

Reported Tuberculosis in the United States 2011

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: (404) 639-8444
Email: timshep@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 .. Kevin Fenton, M.D., Ph.D.
Director

Division of Tuberculosis Elimination Kenneth G. Castro, 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

Field Services and Evaluation Branch Terence Chorba, M.D.
Chief

Data Management and Statistics Branch José E. Becerra, M.D., M.P.H.
Chief

This report was prepared by

Surveillance Team
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

Roque Miramontes, P.A.-C., M.P.H.
Carla Jeffries, M.P.H.¹
Robert Pratt, B.S.
Rachel S. Yelk Woodruff, M.P.H.
Lori Armstrong, Ph.D.
Carla Winston, Ph.D.
Elvin Magee, M.P.H., M.S.
Lilia P. Manangan, R.N., M.P.H.
Glenda T. Newell
Kai Young, MPH
J. Scott Cope, B.S.

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.¹
Vic Bowker¹
Cynthia Adams¹
Stacey Parker¹

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

Field Services and Evaluation 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, 2011 presents summary data for tuberculosis (TB) cases verified and counted in 2011. 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, 2011 is similar to previous publications (see page xi, #19) and contains an Executive Commentary, Technical Notes, and six major sections. The Executive Commentary includes highlights of the 2011 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. The 2011 report also includes a special supplement section on the U.S. Affiliated Pacific Islands (USAPI).

Morbidity Trend Tables, United States present trends in the overall TB case counts and case rates by selected demographic and clinical characteristics. *Morbidity Tables, United States, 2011* present overall case counts and case rates for the United States by selected demographic characteristics. *Morbidity Tables, Reporting Areas, United States, 2011* present TB case counts and case rates by state and other jurisdictions with tables of selected demographic and clinical characteristics. *Morbidity Tables, Reporting Areas, United States, 2011 and 2009* present data for the most recent year for which data are available on selected variables such as completion of therapy by reporting area. *Morbidity Tables, Cities and Metropolitan Statistical Areas, 2011* 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. *United States Affiliated Pacific Islands, 2011* presents an overview of USAPI TB programs and provides USAPI TB surveillance data highlights. *Surveillance Slide Set, 2011* 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 139 and 140). *National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information* is provided in Appendix C (page 149).

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 1993–2010). Atlanta: CDC; 1994–2011.

**Reports from 2006 through 2011 are available on the Internet at
<http://www.cdc.gov/tb/statistics/>**

State TB Resources on the Internet*

AL	http://www.adph.org/tb/
AK	http://www.epi.alaska.gov/id/tb.stm
AR	http://www.healthy.arkansas.gov/programsServices/infectiousDisease/tuberculosis
AZ	http://www.azdhs.gov/phs/oids/tuberculosis
CA	http://www.cdph.ca.gov/programs/tb
CO	http://www.cdphe.state.co.us/dc/tb/tbhome.html
CT	http://www.ct.gov/dph/cwp/view.asp?a=3136&q=388584&dphNav_GID=1601&dphPNavCtr=|#47055
DC	http://doh.dc.gov/doh/cwp/view,a,1374,q,580737.asp
DE	http://dhss.delaware.gov/dph/dpc/tbelimination.html
FL	http://www.doh.state.fl.us/disease_ctrl/tb/
GA	http://health.state.ga.us/epi/tuber.asp
HI	http://hawaii.gov/health/family-child-health/contagious-disease/tb/index.html
IA	http://www.idph.state.ia.us/ImmTB/TB.aspx?prog=Tb&pg=TbHome
ID	http://www.healthandwelfare.idaho.gov/Health/DiseasesConditions/Tuberculosis/tabid/378/Default.aspx
IL	http://www.idph.state.il.us/health/infect/reportdis/tb.htm
IN	http://www.in.gov/isdh/19662.htm
KS	http://www.kdheks.gov/tb/
KY	http://chfs.ky.gov/dph/epi/tb.htm
LA	http://new.dhh.louisiana.gov/index.cfm/page/1005
MA	http://www.mass.gov/dph/cdc/tb
MD	http://ideha.dhmm.md.gov/OIDPCS/CTBCP/SitePages/Home.aspx
ME	http://www.maine.gov/dhhs/boh/ddc/epi/tuberculosis/
MI	http://www.michigan.gov/tb
MN	http://www.health.state.mn.us/divs/idepc/diseases/tb/index.html
MO	http://health.mo.gov/living/healthcondiseases/communicable/tuberculosis/index.php
MT	http://www.dphhs.mt.gov/publichealth/tb/
MS	http://www.msdh.state.ms.us/msdhsite/_static/14,0,125.html
ND	http://www.ndhealth.gov/disease/tb/
NC	http://epi.publichealth.nc.gov/cd/diseases/tb.html
NE	http://dhhs.ne.gov/publichealth/Pages/cod_tuberculosis_tbindex.aspx
NH	http://www.dhhs.nh.gov/dphs/cdcs/tb/index.htm
NJ	http://www.state.nj.us/health/tb/index.shtml
NM	http://nmhealth.org/IDB/tb_program.shtml
NYC	http://www.nyc.gov/html/doh/html/tb/tb.shtml
NV	http://www.health.nv.gov/CD_HIV_TBProgram.htm
NY	http://www.nyhealth.gov/statistics/diseases/communicable/tuberculosis/
OH	http://www.odh.ohio.gov/odhPrograms/hastpac/tcont/tcont1.aspx
OK	http://www.ok.gov/health/Disease,_Prevention,_Preparedness/Acute_Disease_Service/Disease_Information/Tuberculosis.html
OR	http://oregon.gov/DHS/ph/tb/
PA	http://www.portal.state.pa.us/portal/server.pt?open=514&objID=557952&mode=2
RI	http://www.health.ri.gov/disease/communicable/tb/index.php
PR	http://www.salud.gov.pr/Programas/ProgramaTuberculosis
SC	http://www.scdhec.net/health/disease/tb/index.htm
SD	http://doh.sd.gov/TB/
TN	http://health.state.tn.us/CEDS/TB/index.htm
TX	http://www.dshs.state.tx.us/topicrelatedcontent.aspx?itemsid=1164
UT	http://www.health.utah.gov/cdc/tb_home.htm
VA	http://www.vdh.virginia.gov/Epidemiology/DiseasePrevention/Programs/Tuberculosis/
VT	http://healthvermont.gov/prevent/tb/Tuberculosis.aspx
WA	http://www.doh.wa.gov/cfh/tb
WI	http://www.dhs.wisconsin.gov/tb/
WV	http://www.wvtb.org
WY	http://www.health.wyo.gov/phsd/tb/index.html

*Links to U.S. reporting area TB programs accessed as of September 2012. Includes responses from the reporting areas of New York City (NYC) and Puerto Rico (PR).

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Executive Commentary

Executive Commentary

Highlights of 2011 Report

Since 1953, in cooperation with state and local health departments, the United States national tuberculosis program has collected information on each newly reported case of tuberculosis (TB) disease in the United States. Currently, each individual TB case report (Report of Verified Case of Tuberculosis, or RVCT) is submitted electronically. Following are the highlights of the 2011 report.

1. Updated case counts for each year from 1993 through 2010.
2. Case counts: 10,528 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2011, representing a 5.8% decrease from 2010 (Table 1).
 - Eighteen states reported increased case counts from 2010 (Table 20).
 - California, Texas, New York, and Florida accounted for 50% of the national case total (Table 19).
 - For the first time, Asians exceeded all other racial or ethnic groups with the largest percentage of total cases (30%) (Table 2).
 - Hispanics, who since 2004 had the largest percentage of total cases, now comprise the second largest racial or ethnic group (29%) (Table 2).
 - Blacks or African Americans born in the United States represented 39% of TB cases in U.S.-born persons (Table 16) and accounted for approximately 15% of the national case total.
 - Asians born outside the United States represented 46% of TB cases in foreign-born persons (Table 17) and accounted for 29% of the national case total.
3. Case rates: In 2011, the TB case rate declined from 3.6 to 3.4 per 100,000 persons, representing a 6.4% decrease from 2010.
 - Twelve states and DC reported rates above the national average (Table 19).
 - The TB case rate was 1.5 per 100,000 for U.S.-born persons and 17.2 for foreign-born persons (Table 5).
 - Asians continued to have the highest case rate (20.9 per 100,000 persons) among all racial or ethnic groups (Table 2).
4. Burden among the foreign-born: In 2011, the percentage of cases occurring in foreign-born persons increased to 62% of the national case total. This percentage has risen steadily since 1993.
 - Foreign-born Hispanics and Asians together represented 80% of TB cases in foreign-born persons, and accounted for 50% of the national case total (Table 17).
 - In 34 states, $\geq 50\%$ of TB cases occurred among foreign-born persons (Table 23).
 - In 17 states, $\geq 70\%$ of TB cases occurred among foreign-born persons (Table 23).
 - In 10 states, $\geq 75\%$ of TB cases occurred among foreign-born persons (Table 23).
 - The top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, Vietnam, India, and China (Table 6).
5. Drug resistance: 1.3% of reported cases had primary multidrug resistance, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin (Table 10).
6. HIV status: In 2011, 82% of persons with TB reported HIV test results.
 - Among persons of all ages, the percentage with HIV test results increased from 67% in 2010 to 82% in 2011; among persons 25–44 years of age, reporting of HIV test results increased from 75% to 90% (Table 12).

- The percentage of persons with TB who reported HIV-positive results has remained the same (6%) since 2008 for persons of all ages. Among persons 25–44 years of age, 10% of persons with TB reported HIV-positive results; this percentage has remained between 9%-10% since 2008 (Table 12). The percentages have declined since 1993, when 15% of persons with TB reported HIV-positive results among persons of all ages, and 29% for persons between 25–44 years of age.

Tuberculosis in the United States

In 2011, the reported number of TB cases (10,528) and case rate (3.4 cases per 100,000) both decreased; these represented declines of 5.8% and 6.4%, respectively, compared to 2010. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 61% (Table 1).

