Missouri	23	(34.8)	(56.5)	(0.0)	(8.7)			58	(13.8)	(84.5)	(0.0)	(1.7)	49	(46.9)	
Montana	4	(0.0)	(100.0)	(0.0)	(0.0)			4	(0.0)	(100.0)	(0.0)	(0.0)	5	(0.0)	
Nebraska	22	(9.1)	(63.6)	(18.2)	(9.1)			28	(14.3)	(60.7)	(17.9)	(7.1)	16	(12.5)	
Nevada	24	(12.5)	(83.3)	(0.0)	(4.2)			58	(32.8)	(65.5)	(0.0)	(1.7)	19	(63.2)	
New Hampshire	6	(50.0)	(50.0)	(0.0)	(0.0)			7	(28.6)	(57.1)	(0.0)	(14.3)	9	(66.7)	
New Jersey	80	(60.0)	(5.0)	(35.0)	(0.0)			217	(30.4)	(32.7)	(36.9)	(0.0)	183	(37.7)	
New Mexico	30	(50.0)	(46.7)	(0.0)	(3.3)			38	(47.4)	(47.4)	(0.0)	(5.3)	17	(94.1)	

Table 52. (Con't) Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2014

Reporting Area	Nucleic Acid Amplification Test					Sputum Culture					Culture of Tissue or Other Fluids									
	Total ¹		Public Health Lab		Other Lab	Commercial Lab		Public Health Lab	Other Lab	Missing	Total ³		Commercial Lab		Public Health Lab	Other Lab	Missing			
	No.	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	No.	(%)	(%)	(%)	(%)	(%)	(%)			
New York State ⁴	124	(17.7)	(33.1)	(10.5)	(38.7)	(29.2)	(25.3)	(11.2)	(34.3)		178	(29.2)	(25.3)	(11.2)	(34.3)	96	(29.2)	(21.9)	(20.8)	(28.1)
New York City	410	(5.9)	(66.6)	(21.0)	(6.6)	(7.3)	(12.5)	(46.7)	(33.4)		518	(7.3)	(12.5)	(46.7)	(33.4)	290	(5.5)	(9.7)	(54.5)	(30.3)
North Carolina	91	(39.6)	(60.4)	(0.0)	(0.0)	(20.4)	(65.1)	(14.5)	(0.0)		152	(20.4)	(65.1)	(14.5)	(0.0)	102	(42.2)	(13.7)	(44.1)	(0.0)
North Dakota	1	(0.0)	(100.0)	(0.0)	(0.0)	(22.2)	(66.7)	(0.0)	(11.1)		9	(22.2)	(66.7)	(0.0)	(11.1)	7	(28.6)	(14.3)	(0.0)	(57.1)
Ohio	75	(88.0)	(12.0)	(0.0)	(0.0)	(95.7)	(4.3)	(0.0)	(0.0)		116	(95.7)	(4.3)	(0.0)	(0.0)	97	(97.9)	(2.1)	(0.0)	(0.0)
Oklahoma	40	(20.0)	(80.0)	(0.0)	(0.0)	(12.2)	(87.8)	(0.0)	(0.0)		41	(12.2)	(87.8)	(0.0)	(0.0)	18	(38.9)	(61.1)	(0.0)	(0.0)
Oregon	62	(9.7)	(50.0)	(40.3)	(0.0)	(7.0)	(70.4)	(22.5)	(0.0)		71	(7.0)	(70.4)	(22.5)	(0.0)	34	(11.8)	(20.6)	(67.6)	(0.0)
Pennsylvania	81	(19.8)	(59.3)	(4.9)	(16.0)	(24.8)	(56.5)	(8.1)	(10.6)		161	(24.8)	(56.5)	(8.1)	(10.6)	116	(46.6)	(19.8)	(25.9)	(7.8)
Rhode Island	10	(10.0)	(90.0)	(0.0)	(0.0)	(17.6)	(82.4)	(0.0)	(0.0)		17	(17.6)	(82.4)	(0.0)	(0.0)	10	(30.0)	(70.0)	(0.0)	(0.0)
South Carolina	49	(12.2)	(77.6)	(10.2)	(0.0)	(6.2)	(78.5)	(15.4)	(0.0)		65	(6.2)	(78.5)	(15.4)	(0.0)	40	(40.0)	(25.0)	(35.0)	(0.0)
South Dakota	5	(0.0)	(100.0)	(0.0)	(0.0)	(4.0)	(100.0)	(0.0)	(0.0)		4	(0.0)	(100.0)	(0.0)	(0.0)	6	(0.0)	(100.0)	(0.0)	(0.0)
Tennessee	76	(57.9)	(38.2)	(3.9)	(0.0)	(15.4)	(80.4)	(4.2)	(0.0)		143	(15.4)	(80.4)	(4.2)	(0.0)	77	(61.0)	(28.6)	(10.4)	(0.0)
Texas	678	(22.7)	(55.6)	(20.6)	(1.0)	(14.7)	(57.2)	(25.3)	(2.8)		1081	(14.7)	(57.2)	(25.3)	(2.8)	496	(37.1)	(14.7)	(45.8)	(2.4)
Utah	13	(23.1)	(76.9)	(0.0)	(0.0)	(45.8)	(54.2)	(0.0)	(0.0)		24	(45.8)	(54.2)	(0.0)	(0.0)	15	(93.3)	(6.7)	(0.0)	(0.0)
Vermont	1	(100.0)	(0.0)	(0.0)	(0.0)	(2.0)	(100.0)	(0.0)	(0.0)		2	(100.0)	(0.0)	(0.0)	(0.0)	2	(50.0)	(50.0)	(0.0)	(0.0)
Virginia	76	(46.1)	(43.4)	(10.5)	(0.0)	(12.4)	(76.8)	(9.2)	(1.6)		185	(12.4)	(76.8)	(9.2)	(1.6)	88	(31.8)	(39.8)	(27.3)	(1.1)
Washington	132	(30.3)	(64.4)	(1.5)	(3.8)	(50.6)	(44.8)	(1.9)	(2.6)		154	(50.6)	(44.8)	(1.9)	(2.6)	89	(84.3)	(5.6)	(3.4)	(6.7)
West Virginia	10	(10.0)	(90.0)	(0.0)	(0.0)	(9.1)	(81.8)	(9.1)	(0.0)		11	(9.1)	(81.8)	(9.1)	(0.0)	3	(33.3)	(33.3)	(33.3)	(0.0)
Wisconsin	33	(12.1)	(81.8)	(3.0)	(3.0)	(34.3)	(65.7)	(0.0)	(0.0)		35	(34.3)	(65.7)	(0.0)	(0.0)	21	(42.9)	(57.1)	(0.0)	(0.0)
Wyoming	0	...	...	...	...	...	...	...	...		0	...	...	...	...	2	(100.0)	(0.0)	(0.0)	(0.0)
American Samoa ⁵	0	...	...	...	...	(100.0)	(0.0)	(0.0)	(0.0)		1	(100.0)	(0.0)	(0.0)	(0.0)	0	...	...	...	...
Fed. States of Micronesia ⁵	49	(100.0)	(0.0)	(0.0)	(0.0)	(99.3)	(0.0)	(0.0)	(0.7)		139	(99.3)	(0.0)	(0.0)	(0.0)	9	(100.0)	(0.0)	(0.0)	(0.0)
Guam ⁵	44	(20.5)	(75.0)	(0.0)	(4.5)	(98.1)	(1.9)	(0.0)	(0.0)		52	(98.1)	(1.9)	(0.0)	(0.0)	5	(100.0)	(0.0)	(0.0)	(0.0)
Marshall Islands ⁵	9	(100.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)		111	(100.0)	(0.0)	(0.0)	(0.0)	4	(100.0)	(0.0)	(0.0)	(0.0)
N. Mariana Islands ⁵	0	...	...	...	...	(95.7)	(4.3)	(0.0)	(0.0)		23	(95.7)	(4.3)	(0.0)	(0.0)	0	...	...	...	...
Puerto Rico ⁵	26	(0.0)	(100.0)	(0.0)	(0.0)	(9.8)	(90.2)	(0.0)	(0.0)		41	(9.8)	(90.2)	(0.0)	(0.0)	15	(20.0)	(80.0)	(0.0)	(0.0)
Republic of Palau ⁵	7	(0.0)	(85.7)	(0.0)	(14.3)	(90.9)	(0.0)	(0.0)	(9.1)		11	(90.9)	(0.0)	(0.0)	(9.1)	0	...	...	...	...
U.S. Virgin Islands ⁵	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...

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, 2014

Reporting Area	Total Cases	Culture Positive Cases	Genotyped Cases	Genotype Surveillance Coverage ²
		No.	No.	(%)
United States	9,421	7,226	6,887	95.3
Alabama	133	104	98	94.2
Alaska	62	47	43	91.5
Arizona	193	152	151	99.3
Arkansas	93	60	55	91.7
California	2,145	1,721	1,632	94.8
Colorado	64	43	43	100.0
Connecticut	60	46	46	100.0
District of Columbia	32	28	26	92.9
Delaware	22	11	10	90.9
Florida	595	474	469	98.9
Georgia	335	245	236	96.3
Hawaii	136	97	96	99.0
Idaho	11	6	6	100.0
Illinois	320	257	191	74.3
Indiana	108	85	83	97.6
Iowa	54	39	39	100.0
Kansas	40	32	30	93.8
Kentucky	80	60	60	100.0
Louisiana	121	94	70	74.5
Maine	14	11	11	100.0
Maryland	198	153	148	96.7
Massachusetts	199	150	143	95.3
Michigan	105	75	73	97.3
Minnesota	147	106	106	100.0
Mississippi	74	57	56	98.2
Missouri	79	58	54	93.1
Montana	6	6	6	100.0
Nebraska	38	31	29	93.5
Nevada	74	46	42	91.3
New Hampshire	11	8	8	100.0
New Jersey	308	246	243	98.8
New Mexico	50	38	37	97.4
New York ¹	787	616	580	94.2
North Carolina	195	152	152	100.0
North Dakota	15	9	9	100.0
Ohio	156	116	116	100.0
Oklahoma	59	39	36	92.3
Oregon	77	63	63	100.0
Pennsylvania	209	160	155	96.9
Rhode Island	21	15	15	100.0
South Carolina	79	55	54	98.2
South Dakota	8	7	7	100.0
Tennessee	151	101	100	99.0
Texas	1,269	931	899	96.6
Utah	31	19	19	100.0
Vermont	2	2	2	100.0
Virginia	198	151	143	94.7
Washington	195	153	149	97.4
West Virginia	13	12	11	91.7
Wisconsin	47	37	35	94.6
Wyoming	2	2	2	100.0
American Samoa ³	1	1	1	100.0
Fed State of Micronesia ³	165	67	65	97.0
Guam ³	56	32	29	90.6
Marshall Islands ³	151	61	55	90.2
N. Mariana Islands ³	23	18	15	83.3
Puerto Rico ³	44	40	38	95.0
Republic of Palau ³	14	6	5	83.3
U.S. Virgin Islands ³	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, 2012–2014

Reporting Area	Genotyped Cases	Genotype Surveillance Coverage ²	Clusters	Clustered Cases	Cluster Size	
	No.	(%)	No.	No.	Median	(Range)
United States	21,157	95.2	1,494	4,544	2	(2-58)
Alabama	289	97.6	29	85	2	(2-9)
Alaska	149	94.9	14	111	5	(2-24)
Arizona	469	99.2	35	82	2	(2-5)
Arkansas	142	95.9	7	24	2	(2-9)
California	4,941	94.5	418	1,289	2	(2-52)
Colorado	138	100.0	3	6	2	(2-2)
Connecticut	151	99.3	5	15	3	(2-4)
District of Columbia	72	88.9	6	15	2	(2-4)
Delaware	35	81.4	1	2	2	(2-2)
Florida	1,519	99.3	123	380	2	(2-58)
Georgia	710	97.3	49	173	2	(2-29)
Hawaii	272	97.8	23	70	2	(2-8)
Idaho	25	100.0	-	-	-	-
Illinois	591	79.5	35	103	2	(2-9)
Indiana	232	98.3	9	35	2	(2-11)
Iowa	102	94.4	5	10	2	(2-2)
Kansas	94	90.4	2	4	2	(2-2)
Kentucky	167	100.0	9	23	2	(2-4)
Louisiana	240	71.2	29	76	2	(2-6)
Maine	32	97.0	2	4	2	(2-2)
Maryland	431	98.4	19	45	2	(2-5)
Massachusetts	432	94.7	17	40	2	(2-6)
Michigan	271	97.1	10	36	3	(2-10)
Minnesota	345	99.7	18	51	3	(2-5)
Mississippi	167	97.1	12	31	2	(2-5)
Missouri	188	94.9	12	33	2	(2-5)
Montana	15	93.8	-	-	-	-
Nebraska	57	95.0	1	2	2	(2-2)
Nevada	165	95.9	10	23	2	(2-4)
New Hampshire	30	96.8	1	3	3	(3-3)
New Jersey	718	98.5	37	94	2	(2-7)
New Mexico	112	97.4	2	4	2	(2-2)
New York	1,783	94.0	109	275	2	(2-11)
North Carolina	484	99.4	36	108	2	(2-17)
North Dakota	29	100.0	2	13	7	(2-11)
Ohio	338	99.1	17	51	2	(2-8)
Oklahoma	151	95.0	13	33	2	(2-5)
Oregon	167	100.0	8	25	3	(2-5)
Pennsylvania	481	92.9	19	48	2	(2-6)
Rhode Island	47	100.0	2	4	2	(2-2)
South Carolina	210	96.3	17	57	2	(2-9)
South Dakota	27	100.0	-	-	-	-
Tennessee	308	97.2	16	63	2	(2-13)
Texas	2660	95.6	249	834	2	(2-43)
Utah	71	100.0	2	4	2	(2-2)
Vermont	8	100.0	-	-	-	-
Virginia	447	96.3	18	43	2	(2-5)
Washington	478	97.0	31	85	2	(2-8)
West Virginia	29	93.5	2	4	2	(2-2)
Wisconsin	134	97.1	10	28	2	(2-8)
Wyoming	4	80.0	-	-	-	-

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 2012–2014=1,494).

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, 2012

**Table 55. Tuberculosis Cases and Percentages by Type of Health Care Provider:
Reporting Areas, 2012¹**

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	9,941	9,717	9,184	(94.5)	(66.9)	(22.7)	(10.4)
Alabama	134	133	116	(87.2)	(79.3)	(11.2)	(9.5)
Alaska	66	65	57	(87.7)	(12.3)	(12.3)	(75.4)
Arizona	211	207	204	(98.6)	(68.1)	(21.1)	(10.8)
Arkansas	70	67	67	(100.0)	(89.6)	(4.5)	(6.0)
California	2,188	2,141	2,115	(98.8)	(55.7)	(35.6)	(8.7)
Colorado	64	63	62	(98.4)	(93.5)	(6.5)	(0.0)
Connecticut	74	73	73	(100.0)	(11.0)	(34.2)	(54.8)
Delaware	28	27	22	(81.5)	(90.9)	(4.5)	(4.5)
District of Columbia	37	35	28	(80.0)	(71.4)	(7.1)	(21.4)
Florida	678	658	645	(98.0)	(67.0)	(23.9)	(9.1)
Georgia	357	347	338	(97.4)	(78.4)	(12.1)	(9.5)
Hawaii	117	113	113	(100.0)	(72.6)	(15.9)	(11.5)
Idaho	15	15	15	(100.0)	(46.7)	(46.7)	(6.7)
Illinois	347	343	342	(99.7)	(45.3)	(15.8)	(38.9)
Indiana	102	99	99	(100.0)	(56.6)	(6.1)	(37.4)
Iowa	46	44	43	(97.7)	(0.0)	(100.0)	(0.0)
Kansas	42	40	40	(100.0)	(90.0)	(2.5)	(7.5)
Kentucky	78	76	76	(100.0)	(81.6)	(11.8)	(6.6)
Louisiana	148	142	120	(84.5)	(70.8)	(12.5)	(16.7)
Maine	17	17	16	(94.1)	(6.3)	(93.8)	(0.0)
Maryland	224	222	219	(98.6)	(91.8)	(5.9)	(2.3)
Massachusetts	216	210	172	(81.9)	(79.1)	(18.6)	(2.3)
Michigan	149	146	138	(94.5)	(71.7)	(28.3)	(0.0)
Minnesota	162	161	161	(100.0)	(57.1)	(36.0)	(6.8)
Mississippi	81	78	77	(98.7)	(96.1)	(1.3)	(2.6)
Missouri	89	87	27	(31.0)	--	--	--
Montana	5	5	5	(100.0)	(0.0)	(100.0)	(0.0)
Nebraska	22	22	18	(81.8)	(16.7)	(27.8)	(55.6)
Nevada	84	82	63	(76.8)	(90.5)	(7.9)	(1.6)
New Hampshire	9	9	9	(100.0)	(33.3)	(33.3)	(33.3)
New Jersey	302	293	293	(100.0)	(71.7)	(20.1)	(8.2)
New Mexico	40	38	36	(94.7)	(58.3)	(38.9)	(2.8)
New York State ³	215	210	207	(98.6)	(63.3)	(25.6)	(11.1)
New York City	652	641	388	(60.5)	--	--	--
North Carolina	211	207	207	(100.0)	(77.8)	(4.8)	(17.4)
North Dakota	26	25	24	(96.0)	(0.0)	(100.0)	(0.0)
Ohio	149	145	136	(93.8)	(76.5)	(23.5)	(0.0)
Oklahoma	88	86	86	(100.0)	(75.6)	(7.0)	(17.4)
Oregon	61	60	60	(100.0)	(48.3)	(41.7)	(10.0)
Pennsylvania	234	228	227	(99.6)	(74.4)	(19.8)	(5.7)
Rhode Island	23	23	23	(100.0)	(91.3)	(8.7)	(0.0)
South Carolina	122	118	118	(100.0)	(88.1)	(7.6)	(4.2)
South Dakota	19	17	17	(100.0)	(52.9)	(47.1)	(0.0)
Tennessee	163	160	159	(99.4)	(91.2)	(6.9)	(1.9)
Texas	1,233	1,209	1,205	(99.7)	(78.6)	(17.1)	(4.3)
Utah	37	36	36	(100.0)	(94.4)	(5.6)	(0.0)
Vermont	4	4	4	(100.0)	(50.0)	(0.0)	(50.0)
Virginia	235	228	227	(99.6)	(78.0)	(17.2)	(4.8)
Washington	185	180	175	(97.2)	(68.0)	(21.1)	(10.9)
West Virginia	8	8	5	(62.5)	--	--	--
Wisconsin	71	71	71	(100.0)	(14.1)	(1.4)	(84.5)
Wyoming	3	3	0	(0.0)	--	--	--
American Samoa ⁴	1	1	1	(100.0)	(0.0)	(100.0)	(0.0)
Fed. States of Micronesia ⁴	173	173	169	(97.7)	(100.0)	(0.0)	(0.0)
Guam ⁴	68	67	66	(98.5)	(98.5)	(1.5)	(0.0)
Marshall Islands ⁴	147	147	75	(51.0)	--	--	--
N. Mariana Islands ⁴	26	26	26	(100.0)	(88.5)	(11.5)	(0.0)
Puerto Rico ⁴	71	66	66	(100.0)	(69.7)	(28.8)	(1.5)
Republic of Palau ⁴	4	4	4	(100.0)	(100.0)	(0.0)	(0.0)
U.S. Virgin Islands ⁴	3	3	2	(66.7)	--	--	--

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, 2012¹

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	9,941	9,666	9,387	(97.1)	(61.8)	(29.2)
Alabama	134	132	132	(100.0)	(40.9)	(56.1)
Alaska	66	64	62	(96.9)	(98.4)	(1.6)
Arizona	211	205	199	(97.1)	(81.4)	(18.1)
Arkansas	70	67	65	(97.0)	(12.3)	(36.9)
California	2,188	2,128	2,100	(98.7)	(50.3)	(36.6)
Colorado	64	63	61	(96.8)	(82.0)	(13.1)
Connecticut	74	73	73	(100.0)	(9.6)	(61.6)
Delaware	28	27	24	(88.9)	(58.3)	(41.7)
District of Columbia	37	35	32	(91.4)	(93.8)	(6.3)
Florida	678	654	652	(99.7)	(25.2)	(70.7)
Georgia	357	344	337	(98.0)	(89.6)	(9.5)
Hawaii	117	112	112	(100.0)	(84.8)	(8.9)
Idaho	15	15	15	(100.0)	(26.7)	(60.0)
Illinois	347	342	338	(98.8)	(45.3)	(38.8)
Indiana	102	99	99	(100.0)	(80.8)	(17.2)
Iowa	46	44	44	(100.0)	(86.4)	(6.8)
Kansas	42	40	40	(100.0)	(90.0)	(10.0)
Kentucky	78	76	76	(100.0)	(81.6)	(18.4)
Louisiana	148	137	116	(84.7)	(57.8)	(15.5)
Maine	17	17	17	(100.0)	(5.9)	(94.1)
Maryland	224	221	221	(100.0)	(81.9)	(15.4)
Massachusetts	216	209	206	(98.6)	(47.1)	(33.5)
Michigan	149	140	127	(90.7)	(50.4)	(49.6)
Minnesota	162	160	160	(100.0)	(88.1)	(10.6)
Mississippi	81	78	77	(98.7)	(68.8)	(31.2)
Missouri	89	87	82	(94.3)	(36.6)	(58.5)
Montana	5	5	5	(100.0)	(60.0)	(0.0)
Nebraska	22	22	20	(90.9)	(45.0)	(45.0)
Nevada	84	82	65	(79.3)	(96.9)	(1.5)
New Hampshire	9	9	9	(100.0)	(44.4)	(55.6)
New Jersey	302	293	291	(99.3)	(53.3)	(27.1)
New Mexico	40	38	37	(97.4)	(100.0)	(0.0)
New York State ⁴	215	210	209	(99.5)	(36.4)	(59.3)
New York City	652	639	523	(81.8)	(64.6)	(6.5)
North Carolina	211	207	207	(100.0)	(94.7)	(5.3)
North Dakota	26	25	22	(88.0)	(45.5)	(50.0)
Ohio	149	143	142	(99.3)	(59.2)	(24.6)
Oklahoma	88	86	83	(96.5)	(24.1)	(73.5)
Oregon	61	60	60	(100.0)	(80.0)	(15.0)
Pennsylvania	234	226	226	(100.0)	(73.0)	(18.1)
Rhode Island	23	23	23	(100.0)	(26.1)	(73.9)
South Carolina	122	118	117	(99.2)	(87.2)	(9.4)
South Dakota	19	17	17	(100.0)	(41.2)	(58.8)
Tennessee	163	160	160	(100.0)	(99.4)	(0.6)
Texas	1,233	1,204	1,203	(99.9)	(76.1)	(22.4)
Utah	37	36	36	(100.0)	(97.2)	(2.8)
Vermont	4	4	4	(100.0)	(50.0)	(25.0)
Virginia	235	228	219	(96.1)	(84.5)	(11.9)
Washington	185	180	163	(90.6)	(62.6)	(20.2)
West Virginia	8	8	8	(100.0)	(100.0)	(0.0)
Wisconsin	71	71	71	(100.0)	(85.9)	(12.7)
Wyoming	3	3	0	(0.0)	--	--
American Samoa ⁵	1	1	1	(100.0)	(100.0)	(0.0)
Fed. States of Micronesia ⁵	173	173	172	(99.4)	(96.5)	(2.3)
Guam ⁵	68	67	64	(95.5)	(100.0)	(0.0)
Marshall Islands ⁵	147	147	74	(50.3)	--	--
N. Mariana Islands ⁵	26	26	26	(100.0)	(65.4)	(30.8)
Puerto Rico ⁵	71	66	66	(100.0)	(65.2)	(1.5)
Republic of Palau ⁵	4	4	4	(100.0)	(0.0)	(100.0)
U.S. Virgin Islands ⁵	3	3	1	(33.3)	--	--

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, 2012¹

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	9,666	8,421	(87.1)	31	(0.3)	123	(1.3)	56	(0.6)	600	(6.2)	435	(4.5)
Alabama	132	119	(90.2)	1	(0.8)	1	(0.8)	0	(0.0)	7	(5.3)	4	(3.0)
Alaska	64	56	(87.5)	0	(0.0)	0	(0.0)	0	(0.0)	3	(4.7)	5	(7.8)
Arizona	205	164	(80.0)	0	(0.0)	3	(1.5)	0	(0.0)	14	(6.8)	24	(11.7)
Arkansas	67	54	(80.6)	1	(1.5)	1	(1.5)	2	(3.0)	2	(3.0)	7	(10.4)
California	2,128	1,835	(86.2)	7	(0.3)	19	(0.9)	14	(0.7)	162	(7.6)	91	(4.3)
Colorado	63	58	(92.1)	0	(0.0)	1	(1.6)	0	(0.0)	3	(4.8)	1	(1.6)
Connecticut	73	68	(93.2)	0	(0.0)	1	(1.4)	0	(0.0)	4	(5.5)	0	(0.0)
Delaware	27	21	(77.8)	0	(0.0)	2	(7.4)	0	(0.0)	0	(0.0)	4	(14.8)
District of Columbia	35	29	(82.9)	0	(0.0)	0	(0.0)	0	(0.0)	3	(8.6)	3	(8.6)
Florida	654	576	(88.1)	3	(0.5)	8	(1.2)	2	(0.3)	54	(8.3)	11	(1.7)
Georgia	344	300	(87.2)	1	(0.3)	6	(1.7)	1	(0.3)	22	(6.4)	14	(4.1)
Hawaii	112	103	(92.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(6.3)	2	(1.8)
Idaho	15	13	(86.7)	0	(0.0)	0	(0.0)	1	(6.7)	1	(6.7)	0	(0.0)
Illinois	342	301	(88.0)	3	(0.9)	7	(2.0)	0	(0.0)	23	(6.7)	8	(2.3)
Indiana	99	94	(94.9)	1	(1.0)	0	(0.0)	0	(0.0)	4	(4.0)	0	(0.0)
Iowa	44	39	(88.6)	0	(0.0)	1	(2.3)	1	(2.3)	2	(4.5)	1	(2.3)
Kansas	40	35	(87.5)	0	(0.0)	1	(2.5)	0	(0.0)	4	(10.0)	0	(0.0)
Kentucky	76	69	(90.8)	0	(0.0)	1	(1.3)	0	(0.0)	4	(5.3)	2	(2.6)
Louisiana	137	117	(85.4)	0	(0.0)	6	(4.4)	2	(1.5)	8	(5.8)	4	(2.9)
Maine	17	15	(88.2)	0	(0.0)	0	(0.0)	1	(5.9)	0	(0.0)	1	(5.9)
Maryland	221	200	(90.5)	0	(0.0)	2	(0.9)	1	(0.5)	11	(5.0)	7	(3.2)
Massachusetts	209	183	(87.6)	0	(0.0)	3	(1.4)	1	(0.5)	7	(3.3)	15	(7.2)
Michigan	140	113	(80.7)	1	(0.7)	3	(2.1)	4	(2.9)	11	(7.9)	8	(5.7)
Minnesota	160	149	(93.1)	0	(0.0)	2	(1.3)	1	(0.6)	4	(2.5)	4	(2.5)
Mississippi	78	68	(87.2)	0	(0.0)	0	(0.0)	0	(0.0)	8	(10.3)	2	(2.6)
Missouri	87	63	(72.4)	0	(0.0)	3	(3.4)	0	(0.0)	11	(12.6)	10	(11.5)
Montana	5	5	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	22	16	(72.7)	0	(0.0)	0	(0.0)	0	(0.0)	3	(13.6)	3	(13.6)
Nevada	82	60	(73.2)	0	(0.0)	1	(1.2)	0	(0.0)	3	(3.7)	18	(22.0)
New Hampshire	9	9	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
New Jersey	293	264	(90.1)	2	(0.7)	1	(0.3)	0	(0.0)	13	(4.4)	13	(4.4)
New Mexico	38	28	(73.7)	0	(0.0)	0	(0.0)	0	(0.0)	4	(10.5)	6	(15.8)