TB case rates vary by well-known factors such as age, race and ethnicity, and country of origin. The proportion of total cases occurring in foreign-born persons has been increasing since 1993. In 2011, 62% of TB cases occurred in foreign-born persons. 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 2011 was approximately 11 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths decreased by 10%, from 590 deaths in 2008 to 529 deaths in 2009. The number of TB deaths reported annually has decreased by 69% since 1992 (Table 1).

Age

Since 1993, TB case rates have declined annually for almost all age groups. In 2011, TB case rates continued the trend with declines in all age groups. The highest burden of disease continues to be among older adults. In 2011, adults aged 65 years and older had a case rate of 5.4 cases per 100,000, while children aged ≤ 14 years had the lowest rate at 0.9 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 2011, Asians had the highest TB case rate at 20.9 cases per 100,000, which was a slight decrease from 21.5 in 2010. Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 15.9 cases per 100,000, which is a decrease compared to 19.0 cases per 100,000 reported in 2010. Owing to low case numbers among Native Hawaiians or other Pacific Islanders, case rates fluctuate and must be interpreted with caution (Table 2).

Since 1993, TB case rates have declined between 60% and 78% in the following racial and ethnic groups: among Hispanic or Latinos, from 19.9 to 5.8 cases per 100,000; among non-Hispanic blacks or African Americans, from 28.5 to 6.3 cases per 100,000; among American Indian or Alaska Natives, from 14.0 to 5.6 cases per 100,000; and among non-Hispanic whites, from 3.6 to 0.8 cases per 100,000. In 2011, the TB case rate for Asians remained approximately 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 2011, the TB case rate for U.S.-born persons was 1.5 cases per 100,000, representing a 80% 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 2011, the TB case rate among foreign-born persons was 17.2 cases per 100,000, representing a 49% 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 2011, 38% of TB cases were among U.S.-born persons compared to 69% in 1993 (Table 5). In 34 states, $\geq 50\%$ of TB cases occurred among foreign-born persons. In 17 states (California, Colorado, Connecticut, Delaware, Hawaii, Iowa, Maryland, Massachusetts, Minnesota, Nevada,

New Jersey, New York, North Dakota, Rhode Island, Utah, Washington, Wyoming), $\geq 70\%$ of TB cases occurred among foreign-born persons (Table 23).

Country of Origin and World Region

From 2007 through 2011, 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.¹ Of the 6,510 TB cases reported among foreign-born persons in 2011, 38% occurred among persons born in the Americas region, and 31% occurred among persons born in the Western Pacific region (Table 18). From 1993 through 2011, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 4% in 2011), the Southeast Asia region (6% in 1993 to 14% in 2011), and the Africa region (2% in 1993 and 8% in 2011) (Table 18).

Multidrug-Resistant Tuberculosis

From 1993, when the RVCT was expanded to include drug-susceptibility results, 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 2.5% to 1.0% by 1998. However, there has been a slight increase in the percentage of primary MDR TB cases, from 0.9% of the total number of reported TB cases in 2008 (88 cases), to 1.1% percent in 2009 (86 cases), to 1.2% in 2010 (89 cases), to 1.3% in 2011 (98 cases). Since 1997, the percentage of U.S.-born patients with primary MDR TB has remained below 1.0%. However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25.3% (103 of 407) in 1993 to 82.7% (81 of 98) in 2011 (Table 10).

¹ United States Department of Homeland Security. 2010 Yearbook of Immigration Statistics. In: U.S. Department of Homeland Security, Office of Immigration Statistics; 2011.

Extensively Drug-Resistant Tuberculosis

CDC has included an updated case count of extensively drug-resistant (XDR) TB cases from 1993 to 2011 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).^{2,3} Six cases were reported as XDR TB in 2011, compared with 1 case in 2010, 0 cases in 2009, and 5 in 2008. Of the 12 XDR TB cases reported since 2008, 11 were among foreign-born persons.

Tuberculosis Therapy

The proportion of TB patients prescribed an initial treatment regimen including at least isoniazid, rifampin, and pyrazinamide increased from 72% in 1993 to 88% in 2011. The proportion of patients who completed therapy within 1 year increased from 64% in 1993 to 88% in 2009 (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 90% in 2009, the latest year for which complete outcome data are available (Table 11).

HIV Status

Between 2010 and 2011, the proportion of persons with TB who reported HIV test results increased by 20% for all ages and 22% for persons aged 25–44. This increase is attributed to new reporting by states that were not previously reporting HIV test results. The American Thoracic Society and the Infectious Diseases Society of America recommend that all TB patients be counseled and tested for HIV.⁴

² Centers for Disease Control and Prevention. Revised Definition of Extensively Drug-Resistant Tuberculosis. *MMWR Morb Mortal Wkly Rep* 2006;55:1176.

³ Extensively drug-resistant tuberculosis (XDR-TB): recommendations for prevention and control. *Wkly Epidemiol Rec* 2006;81:430-2.

⁴ CDC. Treatment of tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. *MMWR* 2003;52(No. RR-11).

Summary

Both the absolute number of TB cases and the TB case rate in the United States continued to decrease in 2011. With 10,528 total cases, representing a case rate of 3.4 cases per 100,000 persons, 2011 had the lowest number of reported TB cases since reporting began in 1953. Furthermore, the number of TB cases reported in 2011 and the corresponding case rate decreased by approximately 6% from the previous year. However, despite successful declines in TB cases and case rates over the past 60 years, it is unlikely that current TB control and prevention efforts will result in TB elimination (<1 case per 1,000,000 population)⁵ in this century.⁶

Racial and ethnic minorities and foreign-born persons continue to be disproportionately affected by TB. In 2011, 84% of all TB cases occurred among persons who were Asian, black or African American, Hispanic, American Indian or Alaskan Native, or Native Hawaiian. The TB case rate among Asians is 25 times higher than the TB case rate among non-Hispanic whites. Asians accounted for 30% of all TB cases reported in 2011, the highest percentage of any racial or ethnic group, and 96% of Asian TB patients were foreign-born.

Since 2002, more than half of all TB cases reported in the U.S. have occurred among foreign-born persons. The gap between the proportion of TB cases among foreign-born and U.S.-born persons continued to widen in 2011, with 62% of all TB cases occurring among foreign-born persons. TB control strategies that have been successful in reducing transmission among U.S.-born TB cases have had less success in controlling TB among foreign-born persons.⁷ Focusing on LTBI testing and treatment of foreign-born persons would likely be more successful in decreasing TB among this group.⁷ Additionally, a new LTBI regimen that reduces

⁵ Ending Neglect: The Elimination of Tuberculosis in the United States. Washington, DC: National Academy Press; 2000.

⁶ Hill AN, Becerra JE, Castro KG. Modelling tuberculosis trends in the USA. *Epidemiol Infect* 2012;140(10):1862-72.

⁷ Cain KP, Benoit SR, Winston CA, MacKenzie WR. Tuberculosis among foreign-born persons in the United States. *JAMA*. 2008;300(4):405-12.

treatment time may lead to better LTBI treatment completion among foreign-born persons.⁸

Continuing the decline in TB cases in the United States will require sustained focus on domestic TB control activities and further support of global TB control initiatives.⁹ Improving TB control among racial/ethnic minorities and foreign-born persons is imperative as the United States strives to prevent TB transmission and meet TB elimination goals.¹⁰

⁸ Jereb JA, Goldberg SV, Powell K, Villarino E, LoBue P. Recommendations for use of an Isoniazid-Rifapentine regimen with direct observation to treat latent Mycobacterium tuberculosis infection. *MMWR Morb Mortal Wkly Rep*. 2011;60(48):1650-3.

⁹ Centers for Disease Control and Prevention. Trends in tuberculosis – United States 2011. *MMWR Morb Mortal Wkly Rep* 2012;61(11):181-5.

¹⁰ Centers for Disease Control and Prevention. CDC's response to ending neglect: the elimination of tuberculosis in the United States 2002. <http://www.cdc.gov/tb/publications/reportsarticles/iom/iomresponse/default.htm>.

Technical Notes

Technical Notes

National Surveillance for Tuberculosis

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 using a standard case report form, Report of Verified Case of Tuberculosis (RVCT), through 2011. 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.

The 2011 Report contains several new features:

- Race/ethnicity information on TB cases is displayed by origin of birth (U.S.-born or foreign-born) (Table 3).
- Drug-resistance patterns are displayed in separate tables with drug-resistance trend data by previous TB status and origin of birth (Tables 9 and 10).
- California now reports HIV test results to CDC, resulting in a significant improvement in the completeness of HIV status reporting in 2011.
- TB case data are shown by homeless status among those 15 years of age or older by MSA (Table 49).

TB Case Definition

In 2009, the case definition was modified. TB cases are verified according to the following specified laboratory and clinical criteria.

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, 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 can now be reported to CDC as a measure of programmatic and case management burden. However, data on noncountable TB cases are incomplete and not included in this report.

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

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.

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.

active TB requiring anti-TB 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. These new variables will be made available in a future annual report.

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 2011. 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 13, except Table 7, which now only presents number of years in the United States for 2011. 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 population. Population de-

nomimators used in calculating TB rates were based on official census and midyear postcensal estimates from the U.S. Census Bureau. In Tables 1, 19, and 20, the U.S. total populations for 2000–2009 were taken from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2000 to July 1, 2009); populations for 2010–2011 were taken from Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 2011). 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 2000–2011 were obtained from the Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States (April 1, 2000 to July 1, 2009) and Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States (April 1, 2010 to July 1, 2011). 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 by Sex and Five-Year Age Group for the United States (April 1, 2010 to July 1, 2011). Denominators for computing 2011 rates in Table 15 were obtained from Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States (April 1, 2000 to July 1, 2011). In 2004, the method for calculating the annual percentage change in the TB case rate was modified. Unrounded figures are applied to calculate the percentage change in the case rate.

In Table 5, the populations for U.S.-born and foreign-born persons for 1993 and 1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990–July 1, 1999. Denominators for computing the 1995–2011 rates were based on extrapolations from the U.S. Census Current Population Survey (March Supplement).

Mortality Data

Official TB mortality statistics for the United States are compiled by the National Center for Health Statistics (NCHS), CDC. The annual mortality rate is calculated as the number of deaths due to TB in that year, divided by the estimated population for the year, multiplied by 100,000

(Table 1). The number of deaths for 2009 was obtained from the NCHS, National Vital Statistics Report, Vol. 60, No. 3, December 29, 2011. The finalized numbers of deaths for 2010 and 2011 were not available at the time of this publication.

Race and Ethnicity

Beginning with the 2011 report, Table 3 now includes information on TB cases and percentages by race/ethnicity and origin of birth (U.S.-born or foreign-born).

Drug Resistance

Beginning with the 2011 report, 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 9 and 10, respectively.

Completion of Tuberculosis Therapy

Tables 11, 40, 42, and 43 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 40, the first column shows the total number of cases reported during 2009. 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 during therapy, did not move out of country during treatment, and did not have meningeal TB, regardless of age. In addition, TB patients under the age of 15 were not eligible to complete therapy within 1 year if they had disseminated disease (defined as miliary tuberculosis and/or a positive tuberculosis blood culture). Patients with culture-negative disease, those with an unknown culture status, and those with culture-positive disease but unknown initial drug-susceptibility test results were included under the category of 1 year or less of therapy indicated.

In Table 40, 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 \leq 1 year) and for COT, regardless of duration (i.e., duration of therapy \leq 1 year, $>$ 1 year, or unknown). For COT \leq 1 year, the numerator included only those patients completing therapy in \leq 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 12 provides rates for COT \leq 1 year and for COT, regardless of duration, only for the group with an indicated therapy of 1 year or less. Table 42 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 11 and 35.

Site of TB Disease

Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 8, 26, and 27). 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 12 and 37; Table 12 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 90% of TB cases tested among persons aged 25–44 years in 2011; 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

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

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

Reason Therapy Stopped

Tables 13 and 41 report a new 2009 RVCT data entry option; these tables 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**; however, in 2009 data, the “Moved” option was still utilized by the following reporting areas: Alaska, California, Georgia, Iowa, and New York City. It is anticipated that future reports will not include the “Moved” option from 2009 forward.

Metropolitan Statistical Areas

Tables 45 through 49 present data by metropolitan statistical areas (MSAs) with an estimated 2011 population of 500,000 or more. MSAs are defined by the federal Office of Management and Budget, and the definitions effective as of December 2009 were used for this publication (<http://www.whitehouse.gov/sites/default/files/omb/assets/bulletins/b10-02.pdf>). Beginning with the 2011 report, Table 49 will show TB cases by homeless status among those 15 years of age or older by MSA.

On June 6, 2003, the OMB announced new MSA definitions based on Census 2000 data, and the information has been updated annually. Some MSAs added or dropped counties and some MSAs merged. 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 19 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 45) 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.

Morbidity Trend Tables United States

Table 1. Tuberculosis Cases, Case Rates per 100,000 Population, Deaths, and Death Rates per 100,000 Population, and Percent Change: United States, 1953–2011

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	25,103	9.7	-5.9	-7.1	1,631	0.6	-4.3	-14.3
1994	24,205	9.2	-3.6	-4.8	1,478	0.6	-9.4	0.0
1995	22,727	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	18,287	6.6	-7.4	-8.5	1,112	0.4	-4.6	0.0
1999	17,500	6.3	-4.3	-5.4	930	0.3	-16.4	-25.0
2000	16,309	5.8	-6.8	-7.8	776	0.3	-16.6	0.0
2001	15,944	5.6	-2.2	-3.2	764	0.3	-1.6	0.0
2002	15,055	5.2	-5.6	-6.5	784	0.3	2.6	0.0
2003	14,835	5.1	-1.5	-2.3	711	0.2	-10.2	-33.3
2004	14,499	4.9	-2.3	-3.2	662	0.2	-6.9	0.0
2005	14,068	4.8	-3.0	-3.9	648	0.2	-2.1	0.0
2006	13,727	4.6	-2.4	-3.4	644	0.2	-0.6	0.0
2007	13,278	4.4	-3.3	-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	11,528	3.8	-10.6	-11.4	529	0.2	-10.3	0.0
2010	11,171	3.6	-3.1	-3.8	...	...	...	...
2011	10,528	3.4	-5.8	-6.4	...	...	...	...

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

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

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

Percent change in tuberculosis death rates is calculated with rounded figures. See Technical Notes (page 9).

Note: 1993 to 2011 tuberculosis case counts and rates updated as of June 25, 2012, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentation/bridgedintercena1.doc) (accessed July 20, 2012) and Annual Estimates of the Population for the United States and States, and for Puerto Rico (July 1, 2000– July 1, 2010) (www.census.gov/popest/states/tables/NST-PEST2010-01.xls) (accessed July 20, 2012) and Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2011 (<http://www.census.gov/popest/data/national/totals/2011/index.html>) (accessed August 8, 2012). 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, 1993–2011

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.	(%)
1993	25103	272	(1)	14.0	3454	(14)	41.2	8947	(36)	28.5	...	...	...	6903	(27)	3.6	5138	20	19.9	389	(2)
1994	24205	327	(1)	16.4	3639	(15)	41.5	8383	(35)	26.2	...	...	...	6572	(27)	3.4	5018	21	18.6	266	(1)
1995	22727	320	(1)	15.7	3840	(17)	41.8	7554	(33)	23.2	...	...	...	5972	(26)	3.1	4834	21	17.2	207	(1)
1996	21210	287	(1)	13.7	3666	(17)	38.1	7097	(33)	21.5	...	...	...	5487	(26)	2.8	4492	21	15.2	181	(1)
1997	19751	264	(1)	12.3	3683	(19)	36.6	6604	(33)	19.7	...	...	...	4824	(24)	2.5	4218	21	13.7	158	(1)
1998	18287	254	(1)	11.5	3516	(19)	33.5	5823	(32)	17.0	...	...	...	4475	(24)	2.3	4090	22	12.6	129	(1)
1999	17500	242	(1)	10.7	3519	(20)	32.1	5550	(32)	16.0	...	...	...	4227	(24)	2.1	3864	22	11.4	98	(1)
2000	16309	232	(1)	11.0	3392	(21)	31.3	5149	(32)	15.0	...	...	...	3638	(22)	1.9	3803	23	10.7	95	(1)
2001	15944	226	(1)	10.6	3499	(22)	31.2	4782	(30)	13.7	...	...	...	3346	(21)	1.7	4008	25	10.8	83	(1)
2002	15055	185	(1)	8.6	3323	(22)	28.6	4467	(30)	12.7	...	...	...	3042	(20)	1.5	3973	26	10.3	65	(0)
2003	14835	179	(1)	8.2	3480	(23)	29.9	4159	(28)	11.7	64	(0)	16.2	2792	(19)	1.4	4105	28	10.3	39	(0)
2004	14499	157	(1)	7.1	3336	(23)	28.0	4069	(28)	11.4	63	(0)	15.6	2631	(18)	1.3	4181	29	10.2	28	(0)
2005	14068	152	(1)	6.8	3205	(23)	26.1	3958	(28)	10.9	54	(0)	13.1	2568	(18)	1.3	4045	29	9.5	41	(0)
2006	13727	164	(1)	7.2	3297	(24)	26.1	3730	(27)	10.2	52	(0)	12.3	2387	(17)	1.2	4049	29	9.2	9	(0)
2007	13278	133	(1)	5.8	3447	(26)	26.5	3474	(26)	9.4	95	(1)	22.1	2206	(17)	1.1	3875	29	8.5	24	(0)
2008	12895	137	(1)	5.9	3396	(26)	25.4	3279	(25)	8.8	69	(1)	15.7	2143	(17)	1.1	3803	29	8.1	27	(0)
2009	11528	101	(1)	4.3	3207	(28)	23.4	2872	(25)	7.6	75	(1)	16.7	1827	(16)	0.9	3375	29	7.0	32	(0)
2010	11171	152	(1)	6.7	3167	(28)	21.5	2674	(24)	7.0	95	(1)	19.0	1769	(16)	0.9	3231	29	6.4	51	(0)
2011	10528	129	(1)	5.6	3148	(30)	20.9	2408	(23)	6.3	81	(1)	15.9	1664	(16)	0.8	3008	29	5.8	53	(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: Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1993–1999 (http://www.cdc.gov/inchs/invss/bridged_race.htm) (accessed July 20, 2012). Denominators for computing 2000–2011 case rates were obtained from the Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2000, to July 1, 2009 (http://www.census.gov/popest/data/historical/2000s/vintage_2009/index.html) (accessed July 20, 2012), and Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2010 to July 1, 2011 (<http://www.census.gov/popest/data/national/asrh/2011/index.html>) (accessed July 20, 2012).

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 25, 2012.

Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #8.

Zero % (0) denotes <0.5%.