Table 57. (Con't) Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2012¹

Reporting Area	Cases with Initial Drug Regimen Prescribed ²	Completed Therapy		Did Not Complete Therapy								Unknown ⁴	
		No.	(%)	Adverse Event		Lost		Refused		Died ³		No.	(%)
				No.	(%)	No.	(%)	No.	(%)	No.	(%)		
New York State ⁵	210	189	(90.0)	0	(0.0)	1	(0.5)	0	(0.0)	8	(3.8)	12	(5.7)
New York City	639	576	(90.1)	1	(0.2)	17	(2.7)	1	(0.2)	34	(5.3)	10	(1.6)
North Carolina	207	194	(93.7)	0	(0.0)	0	(0.0)	0	(0.0)	12	(5.8)	1	(0.5)
North Dakota	25	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.0)	0	(0.0)	24	(96.0)
Ohio	143	126	(88.1)	1	(0.7)	3	(2.1)	3	(2.1)	9	(6.3)	1	(0.7)
Oklahoma	86	78	(90.7)	1	(1.2)	2	(2.3)	1	(1.2)	4	(4.7)	0	(0.0)
Oregon	60	57	(95.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(3.3)	1	(1.7)
Pennsylvania	226	184	(81.4)	0	(0.0)	2	(0.9)	3	(1.3)	17	(7.5)	20	(8.8)
Rhode Island	23	22	(95.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.3)	0	(0.0)
South Carolina	118	105	(89.0)	1	(0.8)	0	(0.0)	1	(0.8)	6	(5.1)	5	(4.2)
South Dakota	17	14	(82.4)	0	(0.0)	0	(0.0)	0	(0.0)	2	(11.8)	1	(5.9)
Tennessee	160	148	(92.5)	0	(0.0)	0	(0.0)	0	(0.0)	9	(5.6)	3	(1.9)
Texas	1,204	1,055	(87.6)	6	(0.5)	15	(1.2)	9	(0.7)	63	(5.2)	56	(4.7)
Utah	36	33	(91.7)	0	(0.0)	0	(0.0)	0	(0.0)	3	(8.3)	0	(0.0)
Vermont	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	228	194	(85.1)	1	(0.4)	6	(2.6)	5	(2.2)	15	(6.6)	7	(3.1)
Washington	180	145	(80.6)	0	(0.0)	2	(1.1)	0	(0.0)	10	(5.6)	23	(12.8)
West Virginia	8	7	(87.5)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)
Wisconsin	71	66	(93.0)	0	(0.0)	2	(2.8)	1	(1.4)	2	(2.8)	0	(0.0)
Wyoming	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
American Samoa ⁶	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ⁶	173	157	(90.8)	0	(0.0)	0	(0.0)	7	(4.0)	4	(2.3)	5	(2.9)
Guam ⁶	67	58	(86.6)	1	(1.5)	0	(0.0)	0	(0.0)	4	(6.0)	4	(6.0)
Marshall Islands ⁶	147	63	(42.9)	0	(0.0)	1	(0.7)	0	(0.0)	9	(6.1)	74	(50.3)
N. Mariana Islands ⁶	26	20	(76.9)	0	(0.0)	0	(0.0)	2	(7.7)	2	(7.7)	2	(7.7)
Puerto Rico ⁶	66	48	(72.7)	0	(0.0)	1	(1.5)	0	(0.0)	13	(19.7)	4	(6.1)
Republic of Palau ⁶	4	4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands ⁶	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)

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, 2012¹

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.	(%)
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	654	53	(8.1)	131	(20.0)	93	(14.2)	6	(0.9)	301	(46.0)	176	(26.9)
Alabama	7	0	(0.0)	1	(14.3)	3	(42.9)	0	(0.0)	2	(28.6)	1	(14.3)
Alaska	3	0	(0.0)	0	(0.0)	3	(100.0)	1	(33.3)	1	(33.3)	1	(33.3)
Arizona	8	1	(12.5)	2	(25.0)	2	(25.0)	0	(0.0)	3	(37.5)	0	(0.0)
Arkansas	4	0	(0.0)	2	(50.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)
California	200	10	(5.0)	53	(26.5)	22	(11.0)	1	(0.5)	109	(54.5)	54	(27.0)
Colorado	3	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)
Connecticut	7	2	(28.6)	0	(0.0)	0	(0.0)	0	(0.0)	3	(42.9)	7	(100.0)
Delaware	3	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	2	(66.7)
District of Columbia	0	0	...	0	...	0	...	0	...	0	...	0	...
Florida	50	5	(10.0)	4	(8.0)	7	(14.0)	0	(0.0)	27	(54.0)	9	(18.0)
Georgia	9	1	(11.1)	0	(0.0)	1	(11.1)	0	(0.0)	6	(66.7)	3	(33.3)
Hawaii	10	4	(40.0)	4	(40.0)	1	(10.0)	0	(0.0)	0	(0.0)	4	(40.0)
Idaho	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)
Illinois	11	1	(9.1)	3	(27.3)	0	(0.0)	0	(0.0)	6	(54.5)	1	(9.1)
Indiana	9	1	(11.1)	1	(11.1)	0	(0.0)	0	(0.0)	5	(55.6)	3	(33.3)
Iowa	4	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(75.0)	1	(25.0)
Kansas	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
Kentucky	3	0	(0.0)	3	(100.0)	1	(33.3)	0	(0.0)	1	(33.3)	0	(0.0)
Louisiana	14	0	(0.0)	1	(7.1)	2	(14.3)	1	(7.1)	5	(35.7)	6	(42.9)
Maine	3	0	...	1	(33.3)	0	...	0	...	2	(66.7)	0	...
Maryland	21	0	(0.0)	6	(28.6)	3	(14.3)	0	(0.0)	11	(52.4)	4	(19.0)
Massachusetts	14	1	(7.1)	0	(0.0)	0	(0.0)	0	(0.0)	7	(50.0)	7	(50.0)
Michigan	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)
Minnesota	11	2	(18.2)	2	(18.2)	2	(18.2)	0	(0.0)	7	(63.6)	1	(9.1)
Mississippi	0	0	...	0	...	0	...	0	...	0	...	0	...
Missouri	0	0	...	0	...	0	...	0	...	0	...	0	...
Montana	1	0	(0.0)	1	(100.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	0	0	...	0	...	0	...	0	...	0	...	0	...
Nevada	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
New Hampshire	0	0	...	0	...	0	...	0	...	0	...	0	...
New Jersey	14	3	(21.4)	3	(21.4)	0	(0.0)	0	(0.0)	5	(35.7)	6	(42.9)
New Mexico	0	0	...	0	...	0	...	0	...	0	...	0	...

Table 58. (Con't) Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2012¹

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	9	1	(11.1)	2	(22.2)	2	(22.2)	0	(0.0)	2	(22.2)
New York City	24	4	(16.7)	4	(16.7)	6	(25.0)	0	(0.0)	1	(4.2)
North Carolina	4	1	(25.0)	2	(50.0)	1	(25.0)	0	(0.0)	0	(0.0)
North Dakota	8	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)	7	(87.5)
Ohio	12	0	(0.0)	0	(0.0)	2	(16.7)	0	(0.0)	6	(50.0)
Oklahoma	8	0	(0.0)	2	(25.0)	1	(12.5)	0	(0.0)	2	(25.0)
Oregon	3	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)
Pennsylvania	25	0	(0.0)	13	(52.0)	8	(32.0)	1	(4.0)	6	(24.0)
Rhode Island	5	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(100.0)
South Carolina	6	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	1	(16.7)
South Dakota	0	0	...	0	...	0	...	0	...	0	...
Tennessee	6	0	(0.0)	2	(33.3)	0	(0.0)	0	(0.0)	3	(50.0)
Texas	88	5	(5.7)	7	(8.0)	15	(17.0)	1	(1.1)	51	(58.0)
Utah	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)
Vermont	0	0	...	0	...	0	...	0	...	0	...
Virginia	22	1	(4.5)	6	(27.3)	3	(13.6)	1	(4.5)	5	(22.7)
Washington	6	1	(16.7)	0	(0.0)	3	(50.0)	0	(0.0)	0	(0.0)
West Virginia	0	0	...	0	...	0	...	0	...	0	...
Wisconsin	11	4	(36.4)	1	(9.1)	1	(9.1)	0	(0.0)	5	(45.5)
Wyoming	0	0	...	0	...	0	...	0	...	0	...
American Samoa ⁵	0	0	...	0	...	0	...	0	...	0	...
Fed. States of Micronesia ⁵	8	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(37.5)
Guam ⁵	2	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
Marshall Islands ⁵	0	0	...	0	...	0	...	0	...	0	...
N. Mariana Islands ⁵	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)
Puerto Rico ⁵	2	1	(50.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)
Republic of Palau ⁵	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, 2012²

Reporting Area		Total Cases ³		Non-Hispanic																
				Hispanic ⁴		American Indian or Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White		Multiple Race		Unknown or Missing		
				No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.
United States		8,123	2,256 (90.6)	123 (74.0)	2,407 (89.9)	1,871 (89.4)	53 (88.7)	1,286 (88.4)	110 (80.9)	17 (88.2)										
Alabama	119	20 (80.0)	0	...	2 (100.0)	59 (93.2)	0	...	38 (92.1)	0	...	0	...	0	...					
Alaska	60	4 (100.0)	47 (83.0)	6 (100.0)	1 (100.0)	1 (100.0)	0	...	2 (100.0)	0	...	0	...	0	...					
Arizona	139	67 (94.0)	10 (90.0)	26 (100.0)	20 (85.0)	0	...	16 (100.0)	0	...	0	...	0	...	0	...				
Arkansas	58	9 (100.0)	0	...	9 (77.8)	9 (100.0)	4 (75.0)	27 (70.4)	0	...	0	...	0	...	0	...				
California	1,773	671 (90.2)	6 (83.3)	753 (88.4)	116 (86.2)	11 (81.8)	141 (85.1)	75 (84.0)	0	...	0	...	0	...	0	...				
Colorado	47	19 (89.5)	1 (100.0)	15 (100.0)	7 (100.0)	0	...	4 (100.0)	1 (100.0)	0	...	0	...	0	...					
Connecticut	60	15 (93.3)	0	...	21 (90.5)	14 (92.9)	0	...	10 (100.0)	0	...	0	...	0	...					
Delaware	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
District of Columbia	27	3 (100.0)	0	...	1 (100.0)	23 (100.0)	0	...	0	...	0	...	0	...	0	...				
Florida	562	150 (94.0)	0	...	61 (91.8)	201 (87.1)	1 (100.0)	149 (94.0)	0	...	0	...	0	...	0	...				
Georgia	293	43 (88.4)	0	...	52 (92.3)	153 (94.1)	0	...	45 (82.2)	0	...	0	...	0	...					
Hawaii	91	2 (100.0)	0	...	71 (90.1)	0	...	12 (100.0)	4 (100.0)	2 (100.0)	0	...	0	...	0	...				
Idaho	13	7 (85.7)	0	...	0	3 (100.0)	0	...	2 (100.0)	1 (0.0)	0	...	0	...	0	...				
Illinois	290	72 (90.3)	0	...	99 (91.9)	69 (91.3)	2 (100.0)	48 (91.7)	0	...	0	...	0	...	0	...				
Indiana	85	8 (100.0)	0	...	19 (78.9)	23 (95.7)	0	...	34 (97.1)	1 (100.0)	0	...	0	...	0	...				
Iowa	36	8 (75.0)	0	...	12 (75.0)	7 (85.7)	1 (100.0)	8 (87.5)	0	...	0	...	0	...	0	...				
Kansas	31	7 (100.0)	0	...	11 (100.0)	5 (100.0)	1 (100.0)	7 (71.4)	0	...	0	...	0	...	0	...				
Kentucky	68	4 (75.0)	0	...	11 (100.0)	12 (100.0)	0	...	40 (92.5)	1 (100.0)	0	...	0	...	0	...				
Louisiana	119	8 (100.0)	0	...	15 (93.3)	59 (71.2)	0	...	37 (86.5)	0	...	0	...	0	...					
Maine	17	1 (100.0)	0	...	2 (0.0)	6 (83.3)	1 (100.0)	7 (57.1)	0	...	0	...	0	...	0	...				
Maryland	192	28 (96.4)	0	...	68 (91.2)	83 (85.5)	0	...	12 (100.0)	1 (100.0)	0	...	0	...	0	...				
Massachusetts	173	30 (80.0)	0	...	62 (85.5)	49 (85.7)	0	...	31 (80.6)	1 (100.0)	0	...	0	...	0	...				
Michigan	115	18 (88.9)	0	...	31 (93.5)	35 (85.7)	0	...	27 (77.8)	0	...	4 (75.0)	0	...	0	...				
Minnesota	133	12 (100.0)	2 (100.0)	34 (100.0)	76 (93.4)	0	...	9 (88.9)	0	...	0	...	0	...	0	...				
Mississippi	67	6 (100.0)	0	...	4 (100.0)	41 (85.4)	0	...	16 (93.8)	0	...	0	...	0	...					
Missouri	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
Montana	5	0	5 (80.0)	0	...	0	...	0	...	0	...	0	...	0	...					
Nebraska	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
Nevada	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
New Hampshire	7	1 (100.0)	0	...	4 (100.0)	2 (100.0)	0	...	0	...	0	...	0	...	0	...				
New Jersey	232	66 (93.9)	0	...	111 (91.9)	33 (93.9)	0	...	22 (95.5)	0	...	0	...	0	...					

Table 59. (Cont'd) Completion of Tuberculosis Therapy (COT) Cases and Percentages¹ by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2012²

Reporting Area	Total Cases ³	Hispanic ⁴		Non-Hispanic													
				American Indian or Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White		Multiple Race		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	27	14	(100.0)	9	(100.0)	2	(100.0)	0	...	0	...	2	(50.0)	0	...	0	...
New York State ⁵	171	42	(90.5)	0	...	53	(90.6)	29	(96.6)	1	(100.0)	42	(95.2)	1	(100.0)	3	(100.0)
New York City	540	149	(91.3)	0	...	224	(95.1)	115	(94.8)	0	...	30	(100.0)	13	(76.9)	9	(88.9)
North Carolina	187	41	(100.0)	5	(100.0)	43	(97.7)	55	(100.0)	0	...	37	(94.6)	6	(83.3)	0	...
North Dakota	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ohio	129	13	(84.6)	0	...	25	(84.0)	51	(86.3)	0	...	40	(87.5)	0	...	0	...
Oklahoma	72	8	(100.0)	10	(80.0)	15	(86.7)	14	(78.6)	4	(75.0)	18	(94.4)	2	(100.0)	1	(100.0)
Oregon	53	18	(94.4)	2	(100.0)	20	(100.0)	2	(100.0)	1	(100.0)	10	(90.0)	0	...	0	...
Pennsylvania	181	16	(87.5)	0	...	68	(79.4)	55	(81.8)	0	...	40	(85.0)	2	(50.0)	0	...
Rhode Island	19	9	(100.0)	0	...	5	(60.0)	3	(100.0)	0	...	2	(100.0)	0	...	0	...
South Carolina	105	10	(100.0)	0	...	16	(81.3)	54	(94.4)	0	...	25	(84.0)	0	...	0	...
South Dakota	14	0	...	6	(83.3)	2	(100.0)	3	(100.0)	0	...	3	(100.0)	0	...	0	...
Tennessee	142	16	(100.0)	0	...	17	(100.0)	60	(95.0)	2	(100.0)	47	(93.6)	0	...	0	...
Texas	1,025	514	(89.7)	0	...	174	(92.5)	192	(88.0)	5	(100.0)	140	(90.0)	0	...	0	...
Utah	29	11	(100.0)	1	(100.0)	9	(88.9)	2	(100.0)	1	(100.0)	5	(100.0)	0	...	0	...
Vermont	4	0	...	0	...	2	(100.0)	2	(100.0)	0	...	0	...	0	...	0	...
Virginia	191	42	(78.6)	1	(0.0)	78	(91.0)	41	(82.9)	0	...	29	(82.8)	0	...	0	...
Washington	149	24	(79.2)	1	(0.0)	67	(80.6)	32	(96.9)	6	(66.7)	18	(72.2)	1	(0.0)	0	...
West Virginia	7	1	(100.0)	0	...	2	(100.0)	1	(100.0)	0	...	3	(100.0)	0	...	0	...
Wisconsin	58	15	(100.0)	1	(100.0)	26	(84.6)	11	(90.9)	0	...	5	(100.0)	0	...	0	...
Wyoming	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
American Samoa ⁶	1	0	...	0	...	0	...	0	...	1	(100.0)	0	...	0	...	0	...
Fed. States of Micronesia ⁶	160	0	...	0	...	2	(100.0)	0	...	155	(88.4)	0	...	1	(100.0)	2	(50.0)
Guam ⁶	60	0	...	0	...	39	(84.6)	0	...	21	(90.5)	0	...	0	...	0	...
Marshall Islands ⁶	134	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N. Mariana Islands ⁶	19	0	...	0	...	10	(100.0)	0	...	8	(62.5)	0	...	0	...	1	(100.0)
Puerto Rico ⁶	49	49	(91.8)	0	...	0	...	0	...	0	...	0	...	0	...	0	...
Republic of Palau ⁶	4	0	...	0	...	1	(100.0)	0	...	3	(100.0)	0	...	0	...	0	...
U.S. Virgin Islands ⁶	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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, 2012¹

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	9,941	8,123	(89.9)	(96.0)	953	(70.8)	9,076	(93.4)
Alabama	134	119	(90.8)	(96.6)	6	(66.7)	125	(95.2)
Alaska	66	60	(86.7)	(93.3)	1	(0.0)	61	(91.8)
Arizona	211	139	(94.2)	(97.1)	52	(55.8)	191	(85.9)
Arkansas	70	58	(81.0)	(84.5)	7	(71.4)	65	(83.1)
California	2,188	1,773	(88.4)	(95.9)	196	(68.4)	1,969	(93.2)
Colorado	64	47	(95.7)	(97.9)	13	(92.3)	60	(96.7)
Connecticut	74	60	(93.3)	(98.3)	9	(100.0)	69	(98.6)
Delaware	28	21	--	--	6	--	27	--
District of Columbia	37	27	(100.0)	(100.0)	5	(40.0)	32	(90.6)
Florida	678	562	(91.3)	(97.2)	38	(78.9)	600	(96.0)
Georgia	357	293	(91.1)	(96.2)	29	(62.1)	322	(93.2)
Hawaii	117	91	(92.3)	(100.0)	14	(85.7)	105	(98.1)
Idaho	15	13	(84.6)	(92.3)	1	(100.0)	14	(92.9)
Illinois	347	290	(91.4)	(96.2)	29	(75.9)	319	(94.4)
Indiana	102	85	(92.9)	(98.8)	10	(100.0)	95	(98.9)
Iowa	46	36	(80.6)	(94.4)	6	(83.3)	42	(92.9)
Kansas	42	31	(93.5)	(96.8)	5	(100.0)	36	(97.2)
Kentucky	78	68	(94.1)	(98.5)	4	(50.0)	72	(95.8)
Louisiana	148	119	(80.7)	(93.3)	11	(54.5)	130	(90.0)
Maine	17	17	(64.7)	(88.2)	0	...	17	(88.2)
Maryland	224	192	(90.1)	(98.4)	18	(61.1)	210	(95.2)
Massachusetts	216	173	(83.8)	(96.0)	29	(58.6)	202	(90.6)
Michigan	149	115	(86.1)	(90.4)	14	(64.3)	129	(87.6)
Minnesota	162	133	(95.5)	(97.7)	23	(82.6)	156	(95.5)
Mississippi	81	67	(89.6)	(100.0)	3	(33.3)	70	(97.1)
Missouri	89	71	--	--	5	--	76	--
Montana	5	5	(80.0)	(100.0)	0	...	5	(100.0)
Nebraska	22	17	--	--	2	--	19	--
Nevada	84	72	--	--	7	--	79	--
New Hampshire	9	7	(100.0)	(100.0)	2	(100.0)	9	(100.0)
New Jersey	302	232	(93.1)	(98.3)	48	(75.0)	280	(94.3)
New Mexico	40	27	(96.3)	(96.3)	7	(28.6)	34	(82.4)
New York State ⁶	215	171	(93.0)	(97.7)	31	(71.0)	202	(93.6)
New York City	652	540	(93.7)	(95.9)	68	(85.3)	608	(94.7)
North Carolina	211	187	(97.9)	(99.5)	9	(88.9)	196	(99.0)
North Dakota	26	24	--	--	1	--	25	--
Ohio	149	129	(86.0)	(94.6)	5	(80.0)	134	(94.0)
Oklahoma	88	72	(87.5)	(95.8)	10	(90.0)	82	(95.1)
Oregon	61	53	(96.2)	(100.0)	5	(80.0)	58	(98.3)
Pennsylvania	234	181	(81.8)	(91.7)	29	(62.1)	210	(87.6)
Rhode Island	23	19	(89.5)	(100.0)	3	(100.0)	22	(100.0)
South Carolina	122	105	(90.5)	(95.2)	7	(71.4)	112	(93.8)
South Dakota	19	14	(92.9)	(100.0)	1	(0.0)	15	(93.3)
Tennessee	163	142	(95.8)	(99.3)	9	(77.8)	151	(98.0)
Texas	1,233	1,025	(90.0)	(95.4)	116	(66.4)	1,141	(92.5)
Utah	37	29	(96.6)	(100.0)	4	(100.0)	33	(100.0)
Vermont	4	4	(100.0)	(100.0)	0	...	4	(100.0)
Virginia	235	191	(84.8)	(93.7)	23	(65.2)	214	(90.7)
Washington	185	149	(81.2)	(87.9)	21	(66.7)	170	(85.3)
West Virginia	8	7	(100.0)	(100.0)	0	...	7	(100.0)
Wisconsin	71	58	(91.4)	(98.3)	11	(81.8)	69	(95.7)
Wyoming	3	3	--	--	0	...	3	--
American Samoa ⁷	1	1	(100.0)	(100.0)	0	...	1	(100.0)
Fed. States of Micronesia ⁷	173	160	(88.1)	(93.8)	8	(75.0)	169	(92.3)
Guam ⁷	68	60	(86.7)	(95.0)	3	(33.3)	63	(92.1)
Marshall Islands ⁷	147	134	--	--	4	--	138	--
N. Mariana Islands ⁷	26	19	(84.2)	(89.5)	5	(60.0)	24	(83.3)
Puerto Rico ⁷	71	49	(91.8)	(95.9)	4	(25.0)	53	(90.6)
Republic of Palau ⁷	4	4	(100.0)	(100.0)	0	...	4	(100.0)
U.S. Virgin Islands ⁷	3	2	--	--	0	...	3	--

¹ Most recent year for which data are available.

² Initial isolate susceptible to rifampin (n=5,973) or susceptibility unknown (n=111); culture negative (n=1,722); culture status unknown (n=317).

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 miliary 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 miliary disease or positive blood culture.

⁶ Excludes New York City.

⁷ Not included in U.S. totals.

Note: Ellipses indicate data not available. See Technical Notes for description of Completion of Therapy calculation (page 9).

Table 61. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2008–2012¹

Reporting Area	Year									
	2008		2009		2010		2011		2012	
	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³	No. ²	(%) ³
United States	11,018	(86.0)	9,520	(88.8)	9,123	(89.6)	8,495	(89.3)	8,123	(89.4)
Alabama	148	(90.5)	141	(94.3)	117	(91.5)	138	(93.5)	119	(90.8)
Alaska	45	(88.9)	32	(84.4)	49	(93.9)	53	...	60	(86.7)
Arizona	187	(72.7)	173	(83.2)	217	(86.2)	166	(87.3)	139	(94.2)
Arkansas	73	(79.5)	58	(86.2)	69	(87.0)	67	(83.6)	58	(81.0)
California	2,328	(84.7)	2,081	(84.3)	1,897	(88.0)	1,875	(87.5)	1,773	(88.4)
Colorado	92	(92.4)	65	(95.4)	53	(92.5)	59	(96.6)	47	(95.7)
Connecticut	86	(91.9)	79	(88.6)	67	(92.5)	68	(94.1)	60	(93.3)
Delaware	21	(85.7)	16	(81.3)	13	(100.0)	17	(94.1)	21	...
District of Columbia	49	(79.6)	32	(81.3)	31	(87.1)	47	(80.9)	27	(100.0)
Florida	803	(90.5)	689	(93.2)	705	(95.0)	607	(92.9)	562	(91.3)
Georgia	405	(88.4)	336	(85.1)	330	(89.7)	277	(89.5)	293	(91.1)
Hawaii	113	(78.8)	92	(83.7)	104	(95.2)	110	(90.0)	91	(92.3)
Idaho	11	(90.9)	16	(93.8)	14	(85.7)	11	(81.8)	13	(84.6)
Illinois	382	(88.2)	340	(90.0)	301	(87.4)	279	(91.8)	290	(91.4)
Indiana	99	(91.9)	100	(91.0)	80	(93.8)	87	(89.7)	85	(92.9)
Iowa	44	(93.2)	39	(87.2)	39	(94.9)	32	(87.5)	36	(80.6)
Kansas	54	(92.6)	56	(100.0)	36	(100.0)	27	(88.9)	31	(93.5)
Kentucky	85	(83.5)	59	(91.5)	72	(88.9)	56	(82.1)	68	(94.1)
Louisiana	209	(78.9)	162	(88.9)	171	(80.7)	140	(82.9)	119	(80.7)
Maine	8	(87.5)	7	(100.0)	6	(100.0)	8	...	17	(64.7)
Maryland	235	(89.4)	180	(90.0)	179	(91.6)	194	(94.8)	192	(90.1)
Massachusetts	228	(82.5)	212	(83.0)	187	(84.0)	155	(83.9)	173	(83.8)
Michigan	144	(82.6)	114	(87.7)	148	(89.2)	140	(89.3)	115	(86.1)
Minnesota	192	(93.2)	137	(93.4)	116	(90.5)	101	(95.0)	133	(95.5)
Mississippi	91	(93.4)	104	(88.5)	101	(93.1)	73	(91.8)	67	(89.6)
Missouri	96	(87.5)	72	(87.5)	95	(86.3)	81	(91.4)	71	...
Montana	4	(100.0)	7	(100.0)	6	(100.0)	7	(100.0)	5	(80.0)
Nebraska	30	(80.0)	28	(85.7)	24	(91.7)	20	(85.0)	17	...
Nevada	83	(85.5)	91	(89.0)	100	(89.0)	82	(89.0)	72	...
New Hampshire	16	(81.3)	13	(100.0)	8	(87.5)	10	(100.0)	7	(100.0)
New Jersey	353	(89.0)	337	(93.2)	325	(92.9)	253	(89.7)	232	(93.1)
New Mexico	43	(93.0)	31	(93.5)	29	(93.1)	38	(92.1)	27	(96.3)
New York State ⁴	262	(87.8)	182	(87.9)	204	(91.7)	187	(94.1)	171	(93.0)
New York City	756	(88.8)	633	(92.6)	599	(92.8)	565	(92.0)	540	(93.7)
North Carolina	293	(91.8)	215	(94.0)	247	(96.4)	200	(95.5)	187	(97.9)
North Dakota	2	(50.0)	3	(66.7)	8	(75.0)	5	...	24	...
Ohio	180	(86.1)	142	(91.5)	150	(89.3)	118	(88.1)	129	(86.0)
Oklahoma	84	(77.4)	85	(87.1)	69	(94.2)	72	(91.7)	72	(87.5)
Oregon	69	(97.1)	75	(97.3)	71	(98.6)	64	(89.1)	53	(96.2)
Pennsylvania	325	(84.0)	195	(83.1)	181	(86.7)	202	(85.1)	181	(81.8)
Rhode Island	32	(90.6)	21	(90.5)	22	(68.2)	25	(80.0)	19	(89.5)
South Carolina	155	(87.1)	134	(92.5)	125	(93.6)	113	(95.6)	105	(90.5)
South Dakota	15	(93.3)	16	(93.8)	13	(84.6)	12	(83.3)	14	(92.9)
Tennessee	242	(89.3)	173	(94.2)	146	(93.2)	130	(94.6)	142	(95.8)
Texas	1,297	(79.8)	1,187	(89.4)	1,093	(85.2)	1,072	(87.8)	1,025	(90.0)
Utah	23	(95.7)	26	(100.0)	13	(100.0)	25	(100.0)	29	(96.6)
Vermont	4	(75.0)	5	(80.0)	5	(100.0)	6	(83.3)	4	(100.0)
Virginia	261	(84.3)	238	(87.8)	235	(88.9)	190	(88.9)	191	(84.8)
Washington	178	(94.4)	219	(94.1)	194	(88.7)	155	(85.2)	149	(81.2)
West Virginia	22	(95.5)	15	(73.3)	12	(100.0)	10	(90.0)	7	(100.0)
Wisconsin	57	(73.7)	55	(83.6)	41	(90.2)	62	(90.3)	58	(91.4)
Wyoming	4	(75.0)	2	(50.0)	6	...	4	...	3	...
American Samoa ⁵	3	(100.0)	3	(66.7)	3	(33.3)	3	...	1	(100.0)
Fed. States of Micronesia ⁵	156	...	175	(82.9)	160	(91.9)	130	(90.0)	160	(88.1)
Guam ⁵	80	(91.3)	93	(95.7)	86	(95.3)	72	(94.4)	60	(86.7)
Marshall Islands ⁵	115	(79.1)	109	(87.2)	189	...	143	...	134	...
N. Mariana Islands ⁵	34	(70.6)	28	(96.4)	25	(96.0)	29	(75.9)	19	(84.2)
Puerto Rico ⁵	69	(95.7)	51	(94.1)	70	(90.0)	34	(94.1)	49	(91.8)
Republic of Palau ⁵	14	...	15	(86.7)	16	(100.0)	6	(83.3)	4	(100.0)
U.S. Virgin Islands ⁵	4	(50.0)	-	...	-	...	-	...	2	...

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

Metropolitan Statistical Areas, 2014

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Table 62. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014 and 2013

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2014
	2014	2013	2014	2013	
Akron, OH	6	4	0.9	0.6	703,825
Albany-Schenectady-Troy, NY	13	11	1.5	1.3	880,167
Albuquerque, NM	15	24	1.7	2.7	904,587
Allentown-Bethlehem-Easton, PA-NJ	5	8	0.6	1.0	829,835
Atlanta-Sandy Springs-Roswell, GA	227	218	4.0	3.9	5,614,323
Augusta-Richmond County, GA-SC	13	21	2.2	3.6	583,632
Austin-Round Rock, TX	64	56	3.3	3.0	1,943,299
Bakersfield, CA	40	28	4.6	3.2	874,589
Baltimore-Columbia-Towson, MD	70	70	2.5	2.5	2,785,874
Baton Rouge, LA	19	16	2.3	2.0	825,478
Birmingham-Hoover, AL	47	18	4.1	1.6	1,143,772
Boise City, ID	6	4	0.9	0.6	664,422
Boston-Cambridge-Newton, MA-NH	158	159	3.3	3.4	4,732,161
Bridgeport-Stamford-Norwalk, CT	16	25	1.7	2.7	945,438
Buffalo-Cheektowaga-Niagara Falls, NY	19	23	1.7	2.0	1,136,360
Cape Coral-Fort Myers, FL	12	14	1.8	2.1	679,513
Charleston-North Charleston, SC	16	22	2.2	3.1	727,689
Charlotte-Concord-Gastonia, NC-SC	36	58	1.5	2.5	2,380,314
Chattanooga, TN-GA	7	11	1.3	2.0	544,559
Chicago-Naperville-Elgin, IL-IN-WI	280	295	2.9	3.1	9,554,598
Cincinnati, OH-KY-IN	27	21	1.3	1.0	2,149,449
Cleveland-Elyria, OH	40	32	1.9	1.5	2,063,598
Colorado Springs, CO	1	8	0.1	1.2	686,908
Columbia, SC	11	13	1.4	1.6	800,495
Columbus, OH	54	55	2.7	2.8	1,994,536
Dallas-Fort Worth-Arlington, TX	295	326	4.2	4.8	6,954,330
Dayton, OH	9	15	1.1	1.9	800,836
Deltona-Daytona Beach-Ormond Beach, FL	8	14	1.3	2.3	609,939
Denver-Aurora-Lakewood, CO	49	47	1.8	1.7	2,754,258
Des Moines-West Des Moines, IA	12	11	2.0	1.8	611,549
Detroit-Warren-Dearborn, MI	68	106	1.6	2.5	4,296,611
Durham-Chapel Hill, NC	14	9	2.6	1.7	542,710
El Paso, TX	43	49	5.1	5.9	836,698
Fayetteville-Springdale-Rogers, AR-MO	36	...	7.2	...	501,653
Fresno, CA	51	38	5.3	4.0	965,974
Grand Rapids-Wyoming, MI	10	9	1.0	0.9	1,027,703
Greensboro-High Point, NC	23	20	3.1	2.7	746,593
Greenville-Anderson-Mauldin, SC	10	7	1.2	0.8	862,463
Harrisburg-Carlisle, PA	12	11	2.1	2.0	560,849
Hartford-West Hartford-East Hartford, CT	21	21	1.7	1.7	1,214,295
Houston-The Woodlands-Sugar Land, TX	381	339	5.9	5.4	6,490,180
Indianapolis-Carmel-Anderson, IN	61	42	3.1	2.2	1,971,274
Jackson, MS	24	21	4.2	3.6	577,564
Jacksonville, FL	50	60	3.5	4.3	1,419,127
Kansas City, MO-KS	30	47	1.4	2.3	2,071,133
Knoxville, TN	9	10	1.0	1.2	857,585
Lakeland-Winter Haven, FL	15	14	2.4	2.2	634,638
Lancaster, PA	8	5	1.5	0.9	533,320
Las Vegas-Henderson-Paradise, NV	66	75	3.2	3.7	2,069,681
Little Rock-North Little Rock-Conway, AR	12	17	1.6	2.3	729,135
Los Angeles-Long Beach-Anaheim, CA	809	892	6.1	6.8	13,262,220
Louisville/Jefferson County, KY-IN	36	24	2.8	1.9	1,269,702
Madison, WI	9	7	1.4	1.1	633,787
McAllen-Edinburg-Mission, TX	70	64	8.4	7.8	831,073
Memphis, TN-MS-AR	60	56	4.5	4.2	1,343,230
Miami-Fort Lauderdale-West Palm Beach, FL	235	267	4.0	4.6	5,929,819
Milwaukee-Waukesha-West Allis, WI	18	14	1.1	0.9	1,572,245

Table 62. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014 and 2013

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2014
	2014	2013	2014	2013	
Minneapolis-St. Paul-Bloomington, MN-WI	102	114	2.9	3.3	3,495,176
Modesto, CA	13	10	2.4	1.9	531,997
Nashville-Davidson--Murfreesboro--Franklin, TN	56	46	3.1	2.6	1,792,649
New Haven-Milford, CT	11	13	1.3	1.5	861,277
New Orleans-Metairie, LA	53	56	4.2	4.5	1,251,849
New York-Newark-Jersey City, NY-NJ-PA	970	1,035	4.8	5.2	20,092,883
Northport-Sarasota-Bradenton, FL	14	17	1.9	2.3	748,708
Ogden-Clearfield, UT	1	6	0.2	1.0	632,293
Oklahoma City, OK	18	28	1.3	2.1	1,336,767
Omaha-Council Bluffs, NE-IA	18	11	2.0	1.2	904,421
Orlando-Kissimmee-Sanford, FL	84	68	3.6	3.0	2,321,418
Oxnard-Thousand Oaks-Ventura, CA	51	28	6.0	3.3	846,178
Palm Bay-Melbourne-Titusville, FL	11	7	2.0	1.3	556,885
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	158	2.6	2.6	6,051,170
Phoenix-Mesa-Scottsdale, AZ	128	121	2.9	2.7	4,489,109
Pittsburgh, PA	23	25	1.0	1.1	2,355,968
Portland-South Portland, ME	8	6	1.5	1.2	523,552
Portland-Vancouver-Hillsboro, OR-WA	71	49	3.0	2.1	2,348,247
Providence-Warwick, RI-MA	24	35	1.5	2.2	1,609,367
Provo-Orem, UT	.	1	.	0.2	571,460
Raleigh, NC	22	29	1.8	2.4	1,242,974
Richmond, VA	17	24	1.3	1.9	1,260,029
Riverside-San Bernardino-Ontario, CA	115	112	2.6	2.6	4,441,890
Rochester, NY	21	25	1.9	2.3	1,083,393
Sacramento--Roseville--Arden-Arcade, CA	88	97	3.9	4.4	2,244,397
St. Louis, MO-IL	44	49	1.6	1.7	2,830,857
Salt Lake City, UT	24	23	2.1	2.0	1,153,340
San Antonio-New Braunfels, TX	91	81	3.9	3.5	2,328,652
San Diego-Carlsbad, CA	220	206	6.7	6.4	3,263,431
San Francisco-Oakland-Hayward, CA	357	354	7.8	7.8	4,594,060
San Jose-Sunnyvale-Santa Clara, CA	165	182	8.4	9.4	1,952,872
Santa Rosa, CA	13	...	2.6	...	500,292
Scranton--Wilkes-Barre--Hazleton, PA	4	9	0.7	1.6	559,679
Seattle-Tacoma-Bellevue, WA	133	162	3.6	4.5	3,671,478
Spokane-Spokane Valley, WA	5	7	0.9	1.3	540,953
Springfield, MA	11	14	1.7	2.2	629,100
Stockton-Lodi, CA	54	43	7.5	6.1	715,597
Syracuse, NY	11	9	1.7	1.4	661,478
Tampa-St. Petersburg-Clearwater, FL	81	92	2.8	3.2	2,915,582
Toledo, OH	2	4	0.3	0.7	607,456
Tucson, AZ	32	24	3.2	2.4	1,004,516
Tulsa, OK	22	17	2.3	1.8	969,224
Urban Honolulu, HI	112	83	11.3	8.4	991,788
Virginia Beach-Norfolk-Newport News, VA-NC	23	22	1.3	1.3	1,716,624
Washington-Arlington-Alexandria, DC-VA-MD-WV	270	248	4.5	4.2	6,033,737
Wichita, KS	12	9	1.9	1.4	641,076
Winston-Salem, NC	8	11	1.2	1.7	655,015
Worcester, MA-CT	25	22	2.7	2.4	930,473
Youngstown-Warren-Boardman, OH-PA	1	.	0.2	.	553,263
Total - 106 Areas	7,553	7,673	3.5	3.6	215,646,195
San Juan-Caguas-Guaynabo, PR	34	39	1.5	1.7	2,242,285

Note: 2014 and 2013 population case counts and rates updated using County Totals Dataset: Population, Population Change and Estimated Components of Population Change: April 1, 2010 to July 1, 2014 (<http://www.census.gov/popest/data/counties/totals/2014/files/CO-EST2014-alldata.csv>) and Vintage 2009 County Population Datasets (http://www.census.gov/popest/data/historical/2000s/vintage_2009/datasets.html) (accessed July 20, 2015).
See Technical Notes for definition of MSA.

Table 63. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥ 65	Unknown or Missing
Akron, OH	6	0	0	0	0	2	4	0
Albany-Schenectady-Troy, NY	13	1	0	2	2	4	4	0
Albuquerque, NM	15	0	1	1	5	3	5	0
Allentown-Bethlehem-Easton, PA-NJ	5	0	0	0	1	1	3	0
Atlanta-Sandy Springs-Roswell, GA	227	9	9	14	80	76	39	0
Augusta-Richmond County, GA-SC	13	1	0	3	6	3	0	0
Austin-Round Rock, TX	64	4	1	4	24	23	8	0
Bakersfield, CA	40	2	0	2	12	13	11	0
Baltimore-Columbia-Towson, MD	70	2	1	7	22	18	20	0
Baton Rouge, LA	19	0	2	1	7	7	2	0
Birmingham-Hoover, AL	47	0	0	2	17	19	9	0
Boise City, ID	6	0	0	0	3	2	1	0
Boston-Cambridge-Newton, MA-NH	158	3	3	16	61	38	37	0
Bridgeport-Stamford-Norwalk, CT	16	0	0	1	9	3	3	0
Buffalo-Cheektowaga-Niagara Falls, NY	19	0	0	4	8	4	3	0
Cape Coral-Fort Myers, FL	12	0	0	2	3	2	5	0
Charleston-North Charleston, SC	16	0	0	3	4	3	6	0
Charlotte-Concord-Gastonia, NC-SC	36	3	1	4	17	9	2	0
Chattanooga, TN-GA	7	0	0	0	2	3	2	0
Chicago-Naperville-Elgin, IL-IN-WI	280	8	3	26	77	101	65	0
Cincinnati, OH-KY-IN	27	0	0	4	10	9	4	0
Cleveland-Elyria, OH	40	2	0	1	13	13	11	0
Colorado Springs, CO	1	0	0	0	0	0	1	0
Columbia, SC	11	0	0	1	4	4	2	0
Columbus, OH	54	0	1	5	17	17	14	0
Dallas-Fort Worth-Arlington, TX	295	7	3	33	98	114	40	0
Dayton, OH	9	0	0	0	2	4	3	0
Deltona-Daytona Beach-Ormond Beach, FL	8	0	1	0	0	7	0	0
Denver-Aurora-Lakewood, CO	49	1	0	7	15	13	13	0
Des Moines-West Des Moines, IA	12	1	0	0	4	3	4	0
Detroit-Warren-Dearborn, MI	68	1	0	1	19	20	27	0
Durham-Chapel Hill, NC	14	0	1	2	6	4	1	0
El Paso, TX	43	1	1	3	5	17	16	0
Fayetteville-Springdale-Rogers, AR-MO	36	5	9	3	8	7	4	0
Fresno, CA	51	1	0	5	10	16	19	0
Grand Rapids-Wyoming, MI	10	0	0	1	5	3	1	0
Greensboro-High Point, NC	23	0	1	2	9	4	7	0
Greenville-Anderson-Mauldin, SC	10	1	0	3	4	1	1	0
Harrisburg-Carlisle, PA	12	0	0	1	4	2	5	0
Hartford-West Hartford-East Hartford, CT	21	1	1	4	3	6	6	0
Houston-The Woodlands-Sugar Land, TX	381	11	3	31	122	137	77	0
Indianapolis-Carmel-Anderson, IN	61	1	0	6	24	19	11	0
Jackson, MS	24	0	0	0	4	8	12	0
Jacksonville, FL	50	2	1	4	16	22	5	0
Kansas City, MO-KS	30	0	2	5	7	8	8	0
Knoxville, TN	9	0	0	0	1	5	3	0
Lakeland-Winter Haven, FL	15	0	0	3	6	6	0	0
Lancaster, PA	8	0	0	0	3	2	3	0
Las Vegas-Henderson-Paradise, NV	66	8	4	7	11	28	8	0
Little Rock-North Little Rock-Conway, AR	12	0	0	4	3	4	1	0
Los Angeles-Long Beach-Anaheim, CA	809	19	10	48	185	273	274	0
Louisville/Jefferson County, KY-IN	36	0	1	2	15	6	12	0
Madison, WI	9	0	0	1	3	4	1	0
McAllen-Edinburg-Mission, TX	70	6	2	10	24	16	12	0
Memphis, TN-MS-AR	60	3	3	7	17	25	5	0
Miami-Fort Lauderdale-West Palm Beach, FL	235	8	2	32	71	78	44	0

Table 63. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2014

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥65	Unknown or Missing
Milwaukee-Waukesha-West Allis, WI	18	0	0	0	7	8	3	0
Minneapolis-St. Paul-Bloomington, MN-WI	102	5	8	13	34	22	20	0
Modesto, CA	13	2	1	2	2	3	3	0
Nashville-Davidson--Murfreesboro--Franklin, TN	56	2	2	11	20	15	6	0
New Haven-Milford, CT	11	0	0	4	3	1	3	0
New Orleans-Metairie, LA	53	1	0	6	16	25	5	0
New York-Newark-Jersey City, NY-NJ-PA	970	15	14	114	335	277	215	0
Northport-Sarasota-Bradenton, FL	14	0	0	3	2	7	2	0
Ogden-Clearfield, UT	1	0	0	0	0	1	0	0
Oklahoma City, OK	18	0	0	1	5	10	2	0
Omaha-Council Bluffs, NE-IA	18	0	0	2	8	4	4	0
Orlando-Kissimmee-Sanford, FL	84	2	0	5	24	38	15	0
Oxnard-Thousand Oaks-Ventura, CA	51	1	3	2	15	15	15	0
Palm Bay-Melbourne-Titusville, FL	11	0	0	0	3	7	1	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	2	3	17	41	57	38	0
Phoenix-Mesa-Scottsdale, AZ	128	3	3	29	40	29	24	0
Pittsburgh, PA	23	0	0	3	10	5	5	0
Portland-South Portland, ME	8	0	2	0	3	0	3	0
Portland-Vancouver-Hillsboro, OR-WA	71	1	0	9	18	24	19	0
Providence-Warwick, RI-MA	24	0	0	4	7	8	5	0
Provo-Orem, UT	0	0	0	0	0	0	0	0
Raleigh, NC	22	0	0	1	13	2	6	0
Richmond, VA	17	0	2	2	4	4	5	0
Riverside-San Bernardino-Ontario, CA	115	3	6	9	34	25	38	0
Rochester, NY	21	1	0	1	10	5	4	0
Sacramento--Roseville--Arden-Arcade, CA	88	2	0	16	17	26	27	0
St. Louis, MO-IL	44	0	0	1	19	16	8	0
Salt Lake City, UT	24	0	0	1	9	8	6	0
San Antonio-New Braunfels, TX	91	3	2	10	23	40	13	0
San Diego-Carlsbad, CA	220	3	6	38	60	61	52	0
San Francisco-Oakland-Hayward, CA	357	6	2	24	79	112	134	0
San Jose-Sunnyvale-Santa Clara, CA	165	3	4	12	59	47	40	0
Santa Rosa, CA	13	1	0	1	3	2	6	0
Scranton--Wilkes-Barre--Hazleton, PA	4	0	0	0	1	1	2	0
Seattle-Tacoma-Bellevue, WA	133	5	5	13	48	35	27	0
Spokane-Spokane Valley, WA	5	0	0	0	3	2	0	0
Springfield, MA	11	0	1	1	3	3	3	0
Stockton-Lodi, CA	54	5	0	1	14	14	20	0
Syracuse, NY	11	0	0	1	3	5	2	0
Tampa-St. Petersburg-Clearwater, FL	81	3	2	7	19	34	16	0
Toledo, OH	2	0	2	0	0	0	0	0
Tucson, AZ	32	3	2	3	11	6	7	0
Tulsa, OK	22	9	1	1	4	4	3	0
Urban Honolulu, HI	112	0	0	10	24	42	36	0
Virginia Beach-Norfolk-Newport News, VA-NC	23	1	0	3	6	6	7	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	270	5	3	33	107	67	55	0
Wichita, KS	12	0	0	3	2	4	3	0
Winston-Salem, NC	8	0	0	0	2	5	1	0
Worcester, MA-CT	25	0	0	4	9	10	2	0
Youngstown-Warren-Boardman, OH-PA	1	0	0	0	0	0	1	0
Total - 106 Areas	7,553	199	141	749	2,287	2,381	1,796	0
San Juan-Caguas-Guaynabo, PR	34	0	0	1	6	16	11	0

Note: See Technical Notes for definition of MSA.

Table 64. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014

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	6	0	0	0	3	0	3	0	0
Albany-Schenectady-Troy, NY	13	0	0	6	3	0	1	1	2
Albuquerque, NM	15	8	1	4	0	0	2	0	0
Allentown-Bethlehem-Easton, PA-NJ	5	3	0	1	0	0	1	0	0
Atlanta-Sandy Springs-Roswell, GA	227	29	0	63	110	0	24	1	0
Augusta-Richmond County, GA-SC	13	2	0	1	10	0	0	0	0
Austin-Round Rock, TX	64	24	0	18	12	0	10	0	0
Bakersfield, CA	40	24	0	8	3	0	3	2	0
Baltimore-Columbia-Towson, MD	70	9	0	24	28	0	9	0	0
Baton Rouge, LA	19	5	0	3	9	0	2	0	0
Birmingham-Hoover, AL	47	5	0	2	27	1	12	0	0
Boise City, ID	6	2	0	1	0	0	1	0	2
Boston-Cambridge-Newton, MA-NH	158	23	0	74	39	0	21	1	0
Bridgeport-Stamford-Norwalk, CT	16	7	0	2	2	0	5	0	0
Buffalo-Cheektowaga-Niagara Falls, NY	19	0	0	12	1	0	6	0	0
Cape Coral-Fort Myers, FL	12	4	0	1	3	0	4	0	0
Charleston-North Charleston, SC	16	0	0	3	10	0	3	0	0
Charlotte-Concord-Gastonia, NC-SC	36	8	0	8	14	0	5	1	0
Chattanooga, TN-GA	7	0	0	3	2	0	2	0	0
Chicago-Naperville-Elgin, IL-IN-WI	280	89	0	90	63	0	38	0	0
Cincinnati, OH-KY-IN	27	3	0	7	9	0	8	0	0
Cleveland-Elyria, OH	40	1	0	9	15	0	15	0	0
Colorado Springs, CO	1	0	0	1	0	0	0	0	0
Columbia, SC	11	5	0	0	5	0	1	0	0
Columbus, OH	54	2	0	20	22	0	10	0	0
Dallas-Fort Worth-Arlington, TX	295	95	1	86	84	1	25	3	0
Dayton, OH	9	0	0	2	2	0	5	0	0
Deltona-Daytona Beach-Ormond Beach, FL	8	2	0	0	2	0	4	0	0
Denver-Aurora-Lakewood, CO	49	9	0	19	14	2	5	0	0
Des Moines-West Des Moines, IA	12	2	0	6	0	0	2	2	0
Detroit-Warren-Dearborn, MI	68	8	0	25	24	0	5	5	1
Durham-Chapel Hill, NC	14	7	0	1	5	0	1	0	0
El Paso, TX	43	42	0	1	0	0	0	0	0
Fayetteville-Springdale-Rogers, AR-MO	36	2	0	5	1	22	6	0	0
Fresno, CA	51	24	0	21	1	0	1	4	0
Grand Rapids-Wyoming, MI	10	1	0	6	1	0	1	0	1
Greensboro-High Point, NC	23	6	0	9	8	0	0	0	0
Greenville-Anderson-Mauldin, SC	10	2	0	2	4	0	2	0	0
Harrisburg-Carlisle, PA	12	1	0	5	2	0	4	0	0
Hartford-West Hartford-East Hartford, CT	21	6	0	5	5	0	5	0	0
Houston-The Woodlands-Sugar Land, TX	381	180	1	78	81	0	40	1	0
Indianapolis-Carmel-Anderson, IN	61	9	0	17	19	0	16	0	0
Jackson, MS	24	2	0	3	18	0	1	0	0
Jacksonville, FL	50	5	0	8	30	0	7	0	0
Kansas City, MO-KS	30	8	0	7	8	0	7	0	0
Knoxville, TN	9	1	0	2	1	0	5	0	0
Lakeland-Winter Haven, FL	15	4	0	4	2	0	5	0	0
Lancaster, PA	8	2	0	4	1	0	1	0	0
Las Vegas-Henderson-Paradise, NV	66	14	0	32	11	0	6	3	0
Little Rock-North Little Rock-Conway, AR	12	4	0	3	1	0	4	0	0
Los Angeles-Long Beach-Anaheim, CA	809	295	0	389	55	2	52	15	1
Louisville/Jefferson County, KY-IN	36	5	0	8	11	1	11	0	0
Madison, WI	9	2	0	5	0	0	2	0	0
McAllen-Edinburg-Mission, TX	70	69	0	0	1	0	0	0	0
Memphis, TN-MS-AR	60	9	0	2	43	0	6	0	0
Miami-Fort Lauderdale-West Palm Beach, FL	235	111	0	12	98	0	14	0	0
Milwaukee-Waukesha-West Allis, WI	18	4	0	8	3	0	3	0	0

Table 64. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014

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
Minneapolis-St. Paul-Bloomington, MN-WI	102	9	1	36	41	0	14	1	0
Modesto, CA	13	8	0	3	0	0	1	1	0
Nashville-Davidson--Murfreesboro--Franklin, TN	56	9	0	15	18	0	14	0	0
New Haven-Milford, CT	11	1	0	6	4	0	0	0	0
New Orleans-Metairie, LA	53	8	0	12	23	0	9	1	0
New York-Newark-Jersey City, NY-NJ-PA	970	282	0	407	175	0	75	23	8
Northport-Sarasota-Bradenton, FL	14	7	0	0	3	0	4	0	0
Ogden-Clearfield, UT	1	1	0	0	0	0	0	0	0
Oklahoma City, OK	18	6	1	3	0	0	6	2	0
Omaha-Council Bluffs, NE-IA	18	6	0	3	6	0	0	3	0
Orlando-Kissimmee-Sanford, FL	84	22	0	22	26	0	14	0	0
Oxnard-Thousand Oaks-Ventura, CA	51	33	0	14	0	0	2	2	0
Palm Bay-Melbourne-Titusville, FL	11	0	0	3	2	0	6	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	23	0	65	48	0	17	5	0
Phoenix-Mesa-Scottsdale, AZ	128	77	3	21	12	0	15	0	0
Pittsburgh, PA	23	2	0	10	4	0	6	1	0
Portland-South Portland, ME	8	0	0	4	3	0	1	0	0
Portland-Vancouver-Hillsboro, OR-WA	71	7	0	24	12	3	24	1	0
Providence-Warwick, RI-MA	24	11	0	2	6	0	4	1	0
Provo-Orem, UT	0	0	0	0	0	0	0	0	0
Raleigh, NC	22	3	0	4	9	0	6	0	0
Richmond, VA	17	0	0	7	7	0	3	0	0
Riverside-San Bernardino-Ontario, CA	115	58	0	36	2	3	10	1	5
Rochester, NY	21	1	0	13	3	0	3	1	0
Sacramento--Roseville--Arden-Arcade, CA	88	12	0	57	1	0	10	6	2
St. Louis, MO-IL	44	1	0	14	21	0	8	0	0
Salt Lake City, UT	24	8	1	7	4	0	4	0	0
San Antonio-New Braunfels, TX	91	66	0	11	5	1	8	0	0
San Diego-Carlsbad, CA	220	115	1	66	14	0	19	5	0
San Francisco-Oakland-Hayward, CA	357	49	1	213	24	5	34	30	1
San Jose-Sunnyvale-Santa Clara, CA	165	30	0	96	7	0	5	26	1
Santa Rosa, CA	13	7	0	2	1	0	3	0	0
Scranton--Wilkes-Barre--Hazleton, PA	4	0	0	2	0	0	2	0	0
Seattle-Tacoma-Bellevue, WA	133	16	1	67	29	12	8	0	0
Spokane-Spokane Valley, WA	5	0	0	1	1	3	0	0	0
Springfield, MA	11	3	0	4	3	0	1	0	0
Stockton-Lodi, CA	54	13	0	22	4	0	14	1	0
Syracuse, NY	11	0	0	9	2	0	0	0	0
Tampa-St. Petersburg-Clearwater, FL	81	20	0	21	14	0	26	0	0
Toledo, OH	2	1	0	0	1	0	0	0	0
Tucson, AZ	32	13	0	5	11	0	3	0	0
Tulsa, OK	22	3	1	11	1	1	4	1	0
Urban Honolulu, HI	112	2	0	90	0	18	1	1	0
Virginia Beach-Norfolk-Newport News, VA-NC	23	1	0	12	9	0	1	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	270	56	0	88	104	0	21	1	0
Wichita, KS	12	3	0	4	1	1	3	0	0
Winston-Salem, NC	8	4	0	0	3	0	1	0	0
Worcester, MA-CT	25	6	0	8	4	0	5	2	0
Youngstown-Warren-Boardman, OH-PA	1	0	0	0	0	0	1	0	0
Total - 106 Areas	7,553	2,187	13	2,656	1,594	76	848	155	24
San Juan-Caguas-Guaynabo, PR	34	33	0	0	0	1	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 65. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2014

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Akron, OH	6	6	(100.0)	0	(0.0)	0	(0.0)
Albany-Schenectady-Troy, NY	13	3	(23.1)	10	(76.9)	0	(0.0)
Albuquerque, NM	15	3	(20.0)	12	(80.0)	0	(0.0)
Allentown-Bethlehem-Easton, PA-NJ	5	2	(40.0)	3	(60.0)	0	(0.0)
Atlanta-Sandy Springs-Roswell, GA	227	112	(49.3)	115	(50.7)	0	(0.0)
Augusta-Richmond County, GA-SC	13	9	(69.2)	4	(30.8)	0	(0.0)
Austin-Round Rock, TX	64	27	(42.2)	37	(57.8)	0	(0.0)
Bakersfield, CA	40	13	(32.5)	27	(67.5)	0	(0.0)
Baltimore-Columbia-Towson, MD	70	25	(35.7)	45	(64.3)	0	(0.0)
Baton Rouge, LA	19	13	(68.4)	6	(31.6)	0	(0.0)
Birmingham-Hoover, AL	47	40	(85.1)	7	(14.9)	0	(0.0)
Boise City, ID	6	1	(16.7)	5	(83.3)	0	(0.0)
Boston-Cambridge-Newton, MA-NH	158	22	(13.9)	136	(86.1)	0	(0.0)
Bridgeport-Stamford-Norwalk, CT	16	2	(12.5)	14	(87.5)	0	(0.0)
Buffalo-Cheektowaga-Niagara Falls, NY	19	7	(36.8)	12	(63.2)	0	(0.0)
Cape Coral-Fort Myers, FL	12	5	(41.7)	7	(58.3)	0	(0.0)
Charleston-North Charleston, SC	16	13	(81.3)	3	(18.8)	0	(0.0)
Charlotte-Concord-Gastonia, NC-SC	36	16	(44.4)	20	(55.6)	0	(0.0)
Chattanooga, TN-GA	7	3	(42.9)	4	(57.1)	0	(0.0)
Chicago-Naperville-Elgin, IL-IN-WI	280	82	(29.3)	198	(70.7)	0	(0.0)
Cincinnati, OH-KY-IN	27	11	(40.7)	16	(59.3)	0	(0.0)
Cleveland-Elyria, OH	40	22	(55.0)	18	(45.0)	0	(0.0)
Colorado Springs, CO	1	0	(0.0)	1	(100.0)	0	(0.0)
Columbia, SC	11	6	(54.5)	5	(45.5)	0	(0.0)
Columbus, OH	54	13	(24.1)	41	(75.9)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	295	108	(36.6)	187	(63.4)	0	(0.0)
Dayton, OH	9	5	(55.6)	4	(44.4)	0	(0.0)
Deltona-Daytona Beach-Ormond Beach, FL	8	6	(75.0)	2	(25.0)	0	(0.0)
Denver-Aurora-Lakewood, CO	49	9	(18.4)	40	(81.6)	0	(0.0)
Des Moines-West Des Moines, IA	12	1	(8.3)	11	(91.7)	0	(0.0)
Detroit-Warren-Dearborn, MI	68	30	(44.1)	38	(55.9)	0	(0.0)
Durham-Chapel Hill, NC	14	3	(21.4)	11	(78.6)	0	(0.0)
El Paso, TX	43	5	(11.6)	38	(88.4)	0	(0.0)
Fayetteville-Springdale-Rogers, AR-MO	36	30	(83.3)	6	(16.7)	0	(0.0)
Fresno, CA	51	15	(29.4)	36	(70.6)	0	(0.0)
Grand Rapids-Wyoming, MI	10	1	(10.0)	9	(90.0)	0	(0.0)
Greensboro-High Point, NC	23	3	(13.0)	20	(87.0)	0	(0.0)
Greenville-Anderson-Mauldin, SC	10	5	(50.0)	5	(50.0)	0	(0.0)
Harrisburg-Carlisle, PA	12	5	(41.7)	7	(58.3)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	21	9	(42.9)	12	(57.1)	0	(0.0)
Houston-The Woodlands-Sugar Land, TX	381	145	(38.1)	236	(61.9)	0	(0.0)
Indianapolis-Carmel-Anderson, IN	61	25	(41.0)	36	(59.0)	0	(0.0)
Jackson, MS	24	21	(87.5)	3	(12.5)	0	(0.0)
Jacksonville, FL	50	37	(74.0)	13	(26.0)	0	(0.0)
Kansas City, MO-KS	30	13	(43.3)	17	(56.7)	0	(0.0)
Knoxville, TN	9	5	(55.6)	4	(44.4)	0	(0.0)
Lakeland-Winter Haven, FL	15	7	(46.7)	8	(53.3)	0	(0.0)
Lancaster, PA	8	2	(25.0)	6	(75.0)	0	(0.0)
Las Vegas-Henderson-Paradise, NV	66	21	(31.8)	45	(68.2)	0	(0.0)
Little Rock-North Little Rock-Conway, AR	12	7	(58.3)	5	(41.7)	0	(0.0)
Los Angeles-Long Beach-Anaheim, CA	809	152	(18.8)	656	(81.1)	1	(0.1)
Louisville/Jefferson County, KY-IN	36	17	(47.2)	19	(52.8)	0	(0.0)
Madison, WI	9	1	(11.1)	8	(88.9)	0	(0.0)
McAllen-Edinburg-Mission, TX	70	28	(40.0)	42	(60.0)	0	(0.0)
Memphis, TN-MS-AR	60	43	(71.7)	17	(28.3)	0	(0.0)
Miami-Fort Lauderdale-West Palm Beach, FL	235	53	(22.6)	182	(77.4)	0	(0.0)
Milwaukee-Waukesha-West Allis, WI	18	6	(33.3)	12	(66.7)	0	(0.0)