Table 3. Tuberculosis Cases and Percentages by Hispanic Ethnicity and non-Hispanic Race, and Origin of Birth: United States, 1993–2011

Year	Non-Hispanic																		Hispanic or Latino ⁴		Unknown or Missing ⁵	
	American Indian or Alaska Native			Asian ¹			Black or African American			Native Hawaiian or Other Pacific Islander ²			White			Multiple Race ³			US-born	Foreign-born	US-born	Foreign-born
	US-born	Foreign-born	No. (%)	US-born	Foreign-born	No. (%)	US-born	Foreign-born	No. (%)	US-born	Foreign-born	No. (%)	US-born	Foreign-born	No. (%)	US-born	Foreign-born	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
1993	263 (97.1)	8 (3.0)	103 (3.0)	3299 (97.0)	8250 (92.9)	630 (7.1)	50 (78.1)	14 (21.9)	2369 (85.0)	418 (15.0)	9 (24.3)	28 (75.7)	6317 (92.3)	528 (7.7)	2235 (44.0)	2850 (56.1)	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)	55 (87.3)	8 (12.7)	2211 (84.1)	418 (15.9)	15 (44.1)	19 (55.9)	6009 (92.4)	494 (7.6)	1989 (40.1)	2966 (59.9)	121 (57.1)	91 (42.9)				
1995	314 (98.1)	6 (1.9)	114 (3.0)	3665 (97.0)	6750 (89.4)	797 (10.6)	41 (75.9)	13 (24.1)	2132 (83.1)	434 (16.9)	23 (51.1)	22 (48.9)	5427 (91.1)	529 (8.9)	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)	38 (73.1)	14 (26.9)	1959 (82.1)	426 (17.9)	16 (41.0)	23 (59.0)	4968 (90.8)	503 (9.2)	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)	52 (75.8)	23 (24.2)	1784 (81.2)	412 (18.8)	9 (37.5)	15 (62.5)	4255 (88.6)	546 (11.4)	1464 (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)	52 (75.4)	17 (24.6)	1755 (81.9)	387 (18.1)	16 (39.0)	25 (61.0)	3914 (87.6)	553 (12.4)	1281 (31.5)	2785 (68.5)	51 (44.4)	64 (55.7)				
1999	237 (97.9)	5 (2.1)	121 (3.5)	3336 (96.5)	4608 (83.3)	924 (16.7)	68 (90.7)	7 (9.3)	1453 (79.6)	373 (20.4)	16 (41.0)	23 (59.0)	3637 (86.4)	575 (13.7)	1119 (29.2)	2717 (70.8)	39 (54.2)	33 (45.8)				
2000	226 (97.4)	6 (2.6)	115 (3.5)	3217 (96.6)	4107 (79.8)	1038 (20.2)	79 (85.0)	14 (15.1)	1423 (80.6)	343 (19.4)	15 (46.9)	17 (53.1)	3102 (85.3)	534 (14.7)	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)	59 (72.8)	22 (27.2)	1325 (79.9)	334 (20.1)	22 (59.5)	15 (40.5)	2787 (83.6)	547 (16.4)	1025 (25.7)	2964 (74.3)	34 (46.6)	39 (53.4)				
2002	183 (98.9)	2 (1.1)	109 (3.3)	3160 (96.7)	3401 (76.4)	1051 (23.6)	59 (72.8)	22 (27.2)	1533 (63.8)	871 (36.2)	22 (59.5)	15 (40.5)	2547 (83.9)	490 (16.1)	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)	2369 (85.0)	418 (15.0)	1000 (24.5)	3089 (75.5)	18 (52.9)	16 (47.1)				
2004	154 (98.1)	3 (1.9)	147 (4.4)	3182 (95.6)	2971 (73.1)	1096 (27.0)	55 (87.3)	8 (12.7)	2211 (84.1)	418 (15.9)	15 (44.1)	19 (55.9)	2211 (84.1)	418 (15.9)	1064 (25.5)	3107 (74.5)	15 (55.6)	12 (44.4)				
2005	146 (96.1)	6 (4.0)	122 (3.8)	3080 (96.2)	2876 (72.8)	1077 (27.3)	41 (75.9)	13 (24.1)	2132 (83.1)	434 (16.9)	23 (51.1)	22 (48.9)	2132 (83.1)	434 (16.9)	955 (23.7)	3074 (76.3)	13 (35.1)	24 (64.9)				
2006	161 (98.2)	3 (1.8)	133 (4.0)	3161 (96.0)	2595 (69.6)	1132 (30.4)	38 (73.1)	14 (26.9)	1959 (82.1)	426 (17.9)	16 (41.0)	23 (59.0)	1959 (82.1)	426 (17.9)	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)	2458 (71.0)	1003 (29.0)	72 (75.8)	23 (24.2)	1784 (81.2)	412 (18.8)	9 (37.5)	15 (62.5)	1784 (81.2)	412 (18.8)	877 (22.8)	2968 (77.2)	14 (77.8)	4 (22.2)				
2008	134 (97.8)	3 (2.2)	153 (4.5)	3239 (95.5)	2238 (68.3)	1041 (31.8)	52 (75.4)	17 (24.6)	1755 (81.9)	387 (18.1)	16 (39.0)	25 (61.0)	1755 (81.9)	387 (18.1)	921 (24.3)	2877 (75.8)	13 (48.2)	14 (51.9)				
2009	97 (96.0)	4 (4.0)	151 (4.7)	3052 (95.3)	1929 (67.2)	941 (32.8)	68 (90.7)	7 (9.3)	1453 (79.6)	373 (20.4)	16 (41.0)	23 (59.0)	1453 (79.6)	373 (20.4)	850 (25.3)	2516 (74.8)	6 (19.4)	25 (80.7)				
2010	150 (98.7)	2 (1.3)	133 (4.2)	3015 (95.8)	1769 (66.3)	901 (33.8)	79 (85.0)	14 (15.1)	1423 (80.6)	343 (19.4)	15 (46.9)	17 (53.1)	1423 (80.6)	343 (19.4)	804 (25.0)	2415 (75.0)	10 (19.6)	41 (80.4)				
2011	127 (98.5)	2 (1.6)	133 (4.2)	3010 (95.8)	1533 (63.8)	871 (36.2)	59 (72.8)	22 (27.2)	1325 (79.9)	334 (20.1)	22 (59.5)	15 (40.5)	1325 (79.9)	334 (20.1)	764 (25.6)	2222 (74.4)	18 (34.6)	34 (65.4)				

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 25, 2012.
 Ellipses indicate data not available.
 See Technical Notes.
 See Surveillance Slide #13.

Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2011

Year	Total Cases	0–14			15–24			25–44			45–64			≥65			Unk. ¹	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25103	1660	(7)	2.9	1821	(7)	5.0	9589	(38)	11.5	6196	(25)	12.4	5820	(23)	17.7	17	(0)
1994	24205	1659	(7)	2.9	1832	(8)	5.0	9043	(37)	10.7	6125	(25)	11.9	5540	(23)	16.6	6	(0)
1995	22727	1536	(7)	2.6	1697	(7)	4.6	8200	(36)	9.7	5960	(26)	11.3	5329	(23)	15.8	5	(0)
1996	21210	1356	(6)	2.3	1637	(8)	4.4	7564	(36)	8.9	5572	(26)	10.2	5076	(24)	14.9	5	(0)
1997	19751	1251	(6)	2.1	1674	(8)	4.5	6884	(35)	8.0	5278	(27)	9.4	4663	(24)	13.6	1	(0)
1998	18287	1077	(6)	1.8	1543	(8)	4.1	6335	(35)	7.4	4954	(27)	8.5	4378	(24)	12.6	0	(0)
1999	17500	1038	(6)	1.7	1518	(9)	3.9	6062	(35)	7.1	4860	(28)	8.1	4020	(23)	11.6	2	(0)
2000	16309	965	(6)	1.6	1618	(10)	4.1	5576	(34)	6.6	4635	(28)	7.4	3515	(22)	10.0	0	(0)
2001	15944	929	(6)	1.5	1597	(10)	4.0	5609	(35)	6.6	4515	(28)	7.0	3293	(21)	9.3	1	(0)
2002	15055	944	(6)	1.6	1498	(10)	3.7	5288	(35)	6.3	4182	(28)	6.3	3142	(21)	8.8	1	(0)
2003	14835	911	(6)	1.5	1573	(11)	3.8	5074	(34)	6.1	4283	(29)	6.3	2994	(20)	8.3	0	(0)
2004	14499	953	(7)	1.6	1603	(11)	3.8	4939	(34)	5.9	4192	(29)	5.9	2811	(19)	7.8	1	(0)
2005	14068	854	(6)	1.4	1541	(11)	3.7	4740	(34)	5.7	4124	(29)	5.7	2809	(20)	7.7	0	(0)
2006	13727	803	(6)	1.3	1532	(11)	3.6	4689	(34)	5.6	4039	(29)	5.4	2663	(19)	7.2	1	(0)
2007	13278	775	(6)	1.3	1580	(12)	3.7	4313	(32)	5.2	4036	(30)	5.3	2574	(19)	6.8	0	(0)
2008	12895	785	(6)	1.3	1444	(11)	3.4	4241	(33)	5.1	3929	(30)	5.0	2496	(19)	6.4	0	(0)
2009	11528	647	(6)	1.0	1278	(11)	3.0	3889	(34)	4.7	3424	(30)	4.3	2283	(20)	5.8	7	(0)
2010	11171	637	(6)	1.0	1199	(11)	2.7	3672	(33)	4.5	3433	(31)	4.2	2228	(20)	5.5	2	(0)
2011	10528	577	(5)	0.9	1033	(10)	2.4	3369	(32)	4.1	3297	(31)	4.0	2247	(21)	5.4	5	(0)

¹Includes unknown and missing.

Note: Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgedpop/documentationbridgedintercena1.doc) (accessed August 30, 2011) Denominators for computing 2000–2011 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 by Sex and Five-Year Age Group for the United States: April 1, 2010 to July 1, 2011 (<http://www.census.gov/popest/data/national/asrh/2011/index.html>) (accessed July 20, 2012).

Data for all years updated through June 25, 2012.

See Technical Notes.

Zero % (0) denotes <0.5%.

See Surveillance Slides #5 and #6.

Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2011

Year	Total Cases	U.S.-born Persons			Foreign-born Persons ¹			Unknown or Missing	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25103	17435	(69)	7.4	7402	(29)	34.0	266	(1)
1994	24205	16191	(67)	6.9	7750	(32)	34.4	264	(1)
1995	22727	14676	(65)	6.2	7998	(35)	34.9	53	(0)
1996	21210	13398	(63)	5.6	7739	(36)	31.5	73	(0)
1997	19751	11935	(60)	5.0	7742	(39)	30.0	74	(0)
1998	18287	10634	(58)	4.4	7599	(42)	28.9	54	(0)
1999	17500	9806	(56)	4.0	7602	(43)	29.2	92	(1)
2000	16309	8648	(53)	3.5	7619	(47)	27.3	42	(0)
2001	15944	7872	(49)	3.2	8009	(50)	26.9	63	(0)
2002	15055	7282	(48)	2.9	7718	(51)	25.4	55	(0)
2003	14835	6861	(46)	2.7	7929	(53)	23.5	45	(0)
2004	14499	6632	(46)	2.6	7845	(54)	23.2	22	(0)
2005	14068	6308	(45)	2.5	7730	(55)	22.4	30	(0)
2006	13727	5888	(43)	2.3	7815	(57)	22.0	24	(0)
2007	13278	5478	(41)	2.1	7731	(58)	20.7	69	(1)
2008	12895	5282	(41)	2.0	7603	(59)	20.4	10	(0)
2009	11528	4570	(40)	1.7	6941	(60)	18.9	17	(0)
2010	11171	4383	(39)	1.6	6748	(60)	18.2	40	(0)
2011	10528	3981	(38)	1.5	6510	(62)	17.2	37	(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/fbtabs001.txt> (accessed July 20, 2012). Denominators for computing the 1995–2011 rates are based on the U.S. Census Bureau, Current Population Survey (March Supplement).

Data for all years updated through June 25, 2012.

See Technical Notes.

Zero % (0) denotes <0.5%.

See Surveillance Slides #11, #12, #15, and #16.

Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons¹ by the Top 30 Countries² of Birth: United States, 2007–2011

Country of Origin	Year									
	2011		2010		2009		2008		2007	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Total Cases	6510	(100)	6748	(100)	6941	(100)	7603	(100)	7731	(100)
Mexico	1432	(22)	1537	(23)	1595	(23)	1762	(23)	1,841	(24)
Philippines	757	(12)	750	(11)	805	(12)	860	(11)	951	(12)
India	502	(8)	583	(9)	541	(8)	598	(8)	625	(8)
Viet Nam	546	(8)	536	(8)	532	(8)	583	(8)	570	(7)
China	376	(6)	368	(5)	345	(5)	405	(5)	386	(5)
Guatemala	166	(3)	195	(3)	214	(3)	252	(3)	243	(3)
Haiti	187	(3)	196	(3)	207	(3)	237	(3)	173	(2)
Ethiopia	154	(2)	161	(2)	172	(2)	183	(2)	178	(2)
Honduras	127	(2)	143	(2)	152	(2)	195	(3)	181	(2)
Korea, Republic of	131	(2)	119	(2)	156	(2)	150	(2)	155	(2)
Somalia	116	(2)	126	(2)	113	(2)	151	(2)	176	(2)
El Salvador	103	(2)	116	(2)	119	(2)	147	(2)	158	(2)
Peru	93	(1)	111	(2)	94	(1)	144	(2)	139	(2)
Ecuador	79	(1)	84	(1)	99	(1)	114	(2)	116	(2)
Cambodia	91	(1)	68	(1)	99	(1)	77	(1)	95	(1)
Myanmar	90	(1)	118	(2)	104	(2)	108	(1)	65	(1)
Pakistan	86	(1)	74	(1)	84	(1)	87	(1)	79	(1)
Dominican Republic	74	(1)	84	(1)	71	(1)	88	(1)	89	(1)
Kenya	74	(1)	62	(1)	73	(1)	82	(1)	69	(1)
Nepal	77	(1)	61	(1)	74	(1)	70	(1)	53	(1)
Laos	59	(1)	68	(1)	60	(1)	68	(1)	79	(1)
Bangladesh	66	(1)	58	(1)	46	(1)	55	(1)	56	(1)
Thailand	37	(1)	46	(1)	57	(1)	62	(1)	47	(1)
Nigeria	52	(1)	43	(1)	46	(1)	50	(1)	44	(1)
Colombia	32	(0)	42	(1)	40	(1)	43	(1)	56	(1)
Indonesia	32	(0)	58	(1)	34	(0)	30	(0)	52	(1)
Cuba	41	(1)	33	(0)	36	(1)	42	(1)	41	(1)
Liberia	26	(0)	36	(1)	34	(0)	33	(0)	46	(1)
Taiwan	38	(1)	26	(0)	26	(0)	31	(0)	38	(0)
Russia	23	(0)	20	(0)	31	(0)	35	(0)	40	(1)
All Others ³	843	(13)	826	(12)	882	(13)	861	(11)	890	(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 25, 2012.

Table 7. 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, 2011

Country of Origin ²	No. Years in U.S. ³								
	Total Cases	< 1 Year		1 - 4 Years		≥ 5 Years		Unknown	
	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Mexico	1432	128	(9)	164	(11)	946	(66)	194	(14)
Philippines	757	112	(15)	101	(13)	462	(61)	82	(11)
Vietnam	546	57	(10)	68	(12)	336	(62)	85	(16)
India	502	85	(17)	122	(24)	255	(51)	40	(8)
China	376	54	(14)	59	(16)	242	(64)	21	(6)
Haiti	187	29	(16)	39	(21)	107	(57)	12	(6)
Guatemala	166	17	(10)	56	(34)	80	(48)	13	(8)
Ethiopia	154	30	(19)	64	(42)	57	(37)	3	(2)
Korea, Republic of	131	8	(6)	7	(5)	98	(75)	18	(14)
Honduras	127	23	(18)	21	(17)	75	(59)	8	(6)
Somalia	116	22	(19)	33	(28)	57	(49)	4	(3)
El Salvador	103	7	(7)	18	(17)	73	(71)	5	(5)
Peru	93	12	(13)	12	(13)	65	(70)	4	(4)
Cambodia	91	1	(1)	10	(11)	71	(78)	9	(10)
Myanmar	90	39	(43)	32	(36)	13	(14)	6	(7)
Pakistan	86	14	(16)	12	(14)	57	(66)	3	(3)
Ecuador	79	5	(6)	17	(22)	46	(58)	11	(14)
Nepal	77	22	(29)	37	(48)	17	(22)	1	(1)
Dominican Republic	74	22	(30)	10	(14)	42	(57)	0	(0)
Kenya	74	15	(20)	22	(30)	36	(49)	1	(1)
Bangladesh	66	16	(24)	16	(24)	26	(39)	8	(12)
Laos	59	0	(0)	3	(5)	48	(81)	8	(14)
Nigeria	52	18	(35)	16	(31)	16	(31)	2	(4)
Cuba	41	4	(10)	6	(15)	28	(68)	3	(7)
Bhutan	39	30	(77)	8	(21)	0	(0)	1	(3)
Taiwan	38	1	(3)	2	(5)	33	(87)	2	(5)
Korea, DPR	37	3	(8)	5	(14)	27	(73)	2	(5)
Thailand	37	6	(16)	6	(16)	24	(65)	1	(3)
Colombia	32	5	(16)	3	(9)	23	(72)	1	(3)
Indonesia	32	6	(19)	4	(13)	18	(56)	4	(13)
All Others ⁴	816	134	(16)	131	(16)	460	(56)	91	(11)
Total	6510	925	(14)	1104	(17)	3838	(59)	643	(10)

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 #18

Table 8. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2011

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	25103	20307	(81)	0	(0)	185	(1)	3088	(12)	1523	(6)	21154	(84)	3940	(16)
1994	24205	19506	(81)	0	(0)	189	(1)	2916	(12)	1594	(7)	20318	(84)	3885	(16)
1995	22727	18266	(80)	0	(0)	189	(1)	2748	(12)	1524	(7)	18887	(83)	3835	(17)
1996	21210	17154	(81)	0	(0)	131	(1)	2607	(12)	1318	(6)	17387	(82)	3814	(18)
1997	19751	15979	(81)	0	(0)	155	(1)	2411	(12)	1206	(6)	16239	(82)	3509	(18)
1998	18287	14790	(81)	0	(0)	155	(1)	2253	(12)	1089	(6)	14801	(81)	3484	(19)
1999	17500	13995	(80)	0	(0)	172	(1)	2103	(12)	1230	(7)	14066	(80)	3431	(20)
2000	16309	13013	(80)	0	(0)	148	(1)	1951	(12)	1197	(7)	13086	(80)	3211	(20)
2001	15944	12749	(80)	0	(0)	123	(1)	1886	(12)	1186	(7)	12724	(80)	3216	(20)
2002	15055	11974	(80)	0	(0)	104	(1)	1822	(12)	1155	(8)	11901	(79)	3148	(21)
2003	14835	11683	(79)	0	(0)	116	(1)	1783	(12)	1253	(8)	11805	(80)	3020	(20)
2004	14499	11326	(78)	0	(0)	80	(1)	1824	(13)	1269	(9)	11523	(79)	2972	(21)
2005	14068	10955	(78)	0	(0)	96	(1)	1795	(13)	1222	(9)	11126	(79)	2936	(21)
2006	13727	10744	(78)	0	(0)	93	(1)	1629	(12)	1261	(9)	10852	(79)	2872	(21)
2007	13278	10425	(79)	0	(0)	69	(1)	1496	(11)	1288	(10)	10587	(80)	2687	(20)
2008	12895	10024	(78)	18	(0)	60	(0)	1546	(12)	1247	(10)	10237	(79)	2650	(21)
2009	11528	8861	(77)	82	(1)	78	(1)	1766	(15)	741	(6)	9012	(78)	2497	(22)
2010	11171	8416	(75)	141	(1)	78	(1)	1875	(17)	661	(6)	8726	(78)	2435	(22)
2011	10528	8042	(76)	166	(2)	60	(1)	1664	(16)	596	(6)	8333	(79)	2188	(21)

¹ Based 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.

⁵ Excludes missing and unknowns.

Note: See Technical Notes.

Data for all years updated through June 25, 2012.

Table 9. Tuberculosis Cases and Percentages, by Resistance to INH¹, Origin of Birth, and Previous History of TB: United States, 1993–2011

Year	All INH-resistant ²	Total INH-resistant						Isoniazid Resistant TB Cases											
		Previous TB			No Previous TB			Previous TB			U.S.-born INH-resistant ³			Foreign-born ^{3,4} INH-resistant					
		Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)
1993	1534	982	161	(16.4)	16601	1367	(8.2)	668	83	(12.4)	11809	789	(6.7)	301	75	(24.9)	4664	564	(12.1)
1994	1543	1033	175	(16.9)	16416	1352	(8.2)	693	81	(11.7)	11019	709	(6.4)	336	93	(27.7)	5280	631	(12.0)
1995	1350	958	168	(17.5)	16022	1172	(7.3)	593	77	(13.0)	10351	555	(5.4)	363	91	(25.1)	5640	616	(10.9)
1996	1284	862	142	(16.5)	15358	1133	(7.4)	559	68	(12.2)	9646	496	(5.1)	303	74	(24.4)	5665	636	(11.2)
1997	1195	742	109	(14.7)	14448	1078	(7.5)	455	35	(7.7)	8705	435	(5.0)	286	74	(25.9)	5698	640	(11.2)
1998	1120	749	98	(13.1)	13420	1011	(7.5)	485	38	(7.8)	7712	366	(4.7)	262	60	(22.9)	5675	643	(11.3)
1999	999	669	82	(12.3)	12655	899	(7.1)	383	25	(6.5)	7020	283	(4.0)	283	55	(19.4)	5583	614	(11.0)
2000	981	632	84	(13.3)	11825	889	(7.5)	360	22	(6.1)	6144	269	(4.4)	272	62	(22.8)	5652	617	(10.9)
2001	897	629	87	(13.8)	11509	800	(7.0)	324	28	(8.6)	5583	242	(4.3)	302	59	(19.5)	5890	557	(9.5)
2002	912	569	80	(14.1)	10813	826	(7.6)	303	23	(7.6)	5069	206	(4.1)	264	57	(21.6)	5703	619	(10.9)
2003	903	524	65	(12.4)	10751	822	(7.6)	253	16	(6.3)	4864	214	(4.4)	271	49	(18.1)	5858	605	(10.3)
2004	872	537	64	(11.9)	10481	801	(7.6)	274	15	(5.5)	4698	214	(4.6)	263	49	(18.6)	5773	587	(10.2)
2005	841	505	69	(13.7)	10064	761	(7.6)	238	17	(7.1)	4412	188	(4.3)	267	52	(19.5)	5635	567	(10.1)
2006	845	493	67	(13.6)	9905	770	(7.8)	203	9	(4.4)	4144	173	(4.2)	289	57	(19.7)	5745	596	(10.4)
2007	798	496	71	(14.3)	9645	715	(7.4)	206	14	(6.8)	3877	164	(4.2)	288	57	(19.8)	5717	547	(9.6)
2008	834	427	56	(13.1)	9306	774	(8.3)	168	12	(7.1)	3677	189	(5.1)	258	44	(17.1)	5623	584	(10.4)
2009	761	343	52	(15.2)	7689	649	(8.4)	118	6	(5.1)	3034	186	(6.1)	225	46	(20.4)	4648	463	(10.0)
2010	692	354	62	(17.5)	7714	622	(8.1)	126	12	(9.5)	2935	164	(5.6)	227	50	(22.0)	4752	454	(9.6)
2011	736	334	57	(17.1)	7335	672	(9.2)	133	8	(6.0)	2623	170	(6.5)	201	49	(24.4)	4686	500	(10.7)

¹Resistance 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.

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 25, 2012.

Table 10. Tuberculosis Cases and Percentages, by Multidrug Resistance¹, Origin of Birth, and Previous History of TB: United States, 1993–2011

Year	All MDR ²	Multidrug Resistant TB Cases																	
		Total MDR ³				U.S.-born MDR ³				Foreign-born ^{3,4} MDR									
		Previous TB		No Previous TB		Previous TB		No Previous TB		Previous TB		No Previous TB							
		Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)	Eligible	No.	(%)						
1993	484	982	76	(7.7)	16601	407	(2.5)	668	30	(4.5)	11809	301	(2.5)	301	46	(15.3)	4664	103	(2.2)
1994	431	1033	74	(7.2)	16416	353	(2.2)	693	35	(5.1)	11019	238	(2.2)	336	38	(11.3)	5280	110	(2.1)
1995	327	958	70	(7.3)	16022	254	(1.6)	593	28	(4.7)	10351	169	(1.6)	363	42	(11.6)	5640	85	(1.5)
1996	250	862	43	(5.0)	15358	207	(1.3)	559	21	(3.8)	9646	105	(1.1)	303	22	(7.3)	5665	101	(1.8)
1997	201	742	44	(5.9)	14448	155	(1.1)	455	12	(2.6)	8705	76	(0.9)	286	32	(11.2)	5698	79	(1.4)
1998	155	749	23	(3.1)	13420	132	(1.0)	485	6	(1.2)	7712	55	(0.7)	262	17	(6.5)	5675	76	(1.3)
1999	157	669	28	(4.2)	12655	127	(1.0)	383	6	(1.6)	7020	39	(0.6)	283	22	(7.8)	5583	88	(1.6)
2000	146	632	26	(4.1)	11825	120	(1.0)	360	2	(0.6)	6144	40	(0.7)	272	24	(8.8)	5652	80	(1.4)
2001	151	629	33	(5.2)	11509	115	(1.0)	324	7	(2.2)	5583	34	(0.6)	302	26	(8.6)	5890	81	(1.4)
2002	158	569	26	(4.6)	10813	132	(1.2)	303	3	(1.0)	5069	35	(0.7)	264	23	(8.7)	5703	97	(1.7)
2003	119	524	21	(4.0)	10751	94	(0.9)	253	2	(0.8)	4864	24	(0.5)	271	19	(7.0)	5858	70	(1.2)
2004	128	537	27	(5.0)	10481	100	(1.0)	274	4	(1.5)	4698	26	(0.6)	263	23	(8.7)	5773	74	(1.3)
2005	124	505	22	(4.4)	10064	98	(1.0)	238	1	(0.4)	4412	20	(0.5)	267	21	(7.9)	5635	77	(1.4)
2006	124	493	20	(4.1)	9905	103	(1.0)	203	1	(0.5)	4144	19	(0.5)	289	19	(6.6)	5745	84	(1.5)
2007	124	496	19	(3.8)	9645	101	(1.0)	206	3	(1.5)	3877	19	(0.5)	288	16	(5.6)	5717	82	(1.4)
2008	107	427	19	(4.4)	9306	88	(0.9)	168	3	(1.8)	3677	21	(0.6)	258	16	(6.2)	5623	67	(1.2)
2009	112	343	19	(5.5)	7689	86	(1.1)	118	1	(0.8)	3034	11	(0.4)	225	18	(8.0)	4648	75	(1.6)
2010	107	354	17	(4.8)	7714	89	(1.2)	126	2	(1.6)	2935	13	(0.4)	227	15	(6.6)	4752	75	(1.6)
2011	124	334	26	(7.8)	7335	98	(1.3)	133	1	(0.8)	2623	17	(0.6)	201	25	(12.4)	4686	81	(1.7)

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.

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 25, 2012.

Table 11. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2011

Year	Initial Drug Regimen ^{1,2}			Directly Observed Therapy ³		Therapy ≤1 Year Indicated ⁴	
				DOT Only	Both DOT and Self-Administered	COT ≤1 Year	COT
	IR	IRZ	IRZE				
1993	(12.9)	(31.2)	(40.3)	(21.7)	(14.4)	(64.1)	(87.5)
1994	(7.0)	(23.3)	(55.7)	(28.1)	(20.5)	(69.0)	(87.9)
1995	(5.2)	(20.3)	(62.7)	(37.3)	(21.5)	(74.0)	(89.8)
1996	(4.2)	(17.5)	(67.3)	(42.5)	(22.4)	(76.5)	(90.6)
1997	(3.2)	(15.1)	(71.9)	(47.0)	(23.8)	(78.3)	(91.4)
1998	(2.6)	(12.9)	(74.3)	(47.7)	(26.6)	(80.7)	(92.5)
1999	(2.2)	(11.2)	(76.9)	(49.4)	(27.6)	(80.9)	(92.4)
2000	(2.0)	(10.4)	(78.5)	(52.5)	(25.8)	(81.6)	(92.7)
2001	(1.7)	(9.6)	(79.8)	(53.6)	(27.5)	(81.8)	(92.8)
2002	(1.8)	(8.9)	(80.3)	(55.4)	(27.8)	(82.4)	(92.7)
2003	(1.4)	(8.1)	(81.3)	(56.5)	(28.5)	(83.0)	(92.9)
2004	(1.5)	(6.4)	(82.4)	(58.9)	(27.7)	(83.7)	(92.6)
2005	(1.3)	(5.5)	(83.7)	(57.9)	(29.6)	(84.1)	(93.3)
2006	(1.2)	(4.8)	(83.3)	(56.3)	(32.9)	(84.8)	(94.0)
2007	(1.1)	(4.6)	(83.6)	(56.3)	(33.5)	(85.2)	(93.3)
2008	(1.0)	(3.5)	(84.3)	(59.5)	(30.3)	(87.7)	(95.3)
2009	(1.0)	(3.1)	(84.2)	...	...	...	...
2010	(0.9)	(2.9)	(84.9)	...	...	...	...
2011 ⁵	(0.7)	(2.7)	(85.6)	...	...	...	...

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 2011, 2.17% received no initial drug therapy, 0.12% were started on one drug, and 10.02% had an initial multidrug regimen other than IR, IRZ, or IRZE.

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

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

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

Note: Data for all years updated through June 25, 2012.

See Technical Notes for description of COT calculation.

See Surveillance Slides #28 and #29.