Table 65. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with ≥500,000 Population, 2014

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Minneapolis-St. Paul-Bloomington, MN-WI	102	26	(25.5)	76	(74.5)	0	(0.0)
Modesto, CA	13	6	(46.2)	7	(53.8)	0	(0.0)
Nashville-Davidson--Murfreesboro--Franklin, TN	56	21	(37.5)	35	(62.5)	0	(0.0)
New Haven-Milford, CT	11	2	(18.2)	9	(81.8)	0	(0.0)
New Orleans-Metairie, LA	53	34	(64.2)	19	(35.8)	0	(0.0)
New York-Newark-Jersey City, NY-NJ-PA	970	159	(16.4)	810	(83.5)	1	(0.1)
Northport-Sarasota-Bradenton, FL	14	7	(50.0)	7	(50.0)	0	(0.0)
Ogden-Clearfield, UT	1	0	(0.0)	1	(100.0)	0	(0.0)
Oklahoma City, OK	18	7	(38.9)	11	(61.1)	0	(0.0)
Omaha-Council Bluffs, NE-IA	18	2	(11.1)	16	(88.9)	0	(0.0)
Orlando-Kissimmee-Sanford, FL	84	33	(39.3)	51	(60.7)	0	(0.0)
Oxnard-Thousand Oaks-Ventura, CA	51	13	(25.5)	38	(74.5)	0	(0.0)
Palm Bay-Melbourne-Titusville, FL	11	7	(63.6)	4	(36.4)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	158	45	(28.5)	113	(71.5)	0	(0.0)
Phoenix-Mesa-Scottsdale, AZ	128	24	(18.8)	104	(81.3)	0	(0.0)
Pittsburgh, PA	23	9	(39.1)	14	(60.9)	0	(0.0)
Portland-South Portland, ME	8	1	(12.5)	7	(87.5)	0	(0.0)
Portland-Vancouver-Hillsboro, OR-WA	71	24	(33.8)	47	(66.2)	0	(0.0)
Providence-Warwick, RI-MA	24	6	(25.0)	18	(75.0)	0	(0.0)
Provo-Orem, UT	0	0	(0.0)	0	(0.0)	0	(0.0)
Raleigh, NC	22	11	(50.0)	11	(50.0)	0	(0.0)
Richmond, VA	17	9	(52.9)	8	(47.1)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	115	33	(28.7)	80	(69.6)	2	(1.7)
Rochester, NY	21	4	(19.0)	17	(81.0)	0	(0.0)
Sacramento--Roseville--Arden-Arcade, CA	88	24	(27.3)	64	(72.7)	0	(0.0)
St. Louis, MO-IL	44	22	(50.0)	22	(50.0)	0	(0.0)
Salt Lake City, UT	24	2	(8.3)	22	(91.7)	0	(0.0)
San Antonio-New Braunfels, TX	91	49	(53.8)	42	(46.2)	0	(0.0)
San Diego-Carlsbad, CA	220	68	(30.9)	152	(69.1)	0	(0.0)
San Francisco-Oakland-Hayward, CA	357	53	(14.8)	304	(85.2)	0	(0.0)
San Jose-Sunnyvale-Santa Clara, CA	165	14	(8.5)	145	(87.9)	6	(3.6)
Santa Rosa, CA	13	4	(30.8)	4	(30.8)	5	(38.5)
Scranton--Wilkes-Barre--Hazleton, PA	4	2	(50.0)	2	(50.0)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	133	27	(20.3)	106	(79.7)	0	(0.0)
Spokane-Spokane Valley, WA	5	3	(60.0)	2	(40.0)	0	(0.0)
Springfield, MA	11	5	(45.5)	6	(54.5)	0	(0.0)
Stockton-Lodi, CA	54	27	(50.0)	26	(48.1)	1	(1.9)
Syracuse, NY	11	0	(0.0)	11	(100.0)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	81	35	(43.2)	46	(56.8)	0	(0.0)
Toledo, OH	2	1	(50.0)	1	(50.0)	0	(0.0)
Tucson, AZ	32	9	(28.1)	23	(71.9)	0	(0.0)
Tulsa, OK	22	9	(40.9)	13	(59.1)	0	(0.0)
Urban Honolulu, HI	112	25	(22.3)	87	(77.7)	0	(0.0)
Virginia Beach-Norfolk-Newport News, VA-NC	23	9	(39.1)	14	(60.9)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	270	38	(14.1)	232	(85.9)	0	(0.0)
Wichita, KS	12	4	(33.3)	8	(66.7)	0	(0.0)
Winston-Salem, NC	8	4	(50.0)	4	(50.0)	0	(0.0)
Worcester, MA-CT	25	4	(16.0)	21	(84.0)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	1	1	(100.0)	0	(0.0)	0	(0.0)
Total - 106 Areas	7,553	2,196	(29.1)	5,341	(70.7)	16	(0.2)
San Juan-Caguas-Guaynabo, PR	34	28	(82.4)	6	(17.6)	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 66. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15:
Metropolitan Statistical Areas with ≥500,000 Population, 2014**

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Akron, OH	6	6	(100.0)	0	(0.0)
Albany-Schenectady-Troy, NY	12	12	(100.0)	0	(0.0)
Albuquerque, NM	14	13	(92.9)	1	(7.1)
Allentown-Bethlehem-Easton, PA-NJ	5	5	(100.0)	0	(0.0)
Atlanta-Sandy Springs-Roswell, GA	209	209	(100.0)	52	(24.9)
Augusta-Richmond County, GA-SC	12	12	(100.0)	0	(0.0)
Austin-Round Rock, TX	59	59	(100.0)	3	(5.1)
Bakersfield, CA	38	38	(100.0)	3	(7.9)
Baltimore-Columbia-Towson, MD	67	67	(100.0)	3	(4.5)
Baton Rouge, LA	17	17	(100.0)	0	(0.0)
Birmingham-Hoover, AL	47	47	(100.0)	1	(2.1)
Boise City, ID	6	5	(83.3)	1	(16.7)
Boston-Cambridge-Newton, MA-NH	152	152	(100.0)	5	(3.3)
Bridgeport-Stamford-Norwalk, CT	16	16	(100.0)	0	(0.0)
Buffalo-Cheektowaga-Niagara Falls, NY	19	19	(100.0)	1	(5.3)
Cape Coral-Fort Myers, FL	12	12	(100.0)	0	(0.0)
Charleston-North Charleston, SC	16	16	(100.0)	1	(6.3)
Charlotte-Concord-Gastonia, NC-SC	32	32	(100.0)	1	(3.1)
Chattanooga, TN-GA	7	7	(100.0)	0	(0.0)
Chicago-Naperville-Elgin, IL-IN-WI	269	266	(98.9)	18	(6.7)
Cincinnati, OH-KY-IN	27	27	(100.0)	1	(3.7)
Cleveland-Elyria, OH	38	38	(100.0)	6	(15.8)
Colorado Springs, CO	1	1	(100.0)	0	(0.0)
Columbia, SC	11	11	(100.0)	2	(18.2)
Columbus, OH	53	53	(100.0)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	285	285	(100.0)	19	(6.7)
Dayton, OH	9	9	(100.0)	0	(0.0)
Deltona-Daytona Beach-Ormond Beach, FL	7	6	(85.7)	2	(28.6)
Denver-Aurora-Lakewood, CO	48	48	(100.0)	1	(2.1)
Des Moines-West Des Moines, IA	11	11	(100.0)	0	(0.0)
Detroit-Warren-Dearborn, MI	67	67	(100.0)	2	(3.0)
Durham-Chapel Hill, NC	13	13	(100.0)	0	(0.0)
El Paso, TX	41	41	(100.0)	3	(7.3)
Fayetteville-Springdale-Rogers, AR-MO	22	22	(100.0)	0	(0.0)
Fresno, CA	50	50	(100.0)	1	(2.0)
Grand Rapids-Wyoming, MI	10	10	(100.0)	0	(0.0)
Greensboro-High Point, NC	22	22	(100.0)	1	(4.5)
Greenville-Anderson-Mauldin, SC	9	9	(100.0)	0	(0.0)
Harrisburg-Carlisle, PA	12	12	(100.0)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	19	19	(100.0)	1	(5.3)
Houston-The Woodlands-Sugar Land, TX	367	367	(100.0)	17	(4.6)
Indianapolis-Carmel-Anderson, IN	60	60	(100.0)	10	(16.7)
Jackson, MS	24	24	(100.0)	0	(0.0)
Jacksonville, FL	47	47	(100.0)	9	(19.1)
Kansas City, MO-KS	28	28	(100.0)	4	(14.3)
Knoxville, TN	9	9	(100.0)	0	(0.0)
Lakeland-Winter Haven, FL	15	15	(100.0)	0	(0.0)
Lancaster, PA	8	8	(100.0)	0	(0.0)
Las Vegas-Henderson-Paradise, NV	54	54	(100.0)	4	(7.4)
Little Rock-North Little Rock-Conway, AR	12	12	(100.0)	2	(16.7)
Los Angeles-Long Beach-Anaheim, CA	780	775	(99.4)	44	(5.6)
Louisville/Jefferson County, KY-IN	35	35	(100.0)	3	(8.6)
Madison, WI	9	9	(100.0)	0	(0.0)
McAllen-Edinburg-Mission, TX	62	62	(100.0)	2	(3.2)
Memphis, TN-MS-AR	54	54	(100.0)	12	(22.2)
Miami-Fort Lauderdale-West Palm Beach, FL	225	225	(100.0)	12	(5.3)
Milwaukee-Waukesha-West Allis, WI	18	18	(100.0)	1	(5.6)

Table 66. (Cont'd) Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15: Metropolitan Statistical Areas with ≥500,000 Population, 2014

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Minneapolis-St. Paul-Bloomington, MN-WI	89	89	(100.0)	5	(5.6)
Modesto, CA	10	10	(100.0)	0	(0.0)
Nashville-Davidson--Murfreesboro--Franklin, TN	52	52	(100.0)	2	(3.8)
New Haven-Milford, CT	11	11	(100.0)	0	(0.0)
New Orleans-Metairie, LA	52	52	(100.0)	4	(7.7)
New York-Newark-Jersey City, NY-NJ-PA	941	931	(98.9)	26	(2.8)
Northport-Sarasota-Bradenton, FL	14	14	(100.0)	1	(7.1)
Ogden-Clearfield, UT	1	1	(100.0)	0	(0.0)
Oklahoma City, OK	18	11	(61.1)	1	(5.6)
Omaha-Council Bluffs, NE-IA	18	18	(100.0)	0	(0.0)
Orlando-Kissimmee-Sanford, FL	82	82	(100.0)	9	(11.0)
Oxnard-Thousand Oaks-Ventura, CA	47	47	(100.0)	4	(8.5)
Palm Bay-Melbourne-Titusville, FL	11	11	(100.0)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	153	153	(100.0)	6	(3.9)
Phoenix-Mesa-Scottsdale, AZ	122	113	(92.6)	3	(2.5)
Pittsburgh, PA	23	23	(100.0)	0	(0.0)
Portland-South Portland, ME	6	6	(100.0)	0	(0.0)
Portland-Vancouver-Hillsboro, OR-WA	70	69	(98.6)	9	(12.9)
Providence-Warwick, RI-MA	24	24	(100.0)	0	(0.0)
Provo-Orem, UT	0	0	(0.0)	0	(0.0)
Raleigh, NC	22	22	(100.0)	0	(0.0)
Richmond, VA	15	15	(100.0)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	106	106	(100.0)	3	(2.8)
Rochester, NY	20	20	(100.0)	0	(0.0)
Sacramento--Roseville--Arden-Arcade, CA	86	85	(98.8)	0	(0.0)
St. Louis, MO-IL	44	44	(100.0)	1	(2.3)
Salt Lake City, UT	24	24	(100.0)	1	(4.2)
San Antonio-New Braunfels, TX	86	86	(100.0)	10	(11.6)
San Diego-Carlsbad, CA	211	211	(100.0)	18	(8.5)
San Francisco-Oakland-Hayward, CA	349	346	(99.1)	12	(3.4)
San Jose-Sunnyvale-Santa Clara, CA	158	157	(99.4)	4	(2.5)
Santa Rosa, CA	12	12	(100.0)	0	(0.0)
Scranton--Wilkes-Barre--Hazleton, PA	4	4	(100.0)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	123	122	(99.2)	3	(2.4)
Spokane-Spokane Valley, WA	5	5	(100.0)	0	(0.0)
Springfield, MA	10	10	(100.0)	3	(30.0)
Stockton-Lodi, CA	49	48	(98.0)	7	(14.3)
Syracuse, NY	11	11	(100.0)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	76	75	(98.7)	8	(10.5)
Toledo, OH	0	0	(0.0)	0	(0.0)
Tucson, AZ	27	27	(100.0)	2	(7.4)
Tulsa, OK	12	10	(83.3)	0	(0.0)
Urban Honolulu, HI	112	112	(100.0)	9	(8.0)
Virginia Beach-Norfolk-Newport News, VA-NC	22	22	(100.0)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	262	261	(99.6)	5	(1.9)
Wichita, KS	12	12	(100.0)	2	(16.7)
Winston-Salem, NC	8	8	(100.0)	1	(12.5)
Worcester, MA-CT	25	25	(100.0)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	1	1	(100.0)	0	(0.0)
Total - 106 Areas	7,213	7,164	(99.3)	408	(5.7)
San Juan-Caguas-Guaynabo, PR	34	34	(100.0)	4	(11.8)

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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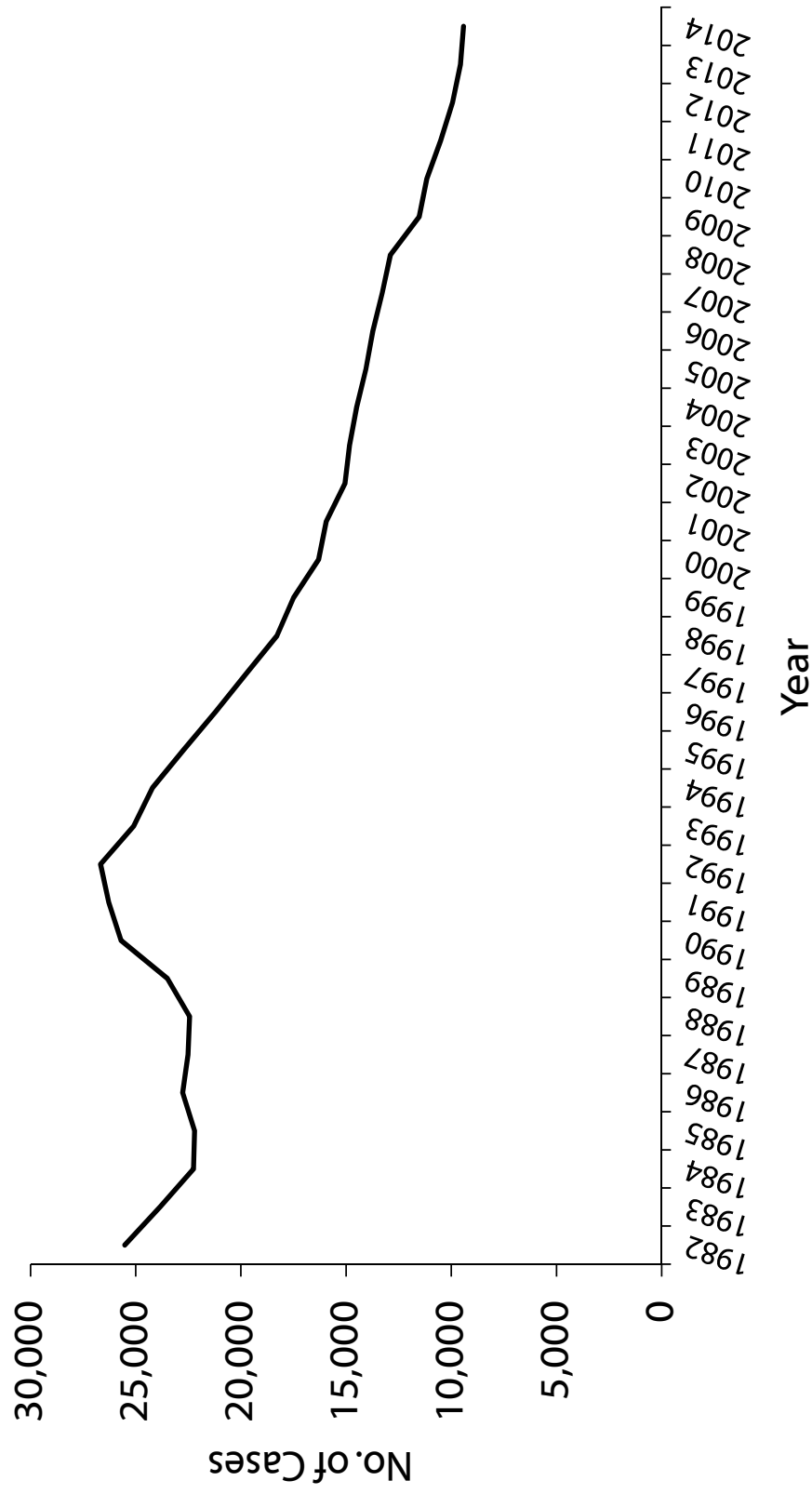
Surveillance Slide Set

2014

Tuberculosis in the United States

National Tuberculosis Surveillance System Highlights from 2014

Reported TB Cases United States, 1982–2014*



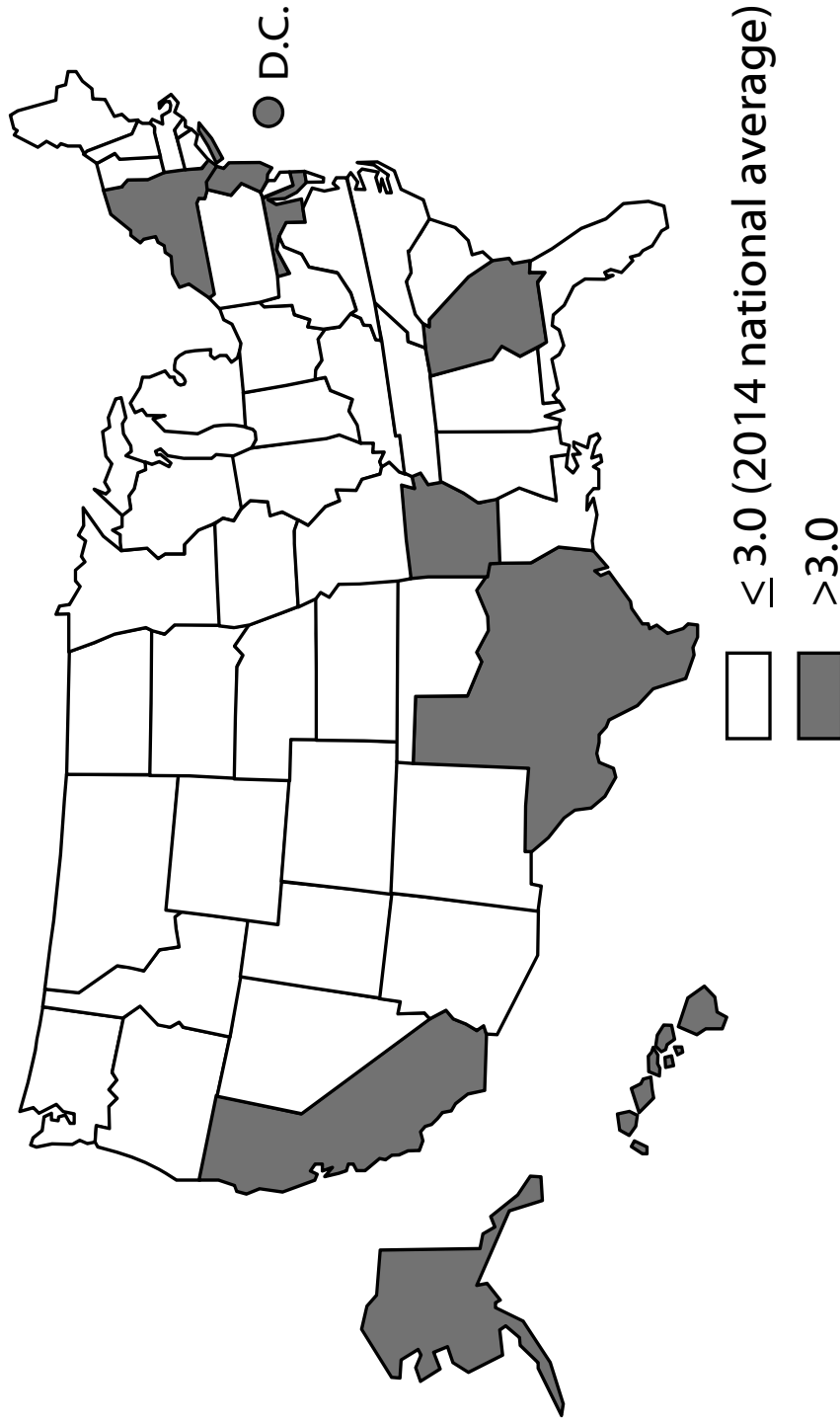
*Updated as of June 5, 2015.

TB Morbidity United States, 2009–2014

Year	No.	Rate*
2009	11,523	3.8
2010	11,161	3.6
2011	10,510	3.4
2012	9,941	3.2
2013	9,565	3.0
2014	9,421	3.0

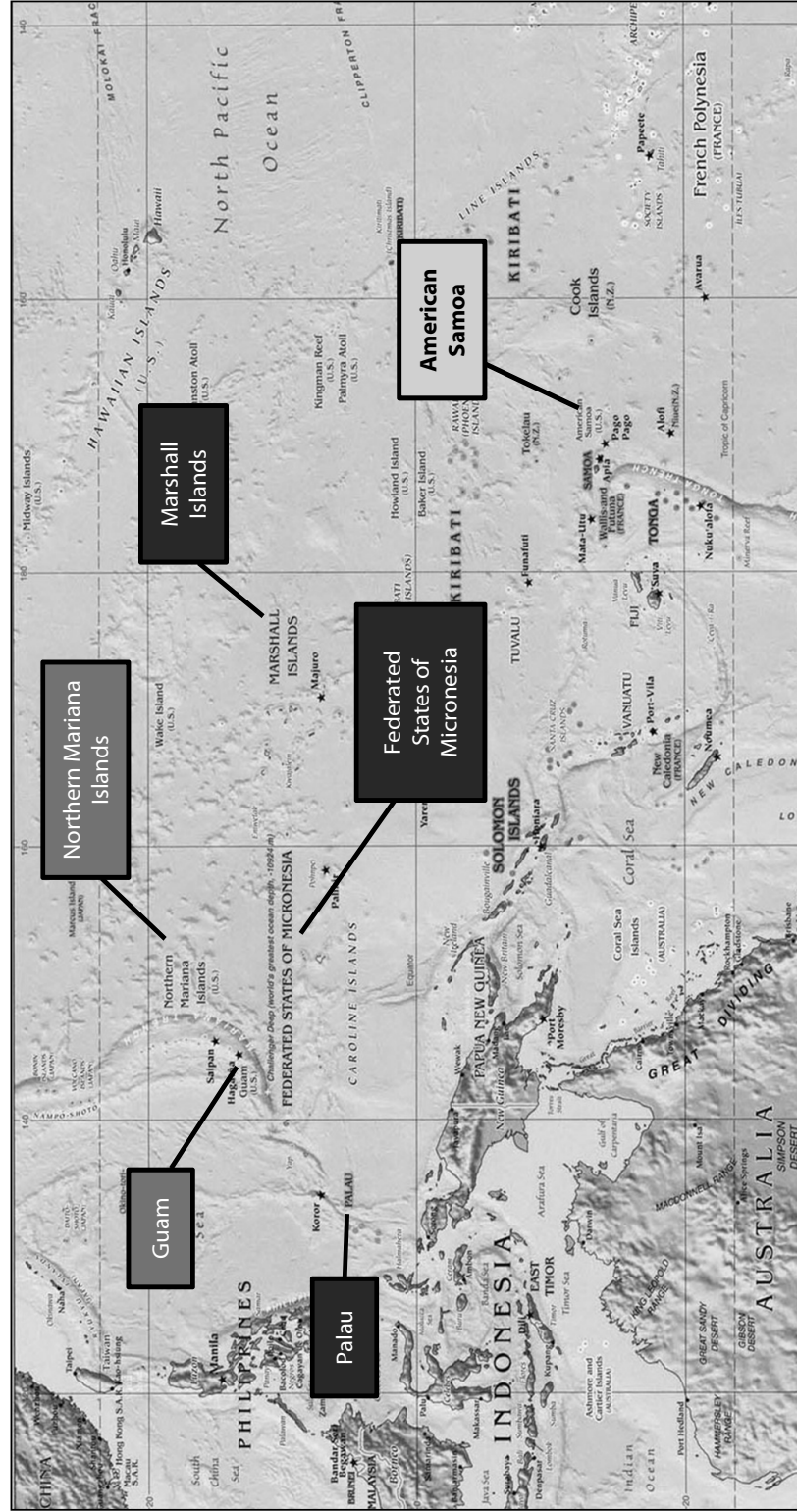
*Cases per 100,000. Updated as of June 5, 2015.