Table 12. Tuberculosis Cases and Percentages in Persons with HIV Test Results¹ and with HIV Coinfection by Age Group: United States, 1993–2011

Year	25–44 Years Old				All Ages			
	HIV Test Results		HIV Positive		HIV Test Results		HIV Positive	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	4382	(46)	2790	(29)	7457	(30)	3682	(15)
1994	4442	(49)	2669	(30)	7887	(33)	3601	(15)
1995	4276	(52)	2171	(26)	8178	(36)	3037	(13)
1996	4366	(58)	1856	(25)	8832	(42)	2615	(12)
1997	4141	(60)	1471	(21)	8771	(44)	2091	(11)
1998	3862	(61)	1240	(20)	8292	(45)	1831	(10)
1999	3810	(63)	1174	(19)	8419	(48)	1725	(10)
2000	3525	(63)	955	(17)	8117	(50)	1464	(9)
2001	3576	(64)	911	(16)	8095	(51)	1408	(9)
2002	3512	(66)	845	(16)	8022	(53)	1390	(9)
2003	3424	(67)	807	(16)	8117	(55)	1320	(9)
2004	3442	(70)	683	(14)	8509	(59)	1195	(8)
2005	3277	(69)	611	(13)	8231	(59)	1042	(7)
2006	3285	(70)	558	(12)	8302	(60)	962	(7)
2007	3160	(73)	488	(11)	8353	(63)	882	(7)
2008	3109	(73)	411	(10)	8244	(64)	820	(6)
2009	2857	(73)	402	(10)	7398	(64)	716	(6)
2010	2751	(75)	324	(9)	7445	(67)	627	(6)
2011 ²	3042	(90)	342	(10)	8683	(82)	672	(6)

¹ 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 2004 - 2010.

² California began reporting HIV test results to CDC in 2011

Note: Data for all years updated through June 25, 2012.

See Surveillance Slides #24 and #25.

Table 13. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2009

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	23741	18044	(76.0)	0	(0.0)	1120	(4.7)	1086	(4.6)	223	(0.9)	3053	(12.9)	215	(0.9)
1994	23051	17763	(77.1)	0	(0.0)	1194	(5.2)	740	(3.2)	183	(0.8)	2743	(11.9)	428	(1.9)
1995	21706	17306	(79.7)	0	(0.0)	969	(4.5)	570	(2.6)	156	(0.7)	2396	(11.0)	309	(1.4)
1996	20298	16528	(81.4)	0	(0.0)	783	(3.9)	525	(2.6)	156	(0.8)	1998	(9.8)	308	(1.5)
1997	18930	15673	(82.8)	0	(0.0)	667	(3.5)	444	(2.3)	119	(0.6)	1755	(9.3)	272	(1.4)
1998	17584	14766	(84.0)	0	(0.0)	534	(3.0)	411	(2.3)	104	(0.6)	1580	(9.0)	189	(1.1)
1999	16862	14234	(84.4)	0	(0.0)	456	(2.7)	359	(2.1)	104	(0.6)	1437	(8.5)	272	(1.6)
2000	15785	13408	(84.9)	0	(0.0)	408	(2.6)	397	(2.5)	112	(0.7)	1294	(8.2)	166	(1.1)
2001	15408	13241	(85.9)	0	(0.0)	378	(2.5)	402	(2.6)	99	(0.6)	1121	(7.3)	167	(1.1)
2002	14564	12482	(85.7)	0	(0.0)	336	(2.3)	412	(2.8)	87	(0.6)	1080	(7.4)	167	(1.1)
2003	14379	12418	(86.4)	0	(0.0)	313	(2.2)	389	(2.7)	84	(0.6)	994	(6.9)	181	(1.3)
2004	14081	12119	(86.1)	0	(0.0)	337	(2.4)	370	(2.6)	82	(0.6)	975	(6.9)	198	(1.4)
2005	13681	11735	(85.8)	0	(0.0)	323	(2.4)	338	(2.5)	90	(0.7)	985	(7.2)	210	(1.5)
2006	13316	11540	(86.7)	0	(0.0)	292	(2.2)	358	(2.7)	79	(0.6)	939	(7.1)	108	(0.8)
2007	12903	11343	(87.9)	0	(0.0)	241	(1.9)	327	(2.5)	73	(0.6)	819	(6.3)	100	(0.8)
2008	12551	10876	(86.7)	6	(0.0)	257	(2.0)	328	(2.6)	78	(0.6)	843	(6.7)	163	(1.3)
2009	11153	9790	(87.8)	20	(0.2)	99	(0.9)	192	(1.7)	83	(0.7)	666	(6.0)	303	(2.7)

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 utilized by the following reporting areas: Alaska, California, Georgia, Iowa, and New York City.

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

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

Note: Data for all years are updated through June 25, 2012.

Data complete through 2009 only. See Technical Notes for details.

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Morbidity Tables United States, 2011

Table 14. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2011

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	10,528	350	227	1033	3369	3297	2247	5
Male	6413	197	114	572	1932	2267	1330	1
Female	4112	153	113	461	1437	1029	917	2
Unknown	3	0	0	0	0	1	0	2
Hispanic or Latino¹	3008	165	90	387	1100	799	465	2
Male	1969	98	47	246	730	571	276	1
Female	1039	67	43	141	370	228	189	1
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	129	7	4	8	26	53	31	0
Male	76	4	2	5	12	37	16	0
Female	53	3	2	3	14	16	15	0
Unknown	0	0	0	0	0	0	0	0
Asian	3148	52	37	311	1057	894	796	1
Male	1706	33	21	151	500	535	466	0
Female	1441	19	16	160	557	358	330	1
Unknown	1	0	0	0	0	1	0	0
Black or African American	2408	82	75	232	821	852	346	0
Male	1440	37	31	121	479	582	190	0
Female	968	45	44	111	342	270	156	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	81	4	7	16	22	22	10	0
Male	45	2	6	11	11	13	2	0
Female	36	2	1	5	11	9	8	0
Unknown	0	0	0	0	0	0	0	0
White	1664	35	11	66	324	651	577	0
Male	1123	19	5	34	188	511	366	0
Female	541	16	6	32	136	140	211	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race²	37	3	2	5	7	12	8	0
Male	26	2	2	2	4	10	6	0
Female	11	1	0	3	3	2	2	0
Unknown	0	0	0	0	0	0	0	0
Unknown	53	2	1	8	12	14	14	2
Male	28	2	0	2	8	8	8	0
Female	23	0	1	6	4	6	6	0
Unknown	2	0	0	0	0	0	0	2

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

²Indicates 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 #10.

Table 15. Tuberculosis Case Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2011

Race/Ethnicity and Sex	Age Group						
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65
Total Rate	3.4	1.7	0.6	2.4	4.1	4.0	5.4
Male	4.2	1.9	0.5	2.5	4.7	5.6	7.4
Female	2.6	1.6	0.6	2.2	3.5	2.4	3.9
Hispanic or Latino¹	5.8	3.2	0.9	4.3	6.8	8.7	15.7
Male	7.4	3.7	1.0	5.2	8.7	12.6	21.8
Female	4.1	2.6	0.9	3.3	4.8	4.9	11.1
American Indian or Alaska Native	5.6	4.0	1.1	2.1	4.3	9.3	16.1
Male	6.7	4.5	1.1	2.5	4.0	13.5	18.6
Female	4.6	3.5	1.1	1.6	4.5	5.4	14.1
Asian	20.9	5.8	2.0	15.1	21.0	23.9	53.3
Male	23.8	7.2	2.3	14.4	21.0	31.2	72.1
Female	18.2	4.3	1.8	15.9	20.9	17.7	38.9
Black or African American	6.3	2.9	1.3	3.6	7.9	9.0	9.9
Male	7.9	2.6	1.1	3.7	9.6	13.2	13.7
Female	4.8	3.3	1.6	3.5	6.2	5.3	7.3
Native Hawaiian or Other Pacific Islander	15.9	10.2	9.1	17.9	13.7	20.0	30.0
Male	17.5	10.0	15.1	24.0	13.5	24.0	13.1
Female	14.3	10.4	2.7	11.5	14.0	16.2	44.2
White	0.8	0.3	0.0	0.3	0.7	1.1	1.8
Male	1.2	0.4	0.0	0.3	0.8	1.8	2.5
Female	0.5	0.3	0.1	0.3	0.6	0.5	1.1
Multiple Race²	0.6	0.3	0.1	0.5	0.6	1.5	3.0
Male	0.9	0.4	0.3	0.4	0.7	2.6	5.2
Female	0.4	0.2	0.0	0.5	0.5	0.5	1.3

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: Denominators for computing 2000–2011 case rates were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States: April 1, 2000, to July 1, 2011 (<http://www.census.gov/popest/data/national/asrh/2011/files/NC-EST2011-ALLDATA-R-File04.csv>) (accessed July 20, 2012).

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 #7.

Table 16. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2011

Race/Ethnicity and Sex	Age Group							Unknown
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	3981	315	141	326	855	1,467	877	0
Male	2611	174	77	176	525	1,096	563	0
Female	1370	141	64	150	330	371	314	0
Unknown	0	0	0	0	0	0	0	0
Hispanic or Latino¹	764	158	65	131	171	150	89	0
Male	477	95	36	71	109	105	61	0
Female	287	63	29	60	62	45	28	0
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	127	7	4	8	25	53	30	0
Male	75	4	2	5	11	37	16	0
Female	52	3	2	3	14	16	14	0
Unknown	0	0	0	0	0	0	0	0
Asian	133	41	9	24	36	9	14	0
Male	74	22	6	14	18	5	9	0
Female	59	19	3	10	18	4	5	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	1533	69	45	104	378	668	269	0
Male	991	31	22	57	239	482	160	0
Female	542	38	23	47	139	186	109	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	59	4	7	12	15	14	7	0
Male	31	2	6	8	7	7	1	0
Female	28	2	1	4	8	7	6	0
Unknown	0	0	0	0	0	0	0	0
White	1325	32	8	45	222	561	457	0
Male	935	17	3	21	134	452	308	0
Female	390	15	5	24	88	109	149	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race²	22	3	2	2	4	6	5	0
Male	15	2	2	0	3	5	3	0
Female	7	1	0	2	1	1	2	0
Unknown	0	0	0	0	0	0	0	0
Unknown	18	1	1	0	4	6	6	0
Male	13	1	0	0	4	3	5	0
Female	5	0	1	0	0	3	1	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 #13.