TB Case Rates,* United States, 2014



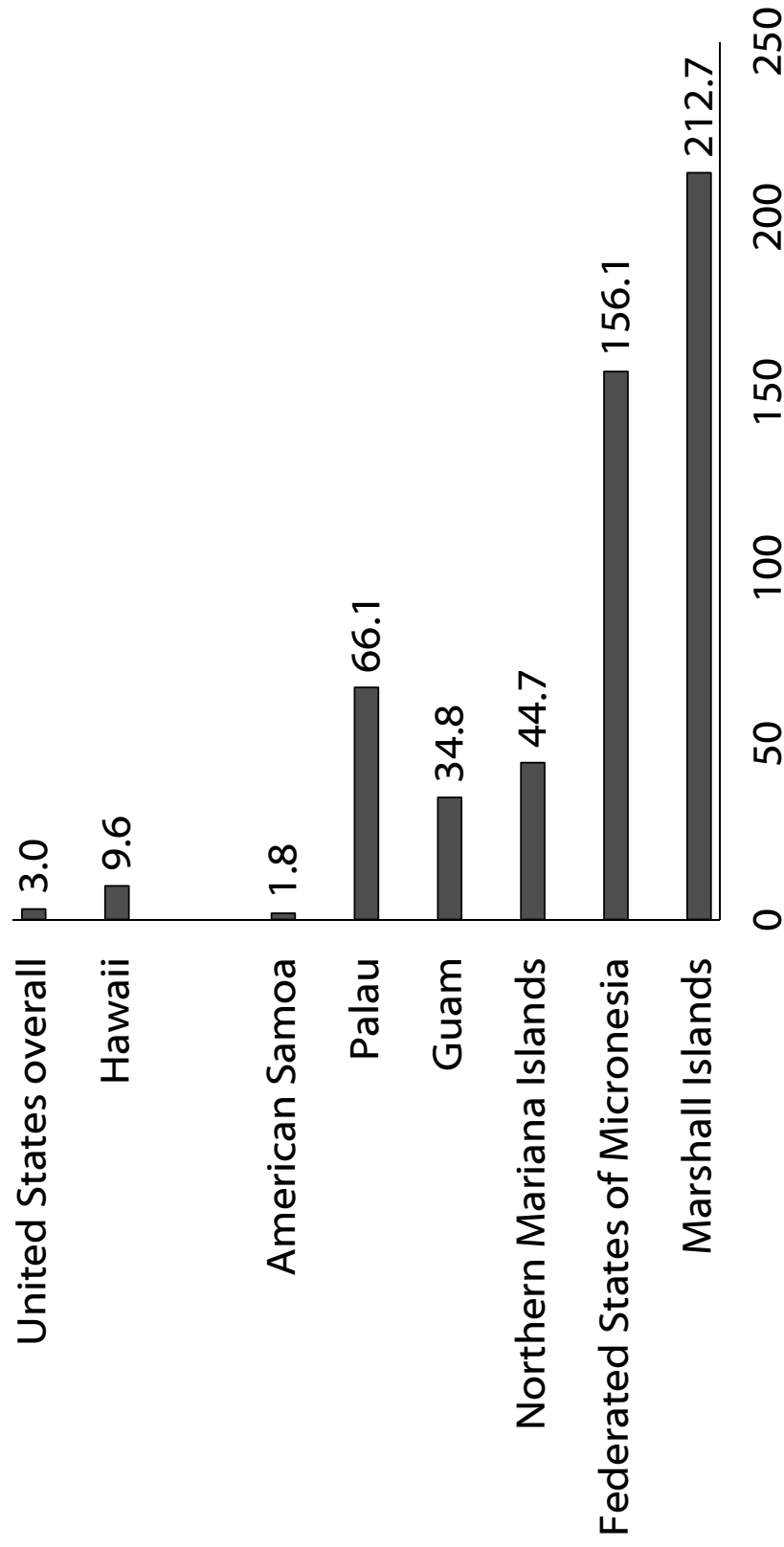
*Cases per 100,000.

Map of U.S.-Affiliated Pacific Islands by TB Case Rates,* 2014



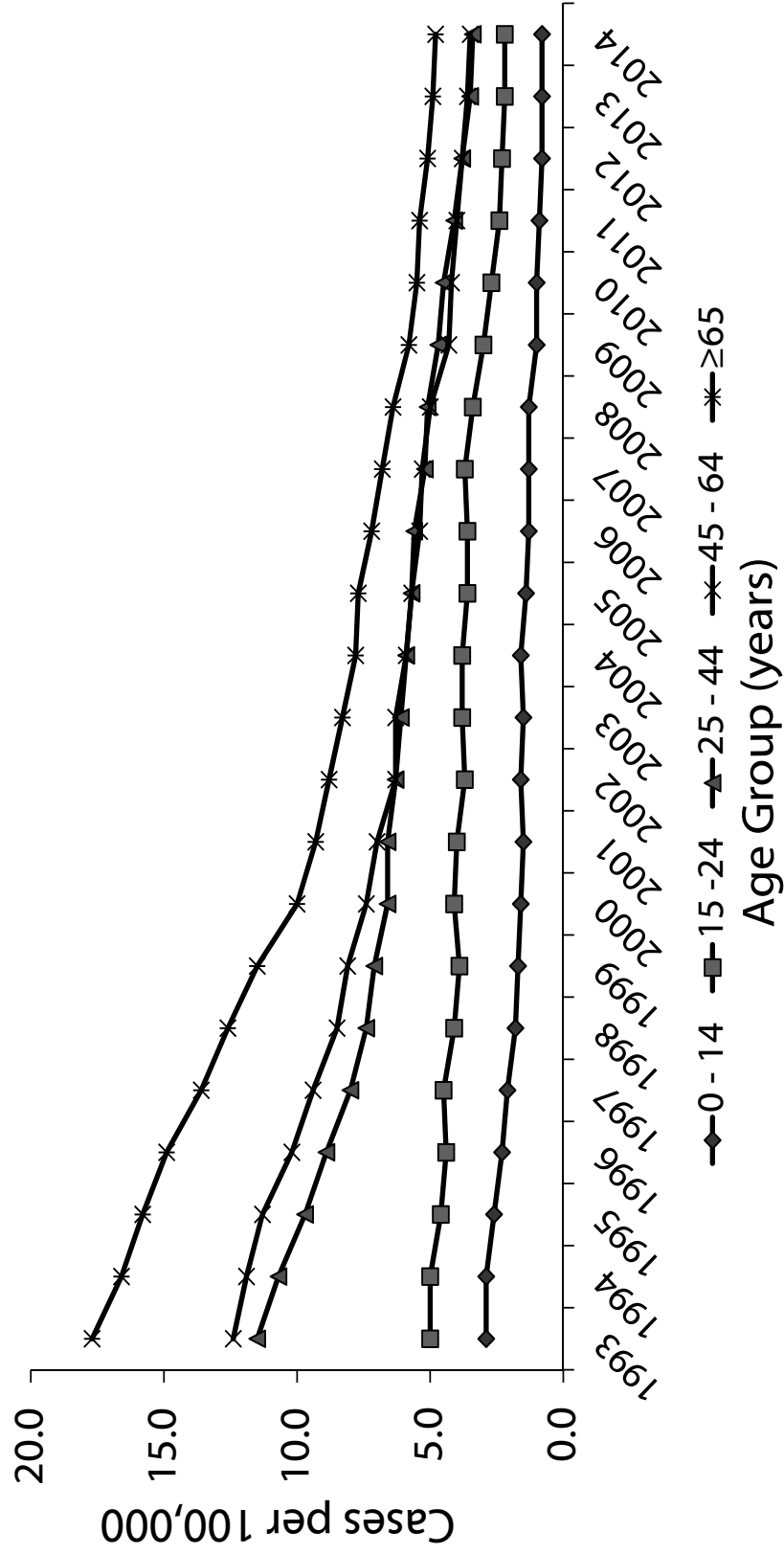
*Cases per 100,000

TB Case Rates,* U.S.-Affiliated Pacific Islands, 2014



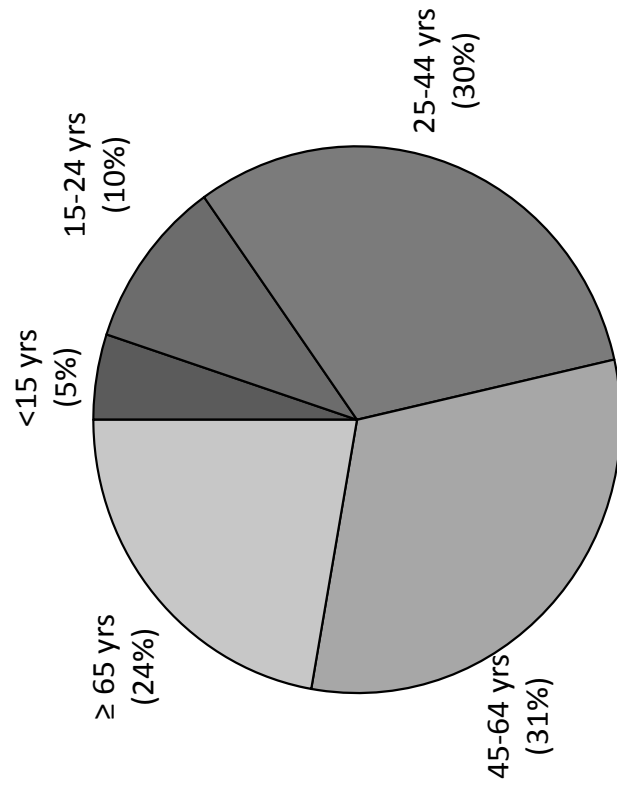
*Cases per 100,000

TB Case Rates* by Age Group United States, 1993–2014

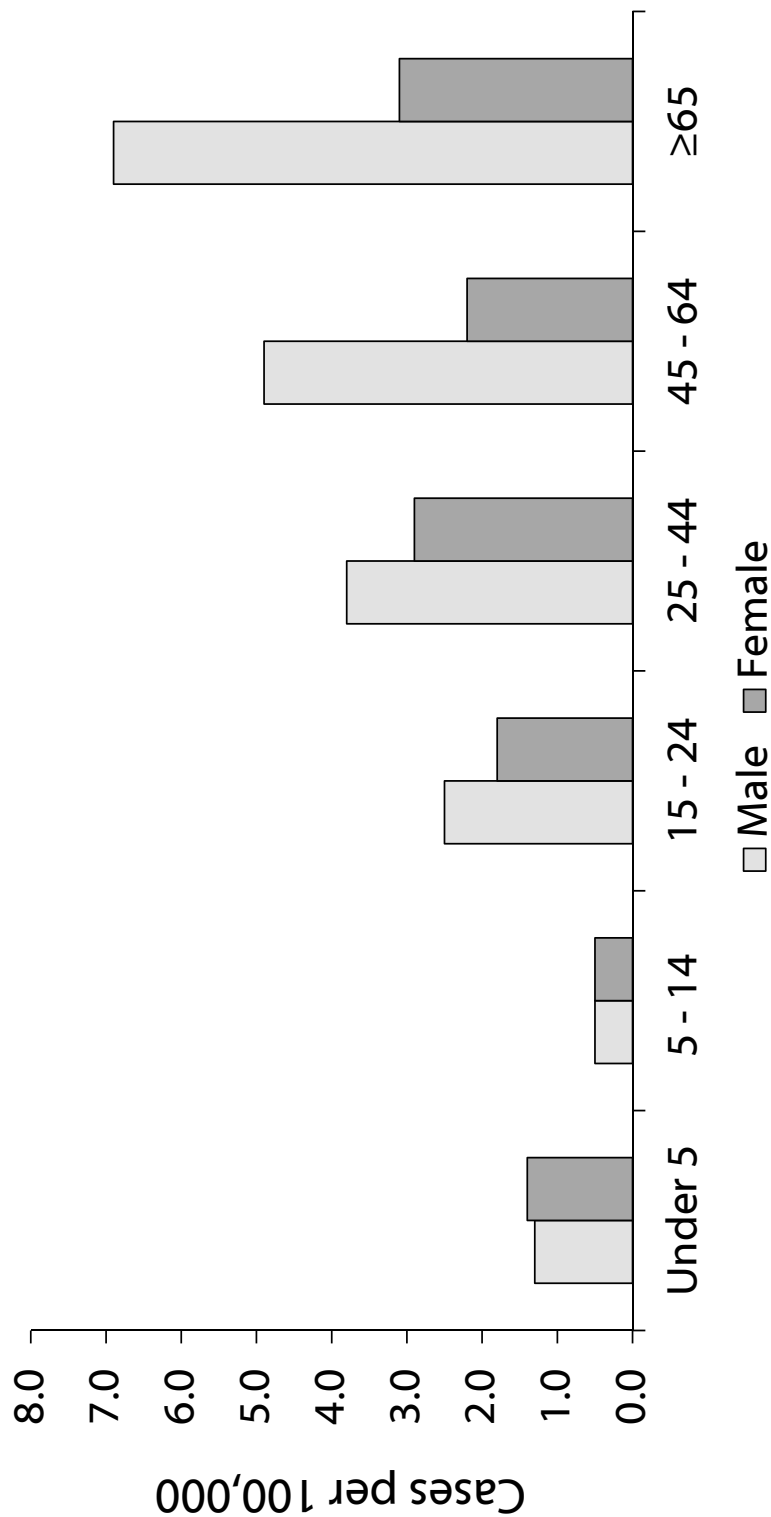


* Updated as of June 5, 2015.

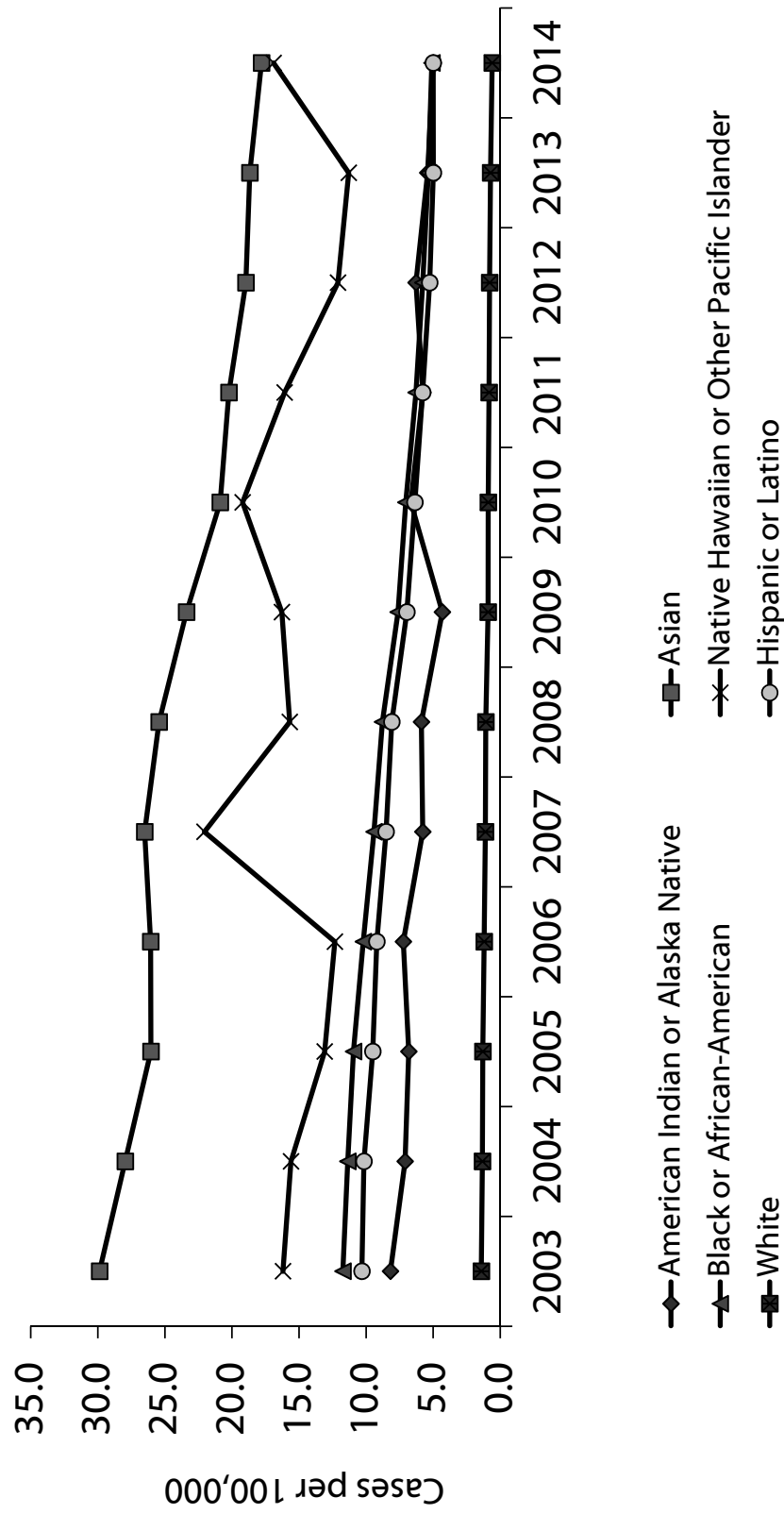
Reported TB Cases by Age Group, United States, 2014



TB Case Rates by Age Group and Sex, United States, 2014



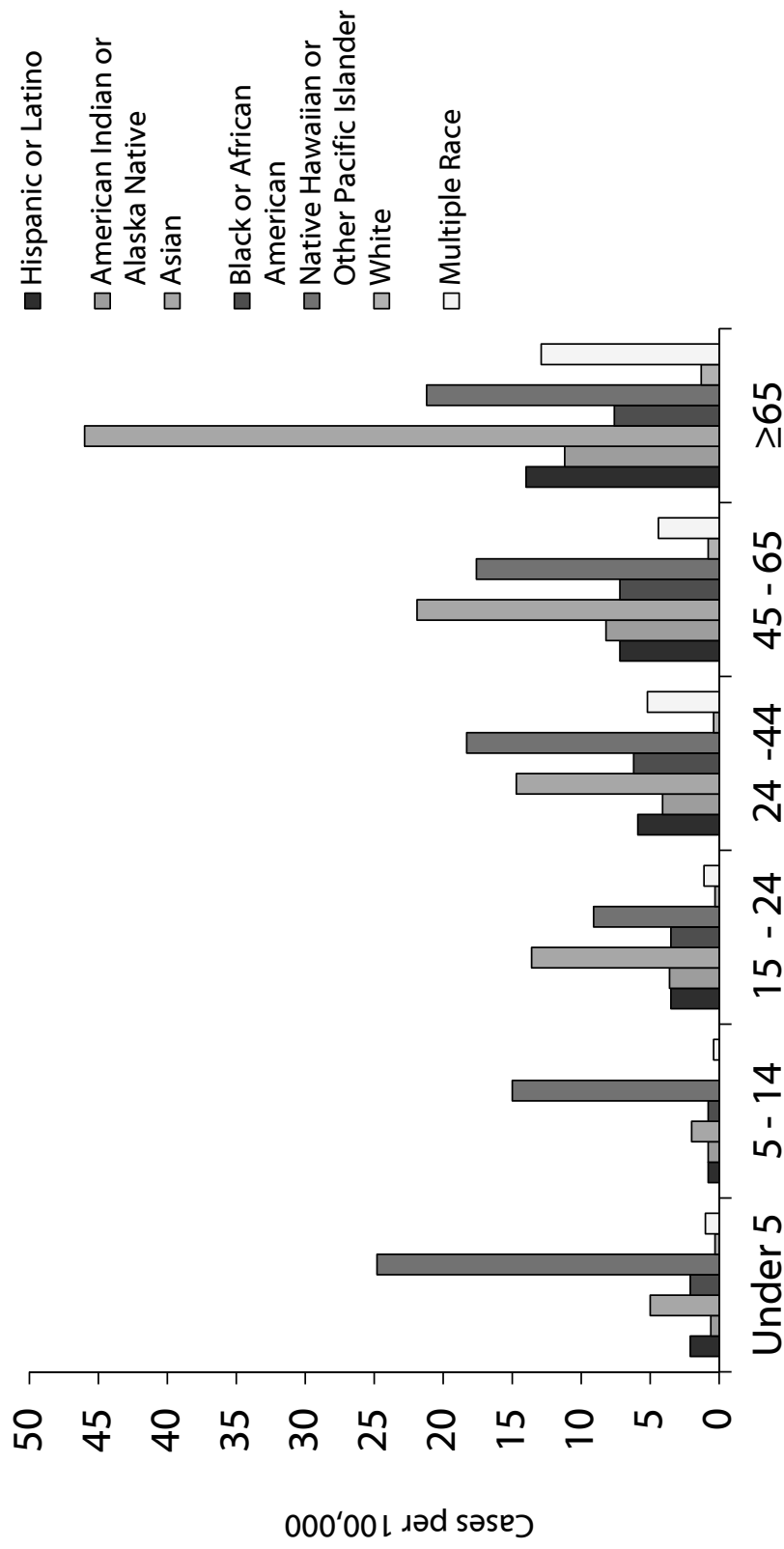
TB Case Rates by Race/Ethnicity,* United States, 2003–2014**



*All races are non-Hispanic.

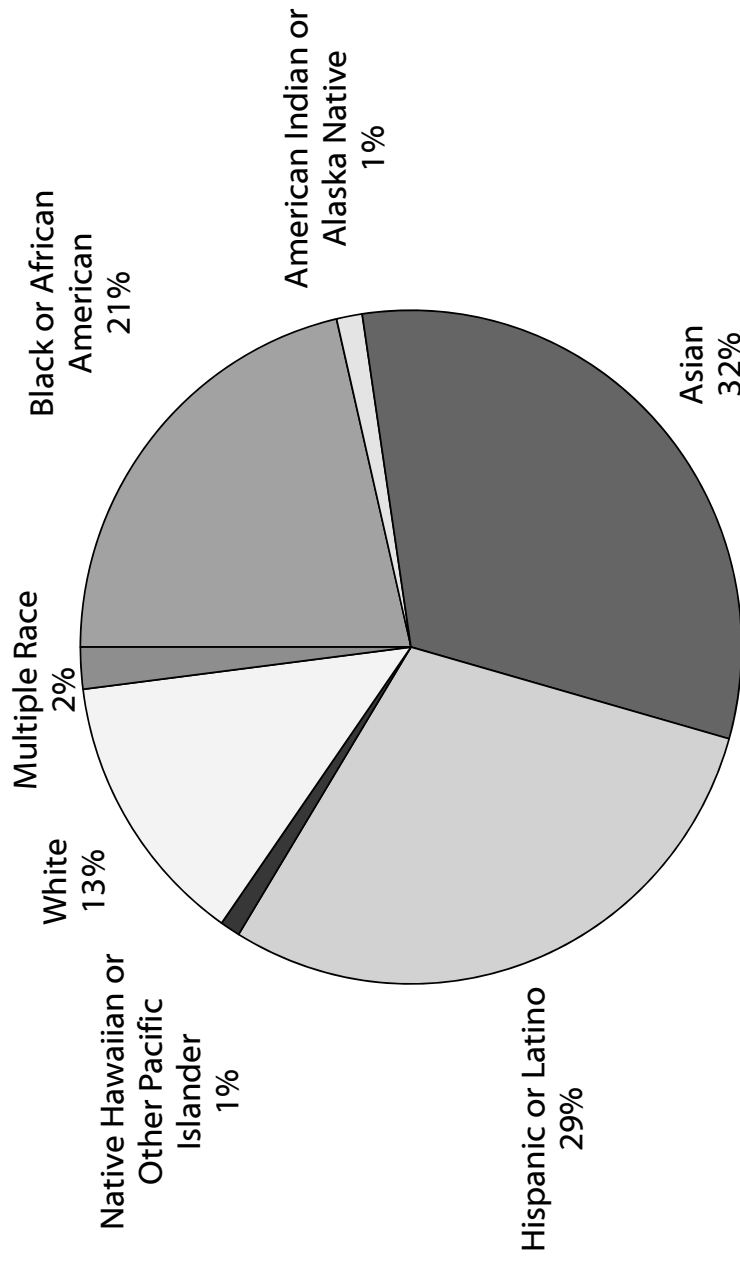
**Updated as of June 5, 2015.

TB Case Rates by Age Group and Race/Ethnicity,* United States, 2014



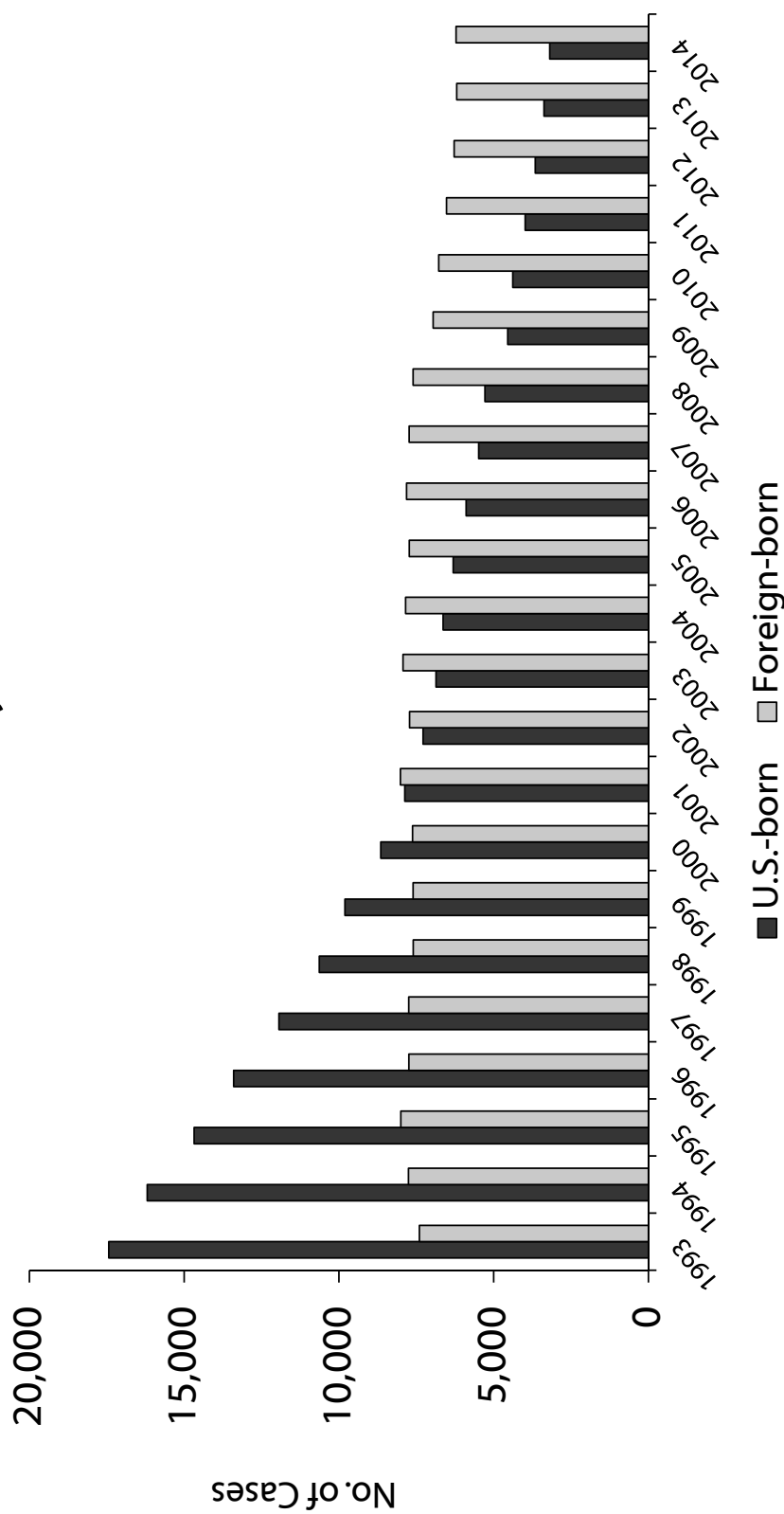
*All races are non-Hispanic. Multiple Race indicates two or more races reported for a person. Does not include persons of Hispanic or Latino origin.

Reported TB Cases by Race/Ethnicity,* United States, 2014



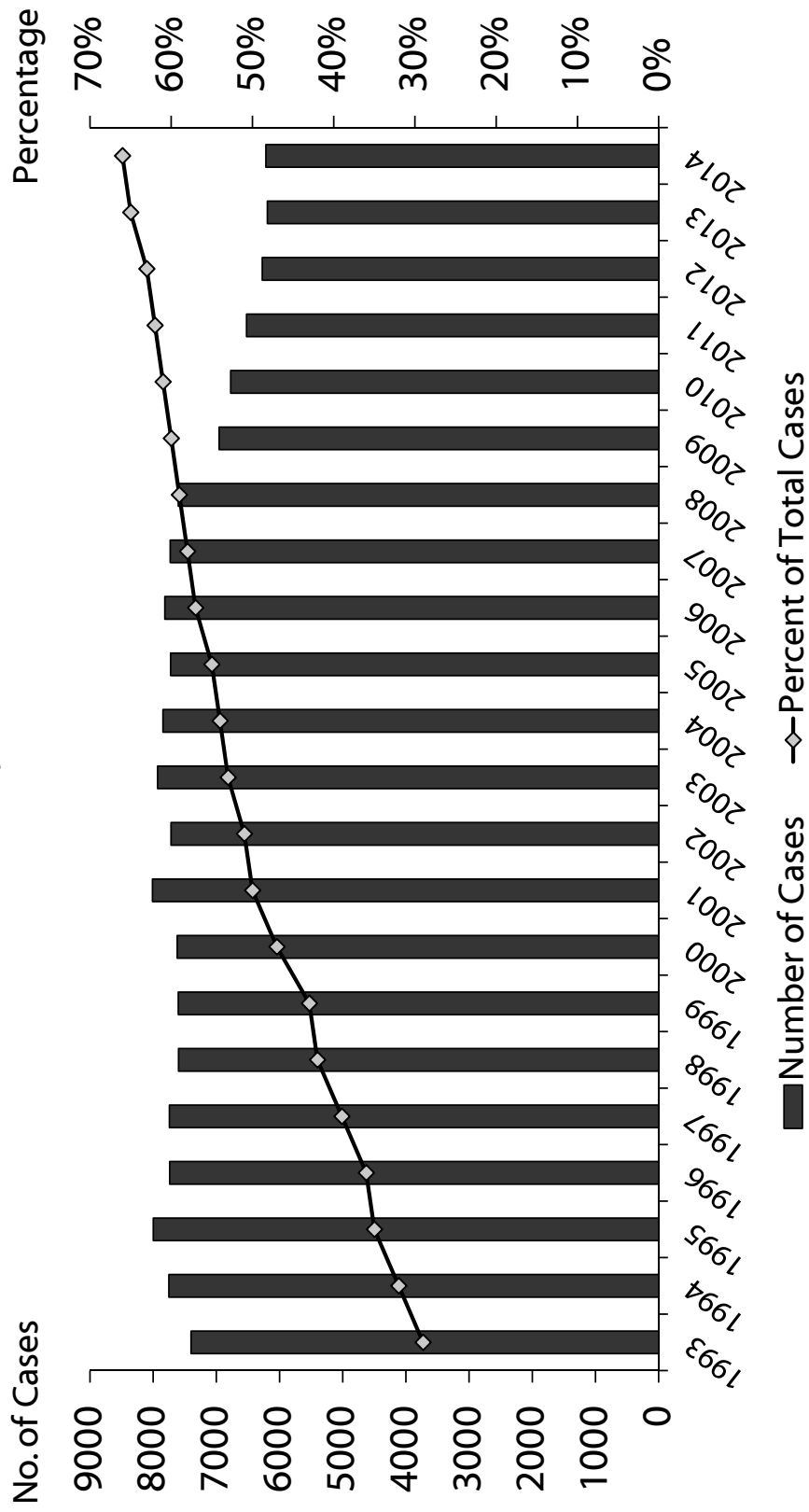
*All races are non-Hispanic. Multiple Race indicates two or more races reported for a person. Does not include persons of Hispanic or Latino origin.

Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2014*



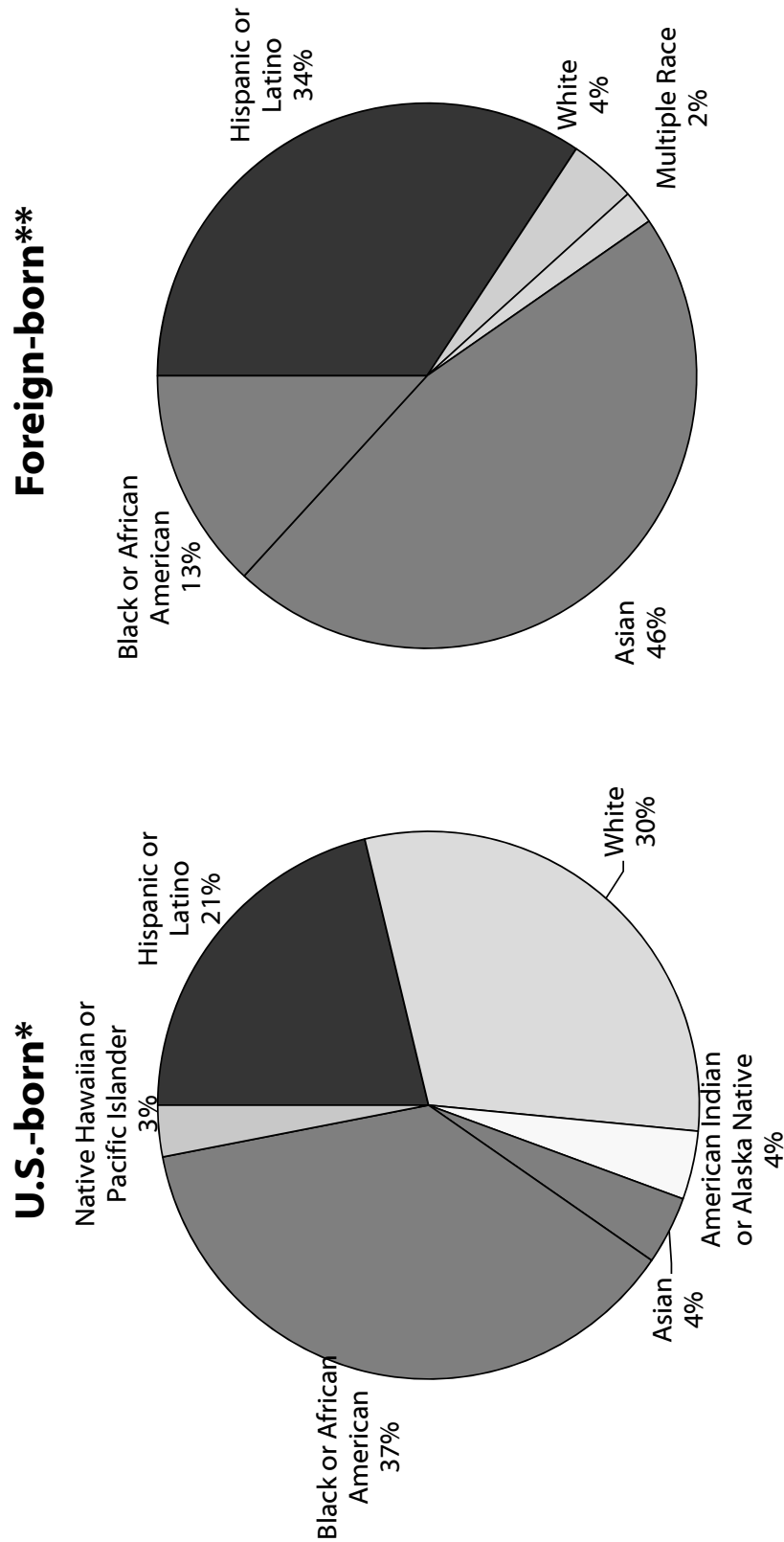
*Updated as of June 5, 2015.

Trends in TB Cases in Foreign-born Persons, United States, 1993 – 2014*



*Updated as of June 5, 2015.

Reported TB Cases by Origin and Race/Ethnicity, United States, 2014

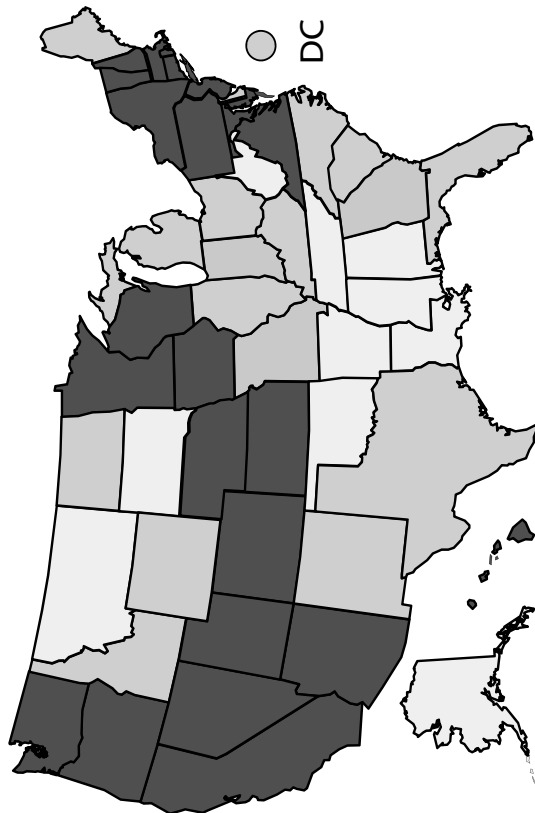


*All races are non-Hispanic. Persons reporting two or more races accounted for 1% of all cases for U.S. born cases and are not shown.

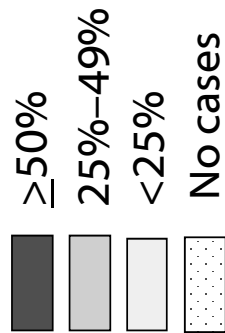
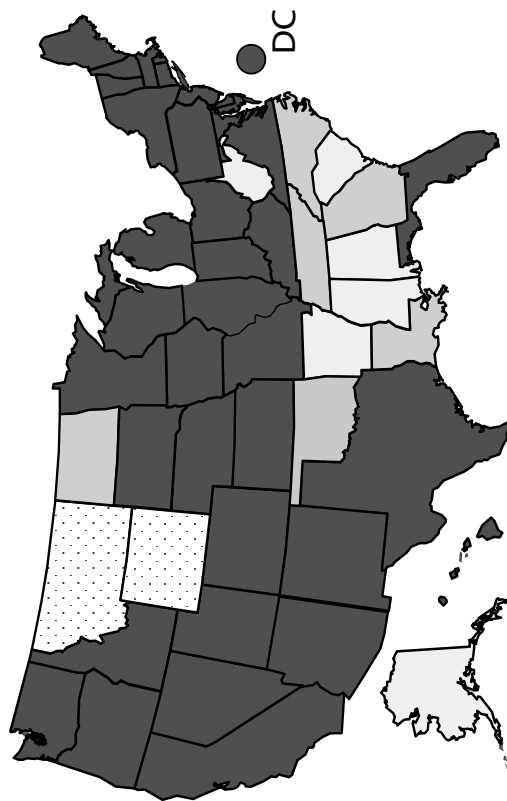
** American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown. Multiple Race indicates two or more races reported for a person. Does not include persons of Hispanic or Latino origin.

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

2004

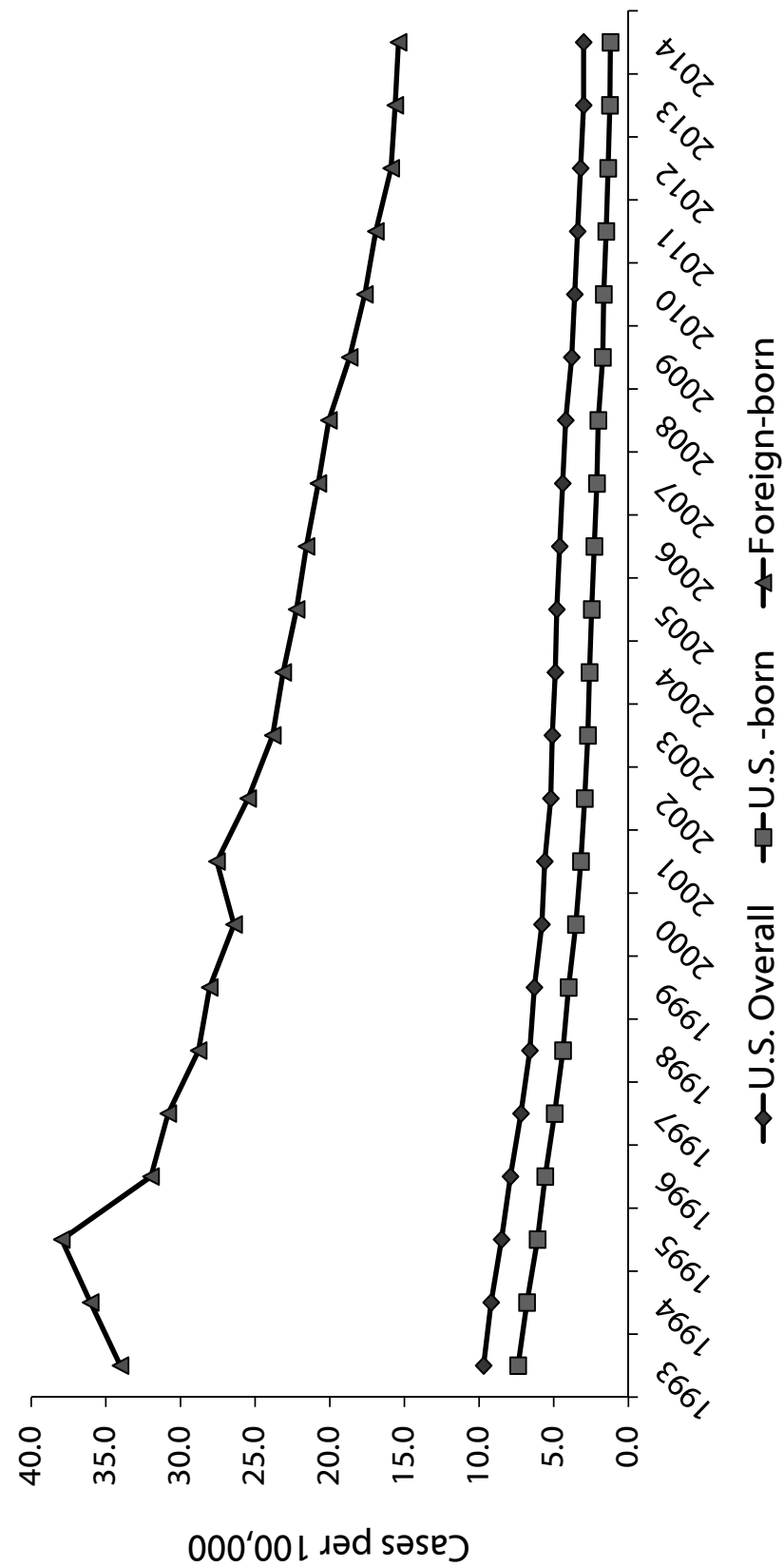


2014



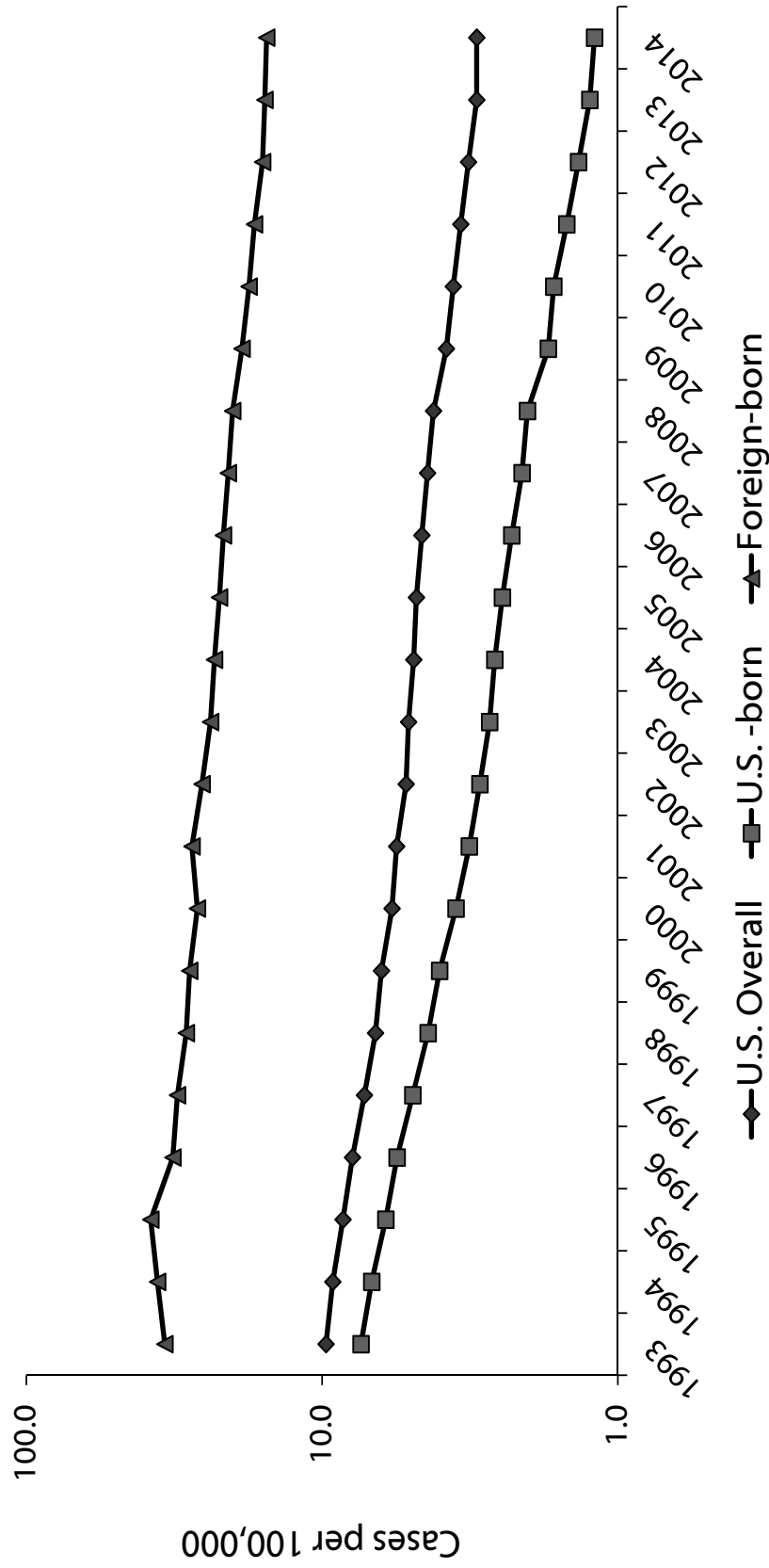
*Updated as of June 5, 2015.

TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2014*



*Updated as of June 5, 2015.

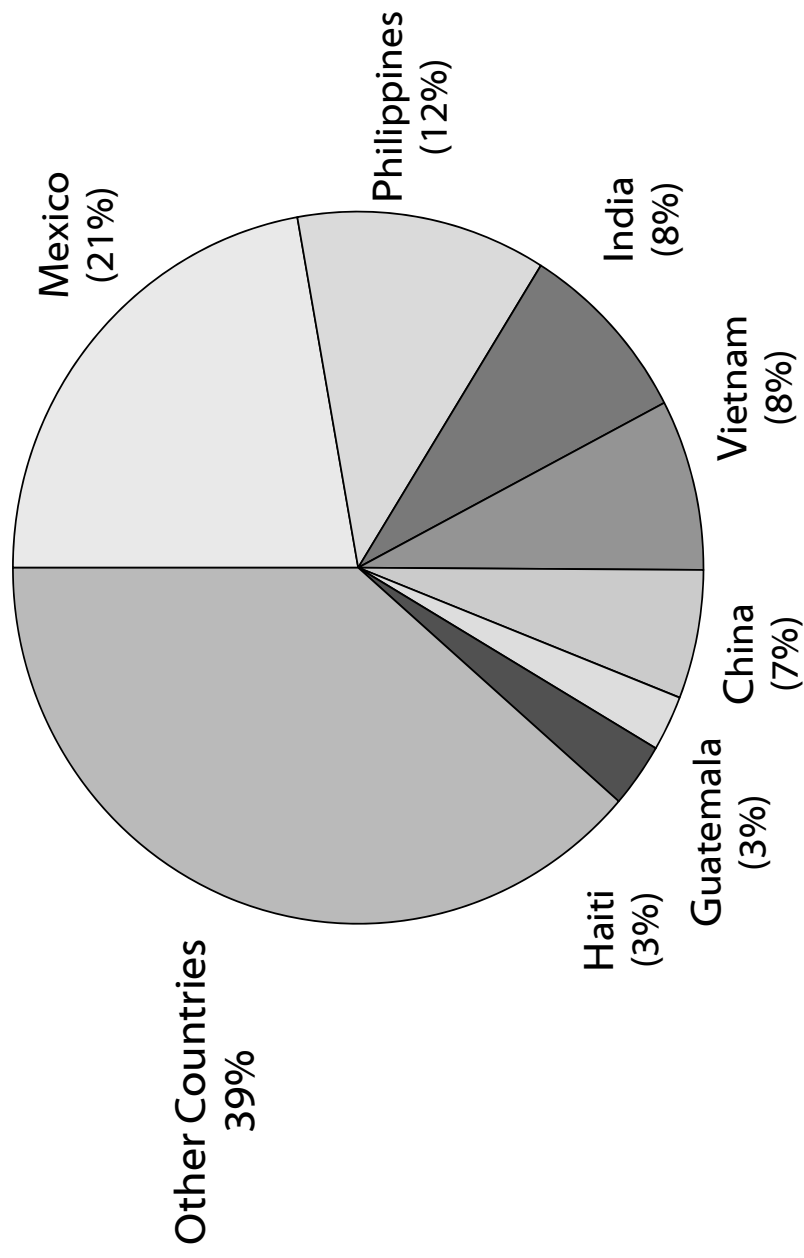
TB Case Rates in U.S.-born vs. Foreign-born Persons, United States,* 1993 – 2014**



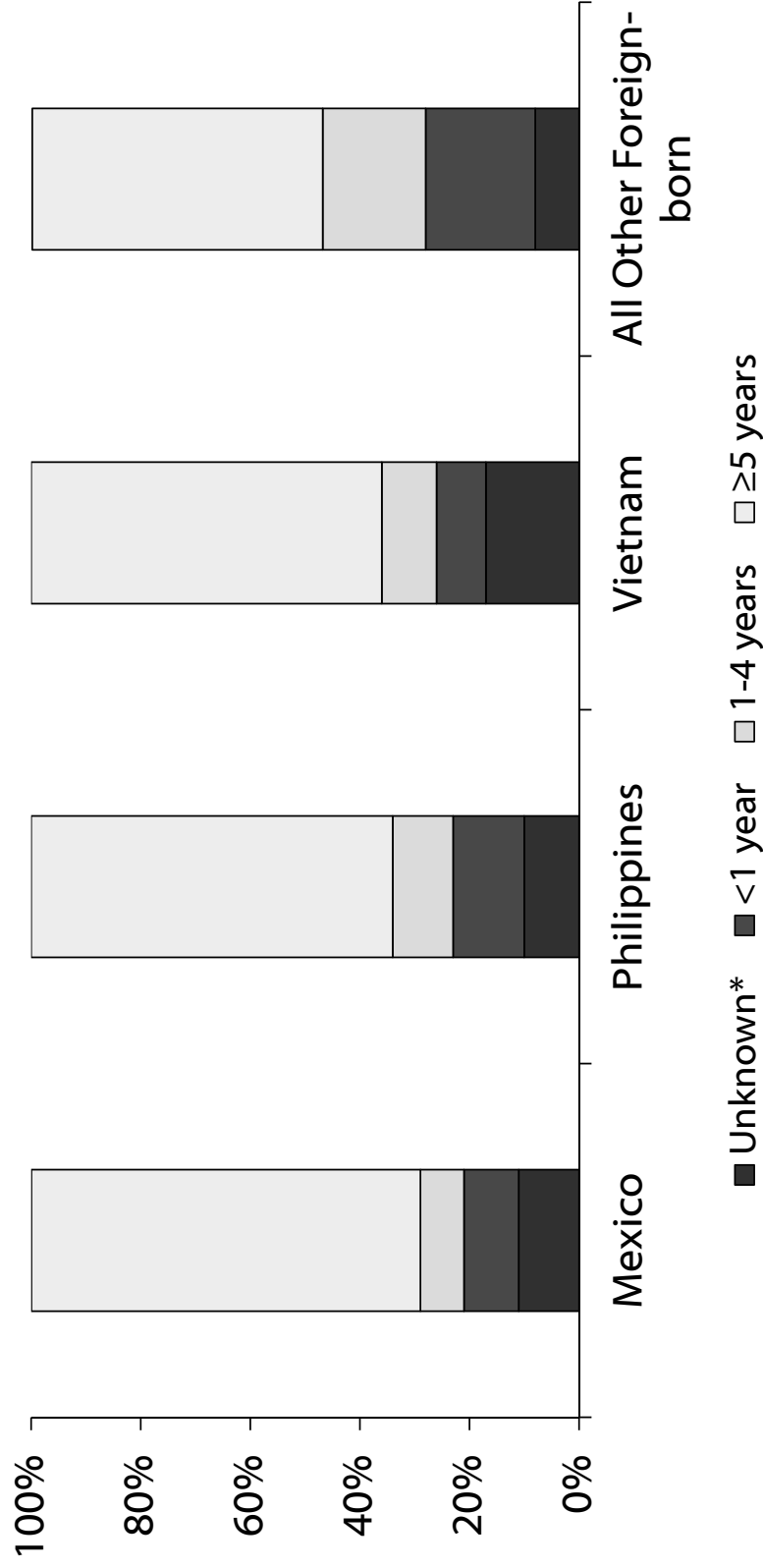
*Includes the same data as slide 17, but rates presented on a logarithmic scale.

**Updated as of June 5, 2015.

Countries of Birth of Foreign-born Persons Reported with TB, United States, 2014

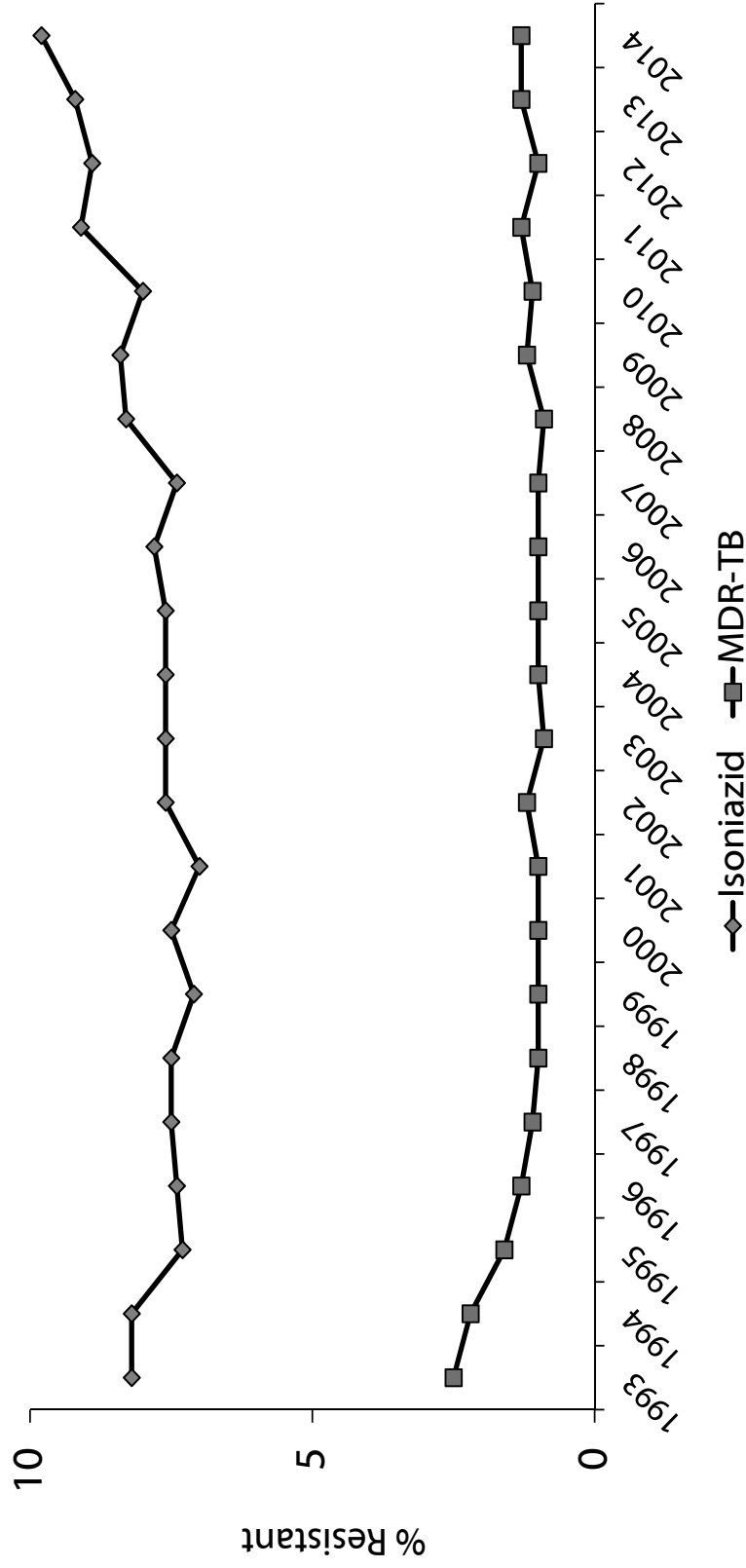


Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2014



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

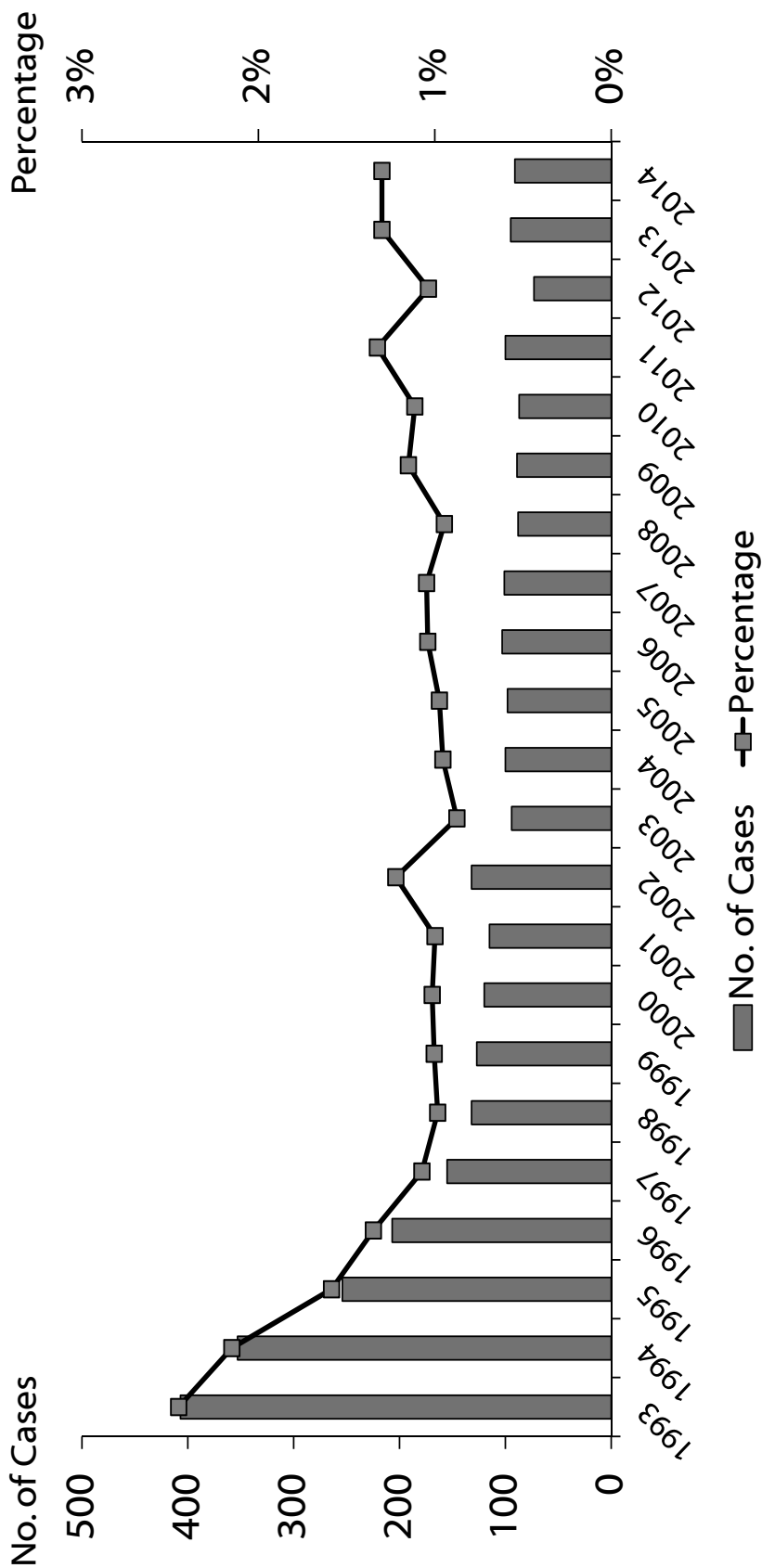
Primary Anti-TB Drug Resistance, United States, 1993 – 2014*



*Updated as of June 5, 2015.

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.

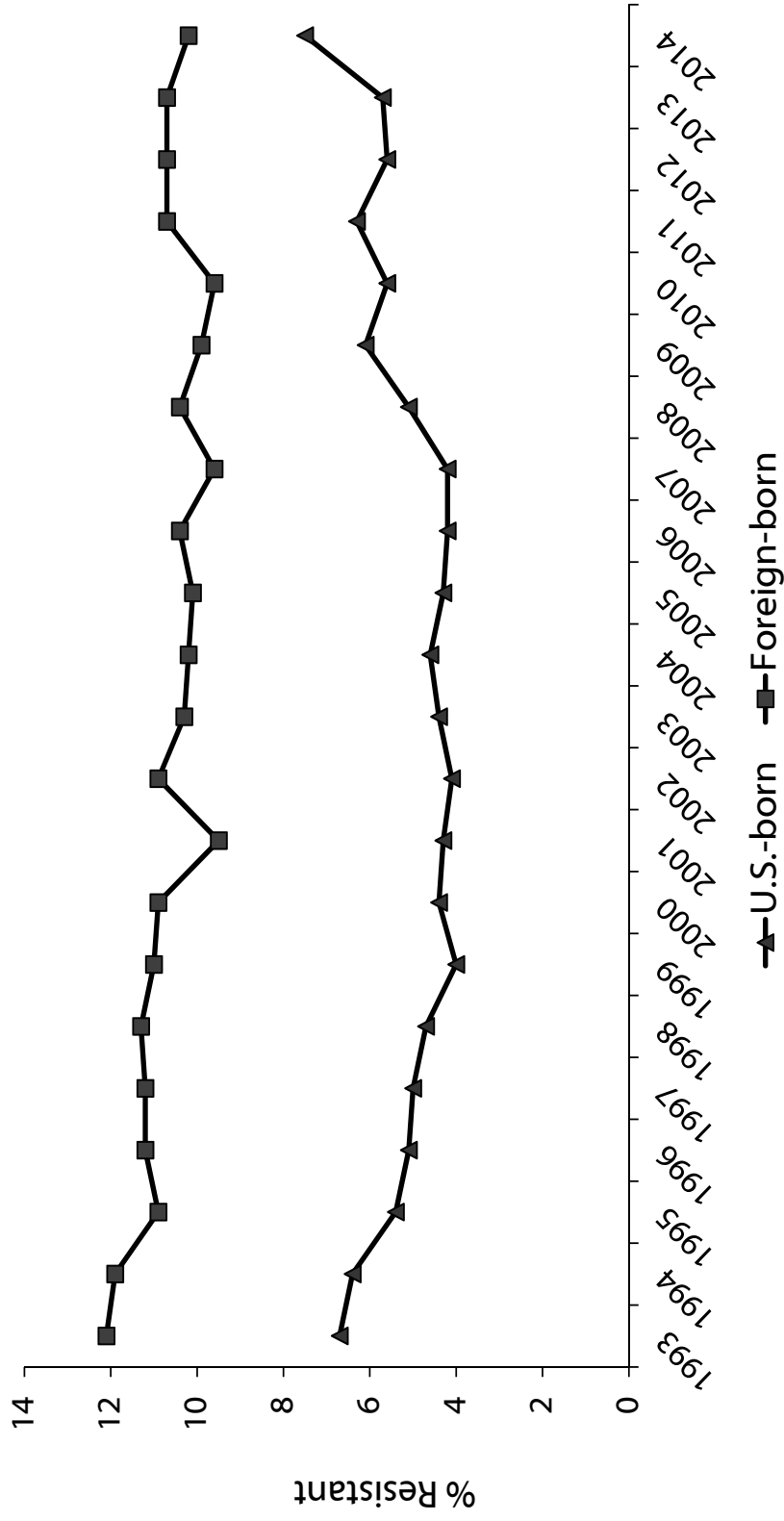
Primary MDR TB, United States, 1993 – 2014*



*Updated as of June 5, 2015.

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

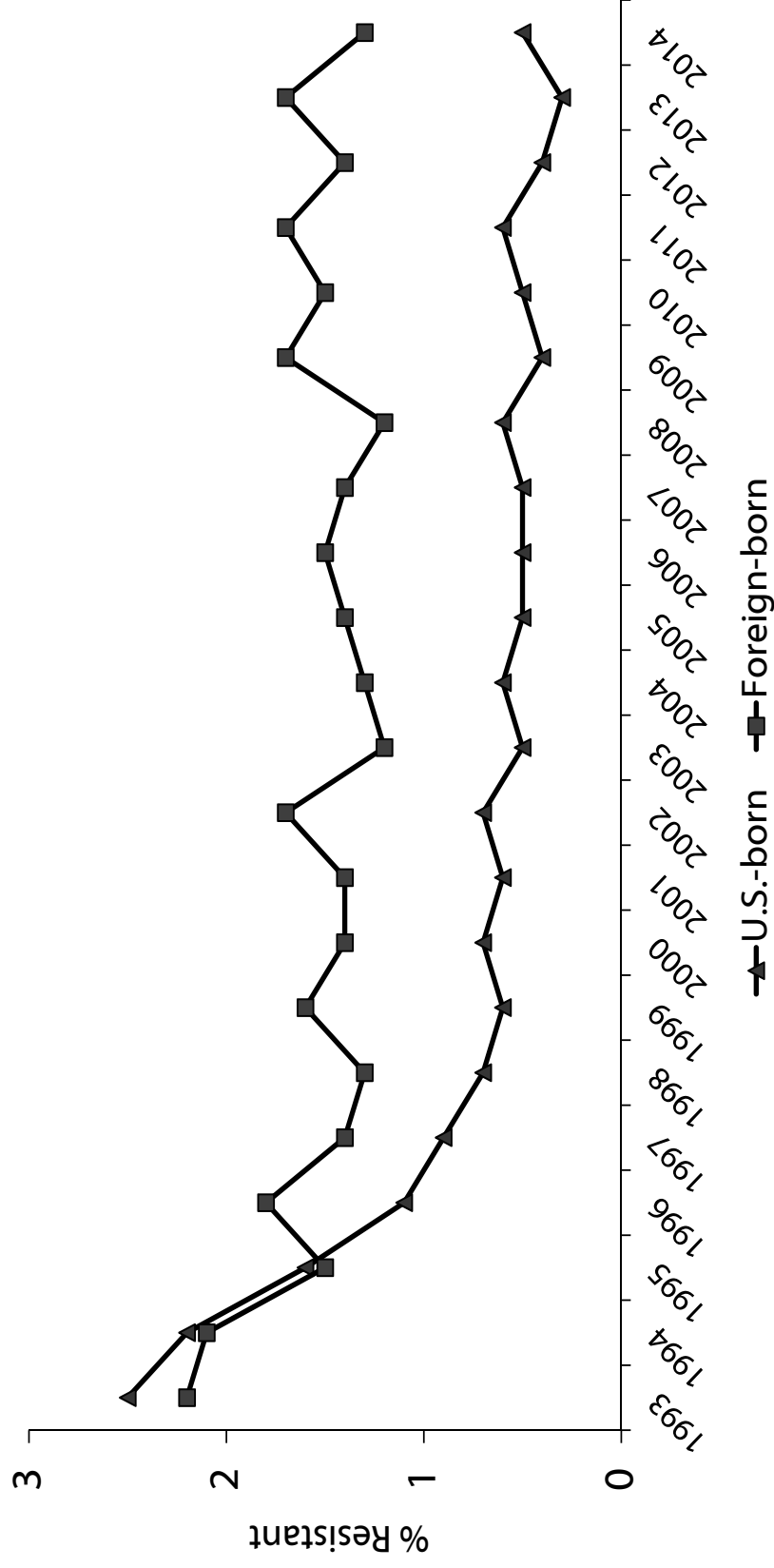
Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2014*



*Updated as of June 5, 2015.

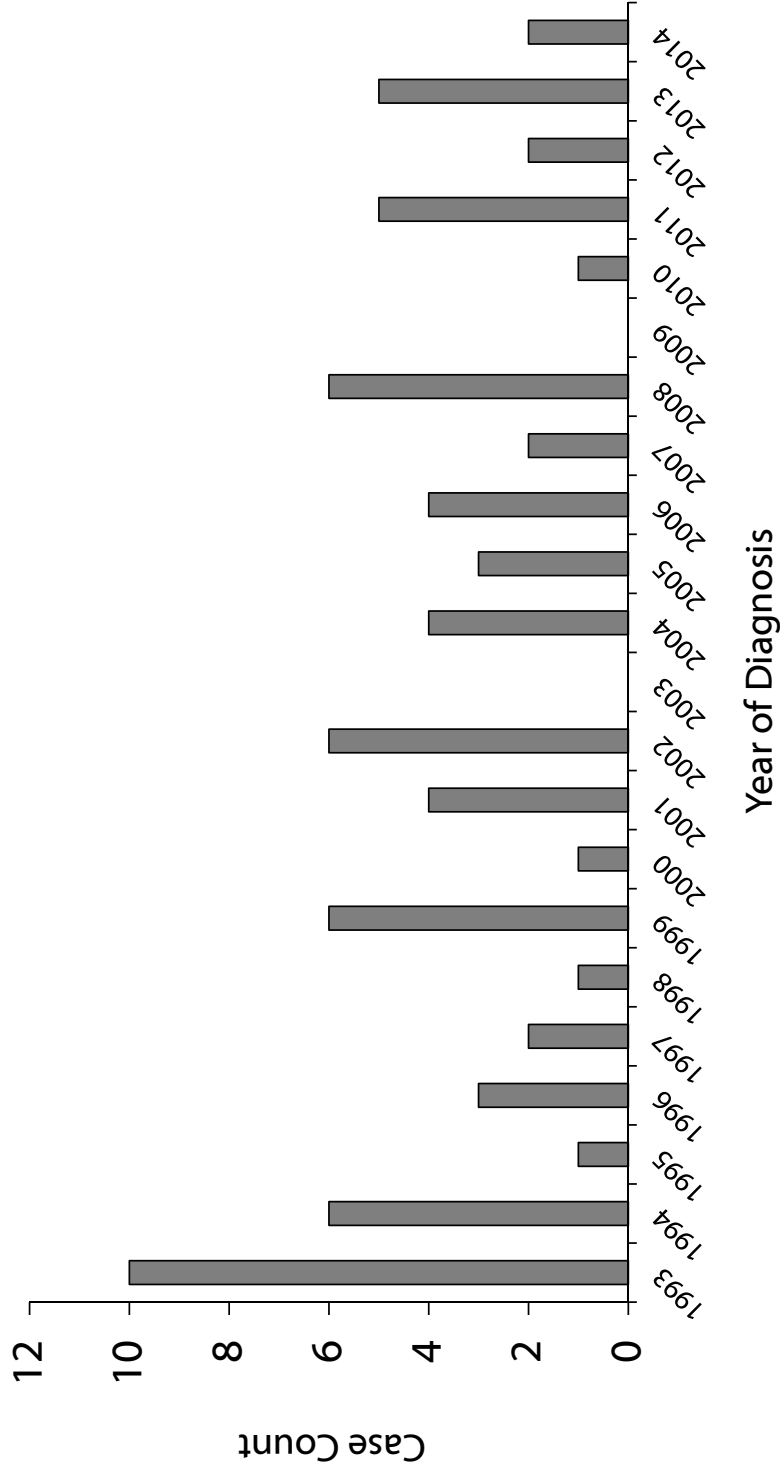
Note: Based on initial isolates from persons with no prior history of TB.

Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2014*



*Updated as of June 5, 2015.
 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 – 2014**

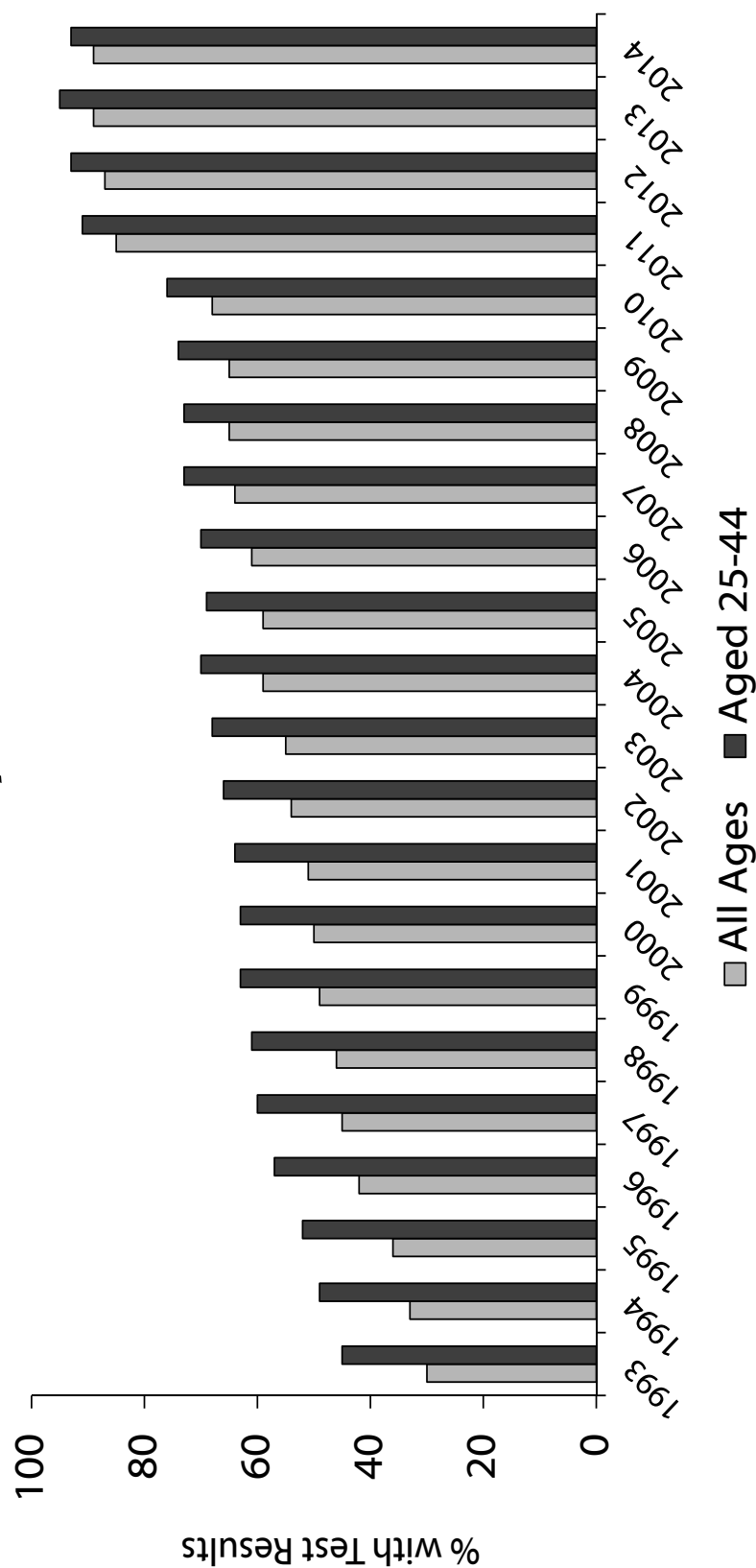


* Drug susceptibility test.

** Updated as of June 5, 2015.

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.

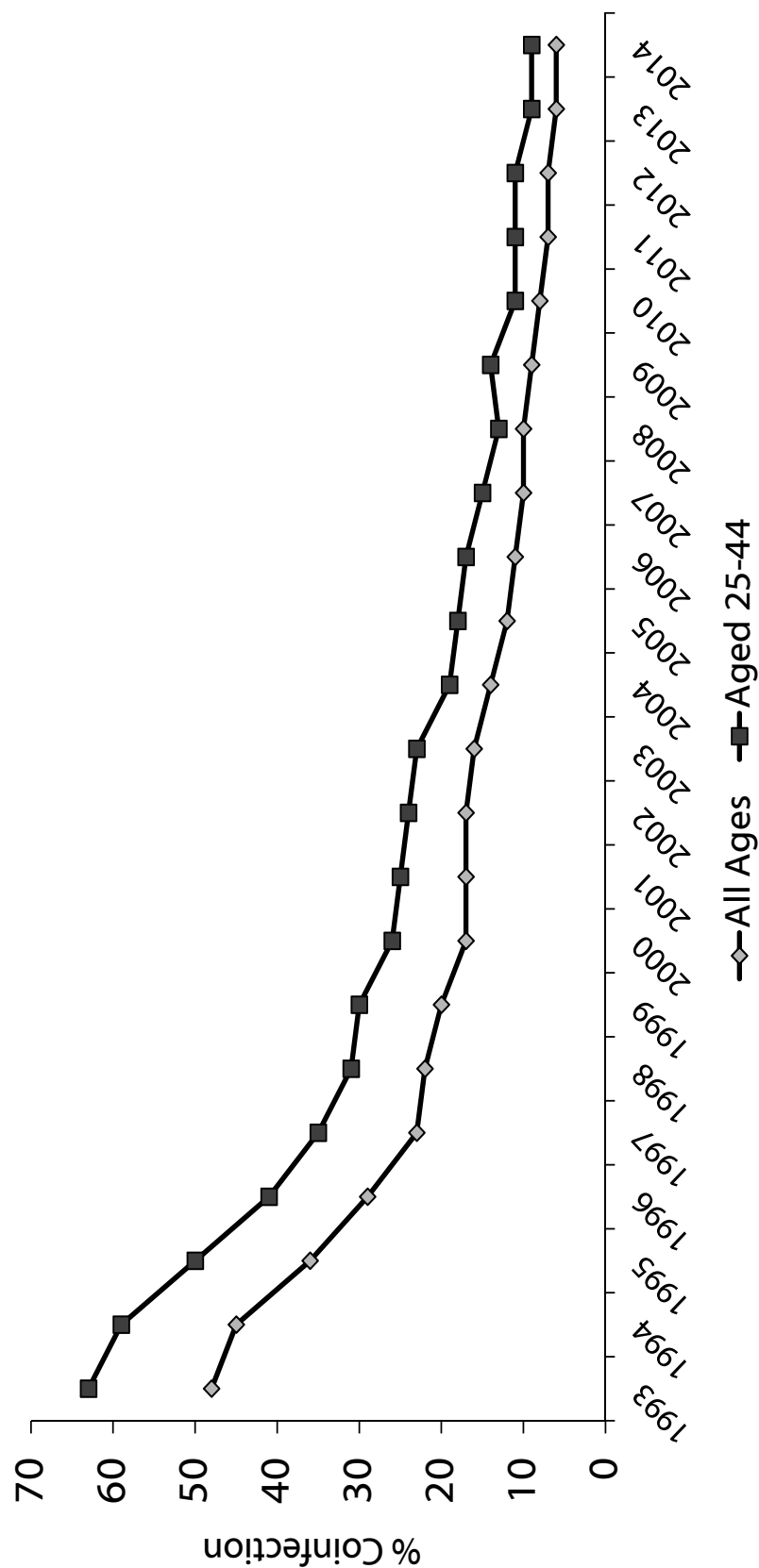
Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993 – 2014*



*Updated as of June 5, 2015.

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.

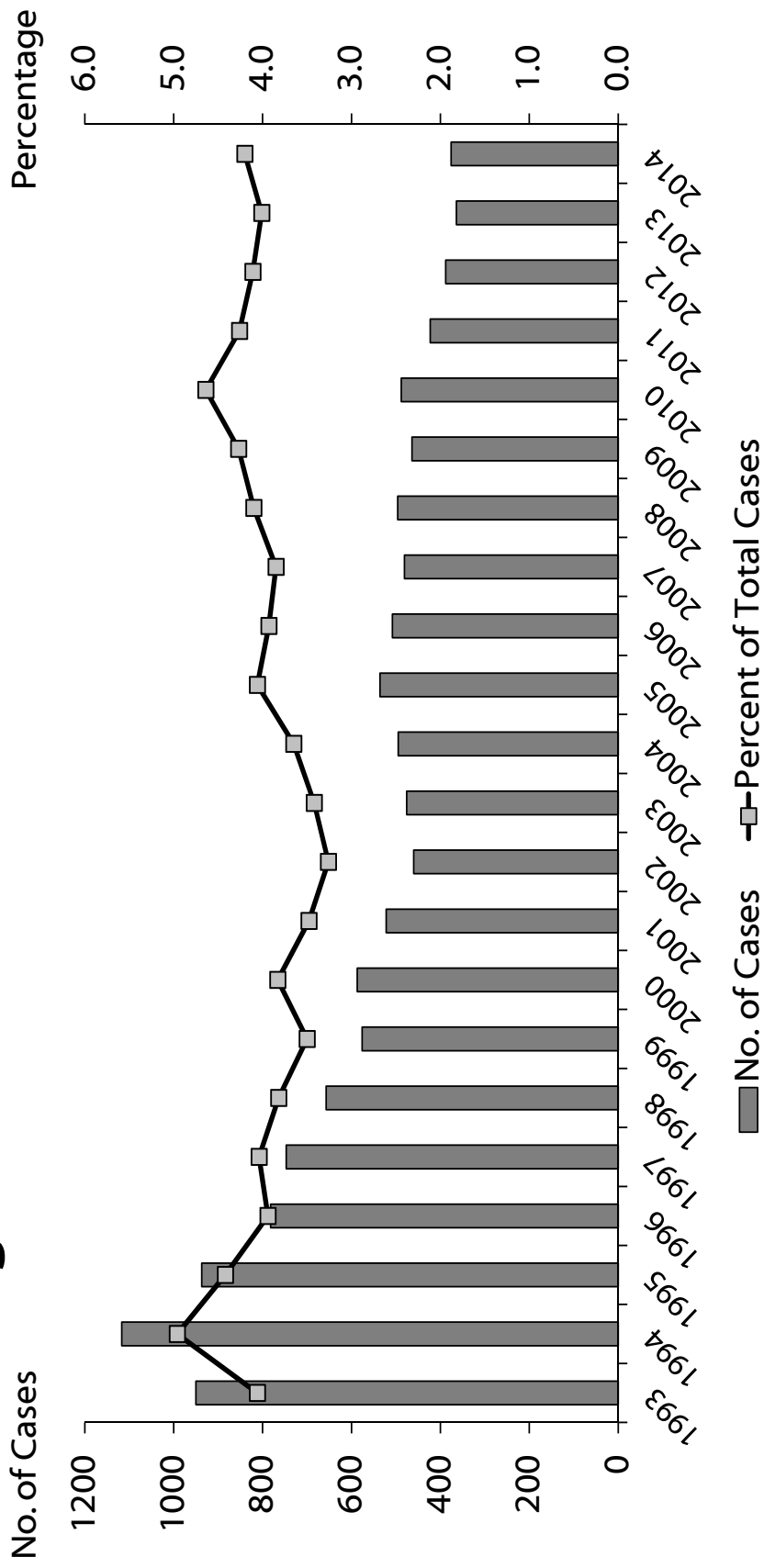
Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2014*



*Updated as of June 5, 2015.

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

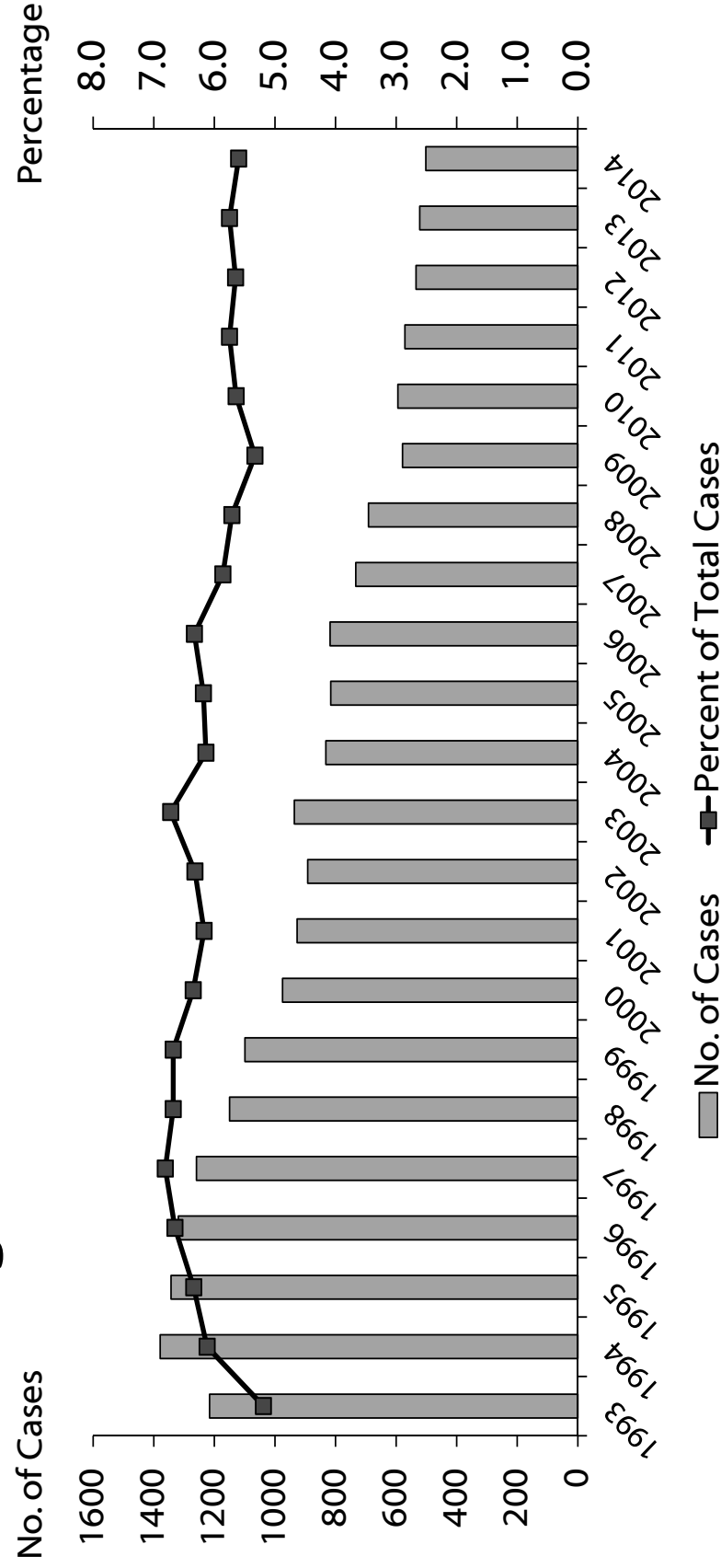
TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993-2014*



*Updated as of June 5, 2015.

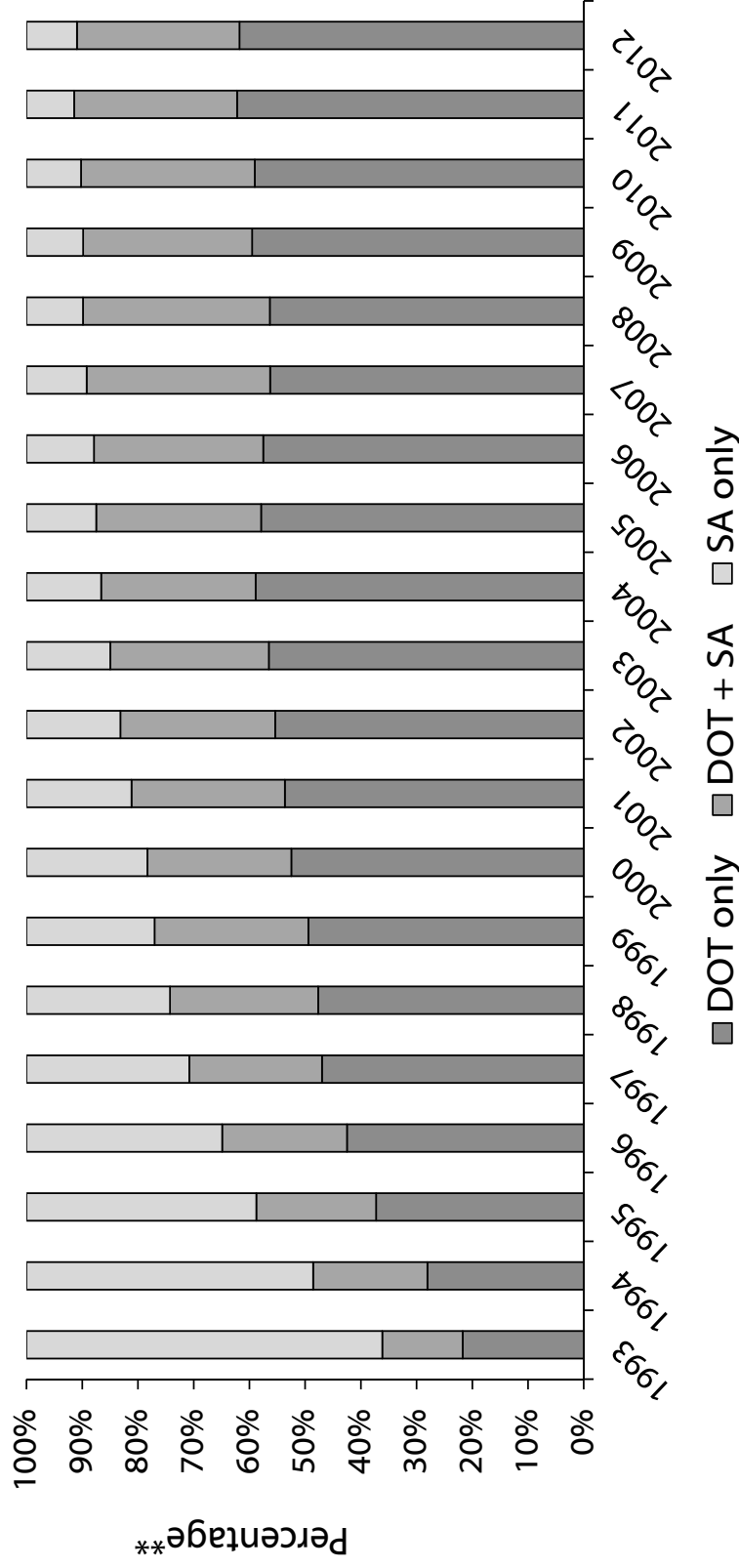
Note: Resident of correctional facility at time of TB diagnosis.

TB Cases Reported as Homeless in the 12 Months Prior to Diagnosis, Age ≥15, United States, 1993-2014*



*Updated as of June 5, 2015.
Note: Homeless within past 12 months of TB diagnosis.

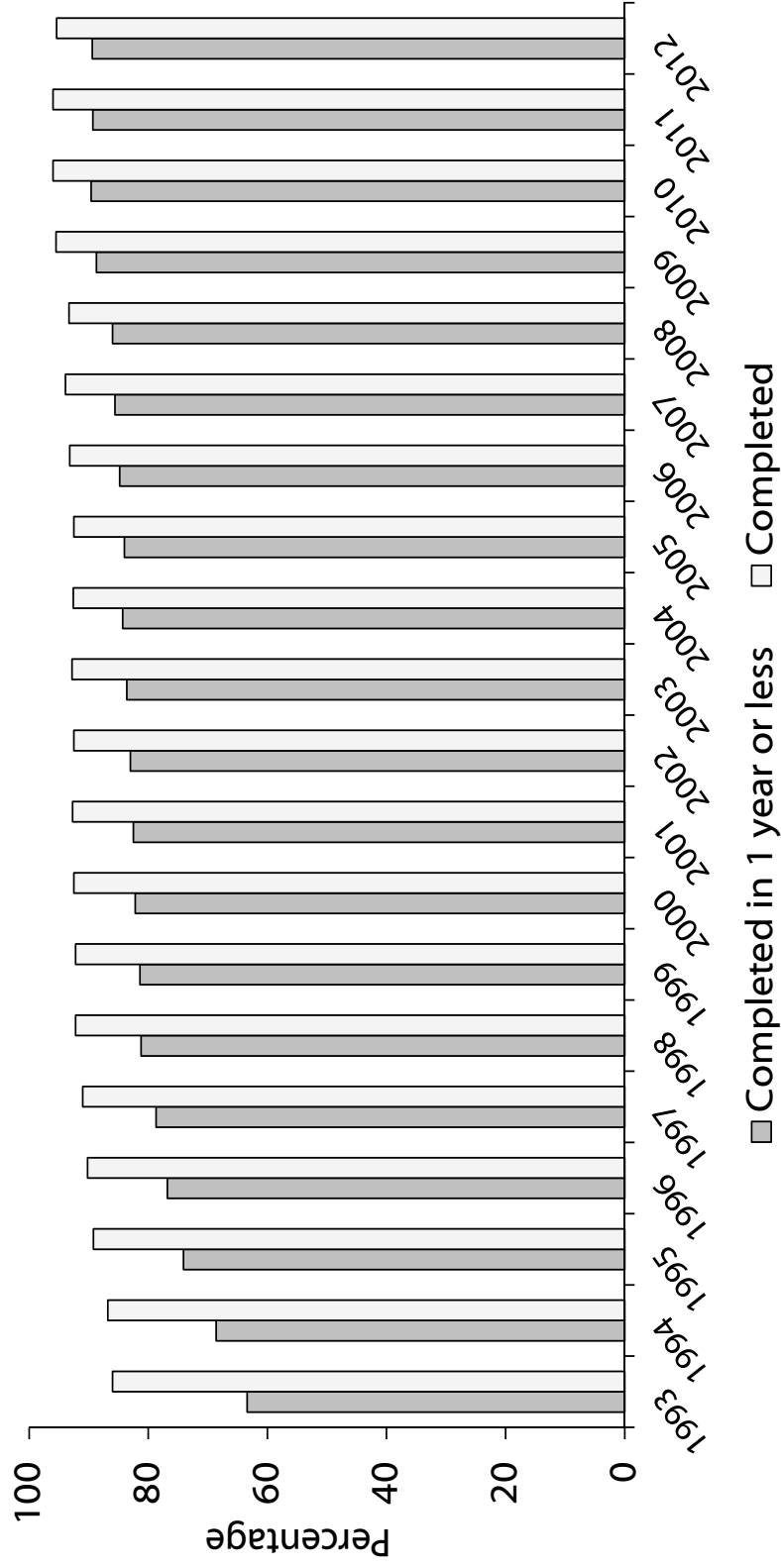
Mode of Treatment Administration in Persons Reported with TB, United States, 1993 – 2012*



*Updated as of June 5, 2015. Data available through 2012 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).

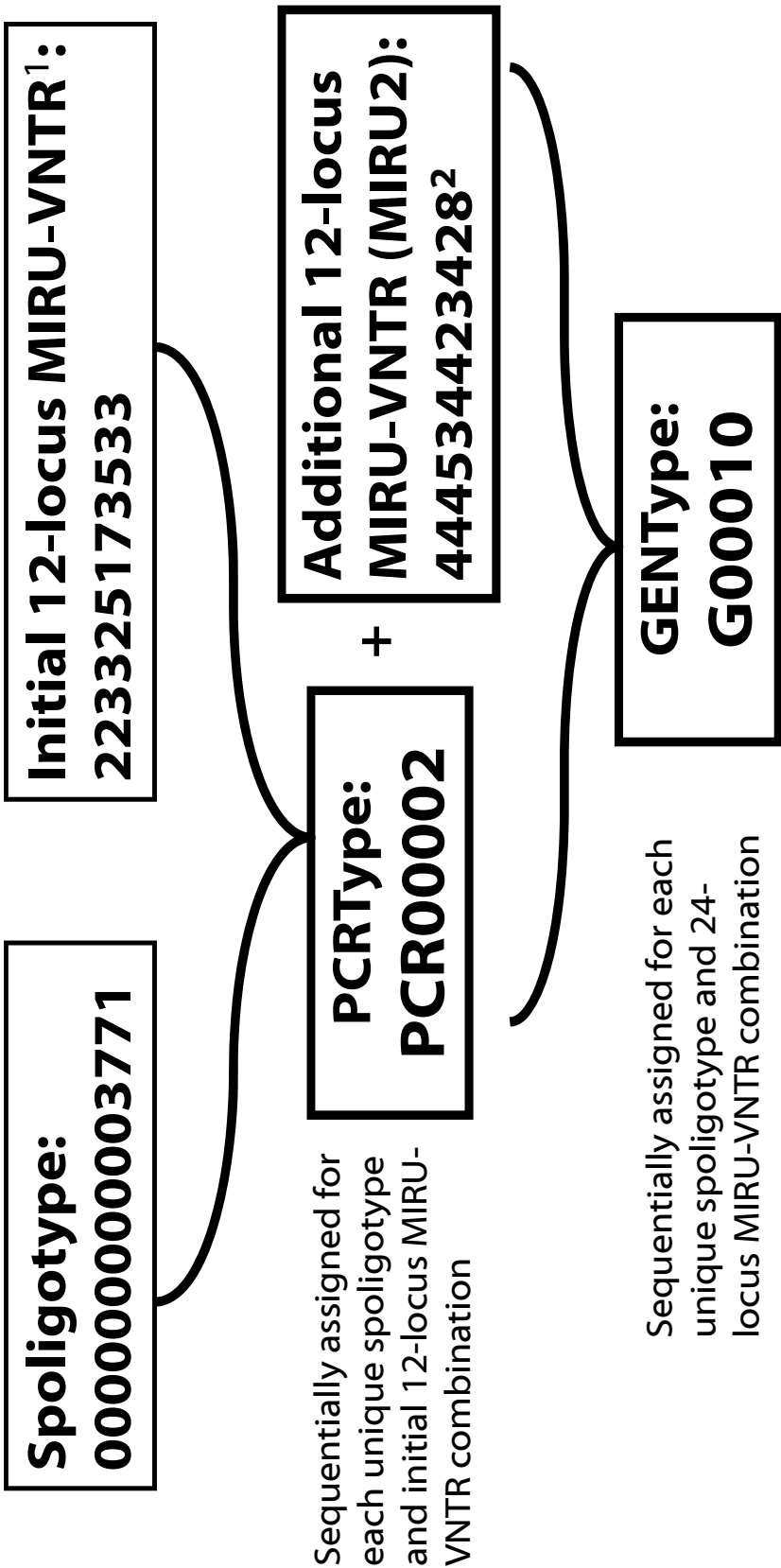
Completion of TB Therapy, United States, 1993 – 2012*



* Updated as of June 5, 2015. Data available through 2012 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 meningeal disease, or pediatric patient (aged <15) with miliary 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.

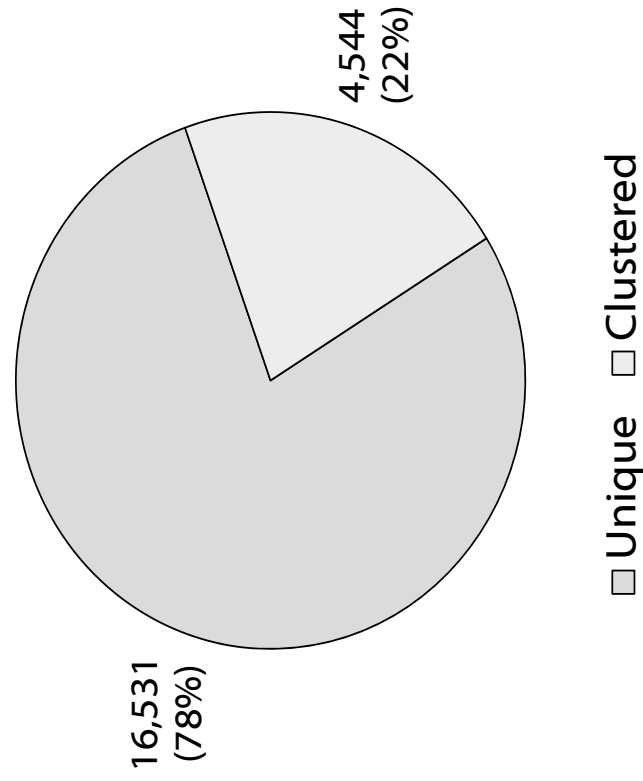
National Tuberculosis Genotyping Surveillance Coverage* by Year: United States**, 2004–2014



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

** Includes 50 states and the District of Columbia.

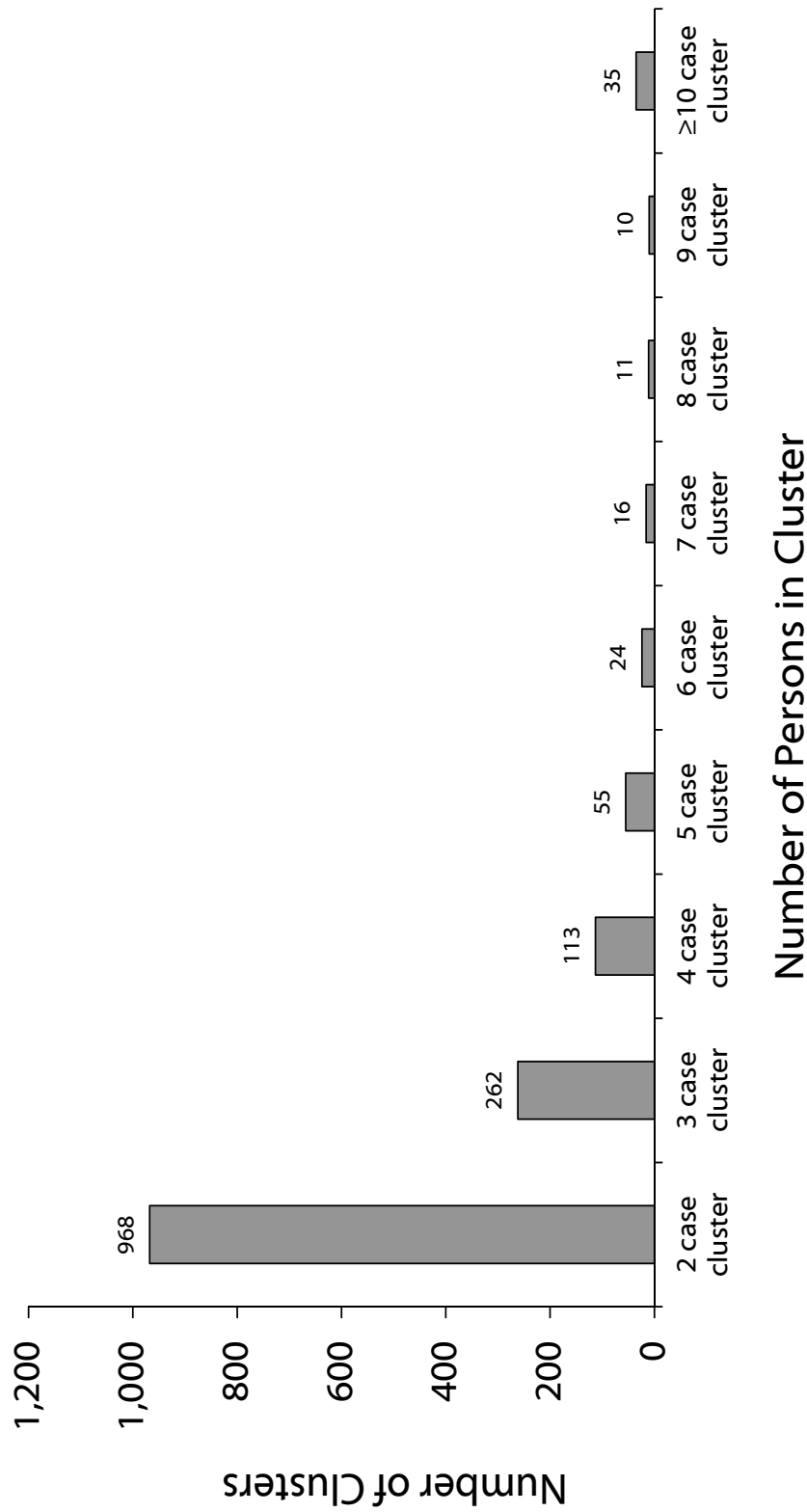
Number and Percent of Unique* and County-GENType Clustered Cases, United States, 2012–2014**



*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.

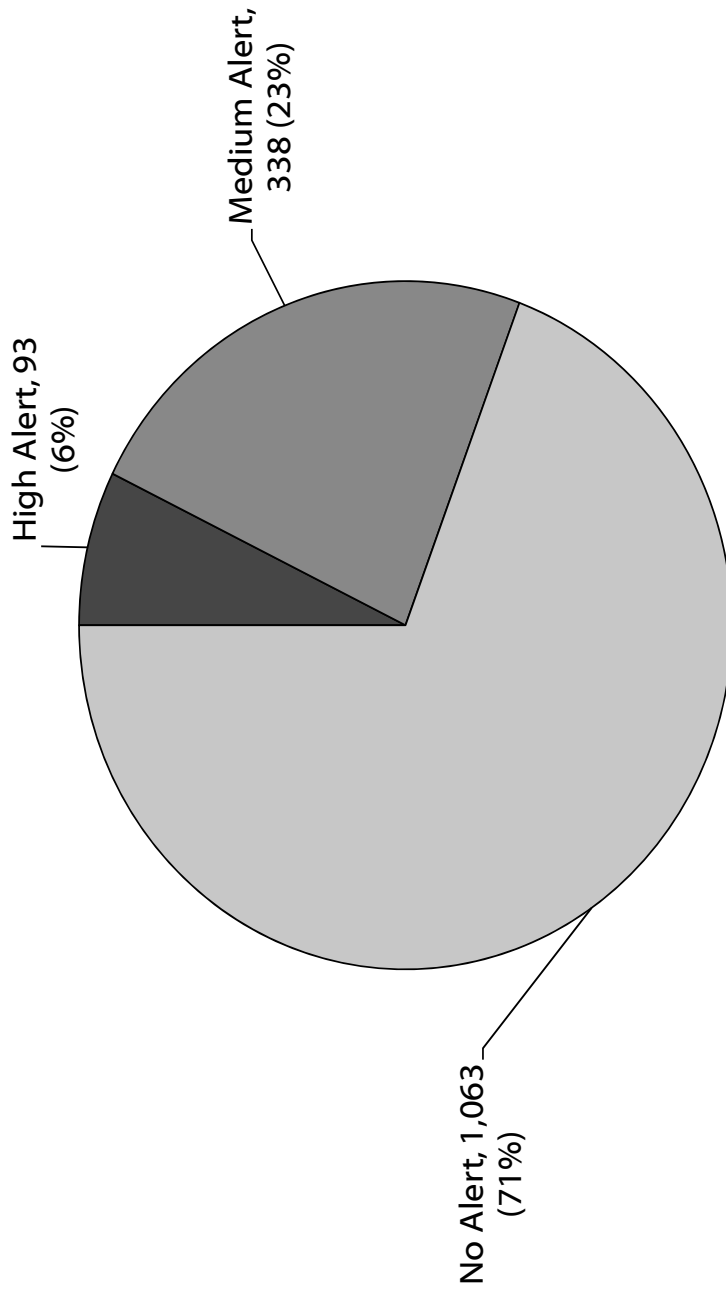
** Two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified 3-year time period.

Number of County-based Tuberculosis Genotype Clusters* by Cluster Size, United States, 2012–2014



* 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, 2012-2014



*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 2014

Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2014. 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 2014. 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 5, 2015. All case counts and rates for years 1993–2014 have been updated.

Slide 2. Reported TB Cases, United States, 1982–2014. 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 2014 marked the twenty-second 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 2014, a total of 9,421 cases were reported from the 50 states and the District of Columbia (DC). This represents a decline of 1.5% from 2013 and 64.7% from 1992.

Slide 3. TB Morbidity, United States, 2009–2014. 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 11,523 in 2009 to 9,421 in 2014, and the TB rate decreased from 3.8 in 2009 to 3.0 in 2014.

Slide 4. TB Case Rates, United States, 2014. This map shows TB rates for 2014. Forty-one states reported a rate less than or equal to 3.0 TB cases per 100,000, the 2014 national average. Ten states and DC reported a rate above 3.0 TB cases per 100,000; these accounted for 57% of the national total in 2014 and have experienced substantial overall decreases in cases and rates from 1992 through 2014.

Slide 5. Map of U.S.-Affiliated Pacific Islands by TB Case Rates, 2014. This map of the Pacific region shows the case rates by jurisdiction.

Slide 6. TB Case Rates, U.S.-Affiliated Pacific Islands, 2014. This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2014. These case rates range from 1.8 per 100,000 in American Samoa to 212.7 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 (9.6 per 100,000) are also shown.

Slide 7. TB Case Rates by Age Group, United States, 1993–2014. This slide shows the last 22 years' declining trend in TB rates by age group. In 2014, 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 4.8 in 2014); adults aged 45 to 64 years (from 12.4 to 3.5); adults aged 25 to 44 years (from 11.5 to 3.4); 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, 2014. This pie chart shows the age distribution of persons reported with TB in 2014. Five percent were children under 15 years of age, 10% were age 15 to 24, 30% were age 25 to 44, 31% were age 45 to 64, and 24% were at least 65 years old.

Slide 9. TB Case Rates by Age Group and Sex, United States, 2014. This slide graphs the TB rates in 2014 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 to 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, 2003–2014. 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 17.8 in 2014, and had a percent decline over the time period of 40.5%. Rates also declined in the following racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 11.7 in 2003 to 5.1 in 2014 (-56%); among Hispanics, from 10.3 to 5.0 (-51%); among American Indians and Alaska Natives, from 8.2 to 5.0 (-39%); and among non-Hispanic whites, from 1.4 to 0.6 (-57%). Rates increased among Native Hawaiian or Other Pacific Islanders, from 16.2 to 16.9 (+4.3%).

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, 2014. This slide presents TB rates in 2014 by age group and race/ethnicity. After infancy (age under 5), risk typically increased with age across all racial and ethnic groups; excepting the Native Hawaiian/Other Pacific Islander race/ethnicity group which does not display a pattern. 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, 2014. In 2014, 85% of all reported TB cases occurred in racial and ethnic minorities (32% in Asians, 29% in Hispanics, 21% in non-Hispanic blacks or African-Americans, 1% in American Indians or Alaska Natives, and 1% in Native Hawaiians or Other Pacific Islanders), whereas 13% of cases occurred in non-Hispanic whites. Persons reporting two or more races, not including persons of Hispanic or Latino origin, accounted for 2% of all cases.

Slide 13. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2014. This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2014. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 66% in 2014. 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 6,961. That decreasing trend continued until 2013 with the number of foreign-born cases dropping to 6,189. However in 2014 the number of foreign-born cases increased to 6,215. The number in U.S.-born persons decreased from more than 17,000 in 1993 to 3,188 in 2014.

Slide 14. Trends in TB Cases in Foreign-born Persons, United States, 1993–2014. This slide shows trends in the past 22 years of TB cases in foreign-born persons in the United States from 1993 through 2014. The percentage of TB cases accounted for by foreign-born persons increased from 29% in 1992 to 66% in 2014.

Slide 15. Reported TB Cases by Origin and Race/Ethnicity, United States, 2014. Among U.S.-born persons with TB in 2014, 37% were non-Hispanic black or African-American, 30% were non-Hispanic white, 21% were Hispanic or Latino, 4% were Asian, 4% were American Indian or Alaska Native, and 3% were Native Hawaiian or Other Pacific Islander. Persons reporting two or more races totaled less than 1% of US born cases and are not shown. Among the foreign-born, 46% were Asian, 34% were Hispanic or Latino, 13% were non-Hispanic black or African-American, 4% were non-Hispanic white, and 2% were persons reporting two or more races, not including persons of Hispanic or Latino origin. 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.

Slide 16. Percentage of TB Cases Among Foreign-born Persons, United States, 2004 and 2014. The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 2004 and 2014 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 2004 to 8 states in 2014. The number of states with at least 25–49% of cases among the foreign-born decreased from 18 states in 2004 to 6 states in 2014. However, the number of states that had 50% or more of their cases among the foreign-born increased from 24 states in 2004 to 37 states in 2014.

Slide 17. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2014. TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2014, 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 15.4.

Slide 18. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2014. This is the same as Slide 17, 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, 2014. This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2014, 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 2014 the seven top countries accounted for over 60% of all foreign-born cases, with Mexico accounting for 21%; the Philippines, 12%; India, 8%; Vietnam, 8%; China, 7%; 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 39% 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, 2014. The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2013 is shown in these stacked bars. Overall, 16% had been in the United States for less than 1 year, 15% 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 Vietnam. Among persons born in Mexico, 10% had been in the United States for less than 1 year, 8% between 1 and 4 years, and 71% for at least 5 years. Among persons born in the Philippines, 13% had been in the United States for less than 1 year, 11% between 1 and 4 years, and 66% for at least 5 years. Among persons born in Vietnam, 9% had been in the United States for less than 1 year, 10% between 1 and 4 years, and 64% for at least 5 years. Values for unknown length of residence in U.S. for these top three countries ranged between 10 – 17% for 2014.

Slide 21. Primary Anti-TB Drug Resistance, United States, 1993–2014. Primary drug resistance is shown for the past 22 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 2014, this had increased to 9.8%. 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 2014 the percent of primary MDR TB was 1.3%.

Slide 22. Primary MDR TB, United States, 1993–2014. 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 2014. 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 91 cases reported for 2014. 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 2014, the percentage was 1.3%.

Slide 23. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2014. 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 has remained higher among foreign-born persons than among U.S.-born persons for all years measured. In foreign-born persons, the percentage declined from 12.1% in 1993 to 10.2% in 2014. In U.S.-born persons, the percentage decreased from 6.7% in 1993 to 4.2% in 2007, but has increased since then to 7.5% in 2014.

Slide 24. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2014. 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 ap-

proximately 25% in 1993 to 85% in 2014 (not shown on slide). Among the U.S.-born, the percentage with primary MDR TB has been less than 1% since 1997 and was 0.5% in 2014. The percentage among foreign-born persons has fluctuated year by year, although it has remained between 1.2 and 1.8% since 1995. In 2014, the percentage of primary MDR TB among foreign-born persons was 1.3%

Slide 25. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2014. This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993–2014. 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. Two cases of XDR TB were reported in 2014. 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, 1993–2014. This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2014. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 89% in 2014. Among adults aged 25–44 years, the percentage increased from 45% in 1993 to 93% in 2014. 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, 1993–2014. This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2014. 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 6% overall from 1993 – 2014, 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, 1993–2014. 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 376 cases in 2014. 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 2014 the percentage of total cases was 4.2%.

Slide 29. TB Cases by Homeless Status, Age ≥15, United States, 1993–2014. This graph highlights the status of cases that were homeless within twelve months prior of TB diagnosis from 1993 through 2014. 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 502 in 2014. 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 5.6% in 2014.

Slide 30. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2012. 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 2012, 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 2012.

Slide 31. Completion of TB Therapy, United States, 1993–2012. 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 patients (aged <15) with miliary disease or a positive blood culture. Overall completion of therapy had remained at approximately 92–

93% from 1998 through 2008, but increased to 96% in 2010 and 2011. In 2012, the latest year with available data, completion of therapy was 95%. Completion in 1 year or less increased from 63% in 1993 to 89% in 2012. 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, 2004–2014. This slide shows the increase in genotyping surveillance coverage from 2004 to 2014. In 2004 the proportion of positive cultures with at least one genotyped isolate was 52.6%; in 2014 it was 95.3%. The national indicator for genotyping surveillance coverage is 94%.

Slide 34. Number and Percent of Unique and County-GENType Clustered Cases, United States, 2012–2014. 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 MIRU-VNTR (GENType) within a county during the specified three year time period. In the 2012 – 2014 three year time period, there were 78% unique cases, and 22% clustered cases.

Slide 35. Number of County-based Tuberculosis Genotype Clusters by Cluster Size, United States, 2012–2014. 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 2012 – 2014 three year time period, there were 968 two-case clusters, 262 three-case clusters, 113 four-case clusters, 55 five-case clusters, 24 six-case clusters, 16 seven-case clusters, 11 eight-case clusters, 10 nine-case clusters, and 35 case clusters that were greater or equal to 10 in size.

Slide 36. Tuberculosis Genotype Clusters by TB GIMS Alert Levels, United States, 2012–2014. 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 $5 - <10$ and “high” alert is for clusters with $LLR \geq 10$. In the 2012–2014 three year time period, high alerts made up 6% of the total, medium alerts were 23%, 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 105,000 *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 500 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 (\geq 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 PCRTyping 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.