Table 17. Tuberculosis Cases in Foreign-born Persons¹ by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2011

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	6510	35	86	703	2509	1815	1357	5
Male	3780	23	37	394	1405	1160	760	1
Female	2727	12	49	309	1104	654	597	2
Unknown	3	0	0	0	0	1	0	2
Hispanic or Latino²	2222	7	25	253	924	643	368	2
Male	1479	3	11	173	619	462	210	1
Female	743	4	14	80	305	181	158	1
Unknown	0	0	0	0	0	0	0	0
American Indian or Alaska Native	2	0	0	0	1	0	1	0
Male	1	0	0	0	1	0	0	0
Female	1	0	0	0	0	0	1	0
Unknown	0	0	0	0	0	0	0	0
Asian	3010	11	28	286	1021	883	780	1
Male	1629	11	15	137	482	529	455	0
Female	1380	0	13	149	539	353	325	1
Unknown	1	0	0	0	0	1	0	0
Black or African American	871	13	30	128	443	180	77	0
Male	445	6	9	64	240	96	30	0
Female	426	7	21	64	203	84	47	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	22	0	0	4	7	8	3	0
Male	14	0	0	3	4	6	1	0
Female	8	0	0	1	3	2	2	0
Unknown	0	0	0	0	0	0	0	0
White	334	3	3	21	102	88	117	0
Male	187	2	2	13	54	58	58	0
Female	147	1	1	8	48	30	59	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race³	15	0	0	3	3	6	3	0
Male	11	0	0	2	1	5	3	0
Female	4	0	0	1	2	1	0	0
Unknown	0	0	0	0	0	0	0	0
Unknown	34	1	0	8	8	7	8	2
Male	14	1	0	2	4	4	3	0
Female	18	0	0	6	4	3	5	0
Unknown	2	0	0	0	0	0	0	2

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 #13.

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**Table 18. Tuberculosis Cases Among Foreign-born Persons¹ by Country of Birth²:
United States, 2011**

African Region					
Total Cases = 500					
Algeria	4	Ethiopia	154	Niger	3
Angola	4	Gabon	0	Nigeria	52
Benin	0	Gambia	10	Rwanda	4
Botswana	3	Ghana	7	Sao Tome and Principe	0
Burkina Faso	1	Guinea	6	Senegal	10
Burundi	2	Guinea-Bissau	0	Seychelles	0
Cameroon	21	Kenya	74	Sierra Leone	16
Cape Verde	3	Lesotho	0	South Africa	5
Central African Republic	3	Liberia	26	Swaziland	0
Chad	1	Madagascar	1	Tanzania, UR	5
Comoros	0	Malawi	1	Togo	3
Congo, Republic of	18	Mali	3	Uganda	7
Côte d'Ivoire	4	Mauritania	5	Zambia	6
DR Congo	0	Mauritius	0	Zimbabwe	7
Equatorial Guinea	1	Mozambique	2		
Eritrea	27	Namibia	1		

Americas Region					
Total Cases = 2,483					
Anguilla	0	Costa Rica	3	Netherland Antilles	0
Antigua and Barbuda	0	Cuba	41	Nicaragua	16
Argentina	5	Dominica	0	Panama	7
Bahamas	1	Dominican Republic	74	Paraguay	1
Barbados	1	Ecuador	79	Peru	93
Belize	7	El Salvador	103	St. Kitts and Nevis	1
Bermuda	1	Grenada	2	St. Lucia	0
Bolivia	18	Guatemala	166	St. Vincent & Grenadines	0
Brazil	17	Guyana	16	Suriname	0
British Virgin Islands	0	Haiti	187	Trinidad and Tobago	14
Canada	1	Honduras	127	Turks and Caicos Islands	0
Cayman Islands	0	Jamaica	22	Uruguay	1
Chile	2	Mexico	1432	Venezuela	13
Colombia	32	Montserrat	0		

Eastern Mediterranean Region					
Total Cases = 280					
Afghanistan	17	Lebanon	1	Sudan	12
Bahrain	0	Libyan Arab Jamahiriya	0	Syrian Arab Republic	0
Djibouti	0	Morocco	7	Tunisia	0
Egypt	2	Oman	0	United Arab Emirates	1
Iran, Islamic Republic of	15	Pakistan	86	West Bank and Gaza	0
Iraq	11	Qatar	1	Yemen	5
Jordan	1	Saudi Arabia	3		
Kuwait	2	Somalia	116		

**Table 18. (Cont'd) Tuberculosis Cases Among Foreign-born Persons¹ by Country of Birth²:
United States, 2011**

European Region					
Total Cases = 221					
Albania	8	Greece	3	Poland	19
Andorra	0	Hungary	4	Portugal	4
Armenia	4	Iceland	0	Romania	13
Austria	0	Ireland	2	Russian Federation	23
Azerbaijan	3	Israel	2	San Marino	0
Belarus	2	Italy	9	Serbia	1
Belgium	0	Kazakhstan	4	Slovakia	1
Bosnia and Herzegovina	9	Kyrgyzstan	1	Slovenia	1
Bulgaria	3	Latvia	1	Spain	2
Croatia	3	Lithuania	1	Sweden	0
Cyprus	1	Luxembourg	0	Switzerland	2
Czech Republic	1	Macedonia, TFYR	2	Tajikistan	0
Denmark	1	Malta	0	Turkey	9
Estonia	1	Moldova, Republic of	2	Turkmenistan	2
Finland	1	Monaco	0	Ukraine	31
France	4	Montenegro	1	United Kingdom	10
Georgia	2	Netherlands	0	Uzbekistan	8
Germany	20	Norway	0		

Southeast Asia Region					
Total Cases = 882					
Bangladesh	66	Korea, DPR	37	Sri Lanka	2
Bhutan	39	Maldives	0	Thailand	37
India	502	Myanmar	90	Timor-Leste	0
Indonesia	32	Nepal	77		

Western Pacific Region					
Total Cases = 2,048					
Australia	1	Kiribati	0	Philippines	757
Brunei Darussalam	0	Korea, Rep.	131	Samoa	5
Cambodia	91	Lao, PDR	59	Singapore	1
China	376	Malaysia	17	Solomon Islands	0
China, Hong Kong SAR	24	Mongolia	11	Tokelau	0
China, Macao SAR	0	Nauru	0	Tonga	7
Cook Islands	0	New Caledonia	0	Tuvalu	0
Fiji	3	New Zealand	0	Vanuatu	0
French Polynesia	0	Niue	0	Vietnam	546
Japan	19	Papua New Guinea	0	Wallis and Futuna	0

Other³
Total Cases = 44

Unknown
Total Cases = 52

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 Control 2011, World Health Organization (WHO/HTM/TB/2011.16)* (http://www.who.int/tb/publications/global_report/2011/en/).

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Morbidity Tables Reporting Areas, 2011

Table 19. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2011 and 2010

Reporting Area	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2011
	2011	2010	2011	2010	2011	2010	
United States	10,528	11,171	3.4	3.6	--	--	311,591,917
Alabama	161	146	3.4	3.1	13	19	4,802,740
Alaska	67	57	9.3	8.0	1	2	722,718
Arizona	255	282	3.9	4.4	8	9	6,482,505
Arkansas	85	78	2.9	2.7	18	22	2,937,979
California	2,323	2,324	6.2	6.2	3	3	37,691,912
Colorado	70	71	1.4	1.4	36	39	5,116,796
Connecticut	83	85	2.3	2.4	27	26	3,580,709
Delaware	21	20	2.3	2.2	28	29	907,135
District of Columbia ¹	56	43	9.1	7.1	--	--	617,996
Florida	754	834	4.0	4.4	7	7	19,057,542
Georgia	347	411	3.5	4.2	11	10	9,815,210
Hawaii	123	115	8.9	8.4	2	1	1,374,810
Idaho	12	15	0.8	1.0	47	44	1,584,985
Illinois	359	372	2.8	2.9	19	21	12,869,257
Indiana	100	90	1.5	1.4	35	40	6,516,922
Iowa	40	48	1.3	1.6	37	37	3,062,309
Kansas	36	46	1.3	1.6	40	36	2,871,238
Kentucky	71	90	1.6	2.1	34	30	4,369,356
Louisiana	167	200	3.7	4.4	10	8	4,574,836
Maine	9	8	0.7	0.6	50	50	1,328,188
Maryland	233	220	4.0	3.8	6	13	5,828,289
Massachusetts	196	222	3.0	3.4	16	15	6,587,536
Michigan	170	183	1.7	1.9	32	32	9,876,187
Minnesota	137	135	2.6	2.5	22	23	5,344,861
Mississippi	91	116	3.1	3.9	14	12	2,978,512
Missouri	98	107	1.6	1.8	33	34	6,010,688
Montana	8	6	0.8	0.6	46	49	998,199
Nebraska	23	27	1.2	1.5	41	38	1,842,641
Nevada	95	114	3.5	4.2	12	11	2,723,322
New Hampshire	11	10	0.8	0.8	45	47	1,318,194
New Jersey	331	405	3.8	4.6	9	6	8,821,155
New Mexico	49	50	2.4	2.4	26	25	2,082,224
New York	910	954	4.7	4.9	5	5	19,465,197
North Carolina	244	296	2.5	3.1	23	18	9,656,401
North Dakota	7	9	1.0	1.3	44	41	683,932
Ohio	145	190	1.3	1.6	39	35	11,544,951
Oklahoma	94	86	2.5	2.3	24	27	3,791,508
Oregon	74	87	1.9	2.3	30	28	3,871,859
Pennsylvania	260	238	2.0	1.9	29	31	12,742,886
Rhode Island	27	26	2.6	2.5	21	24	1,051,302
South Carolina	140	153	3.0	3.3	15	17	4,679,230
South Dakota	15	15	1.8	1.8	31	33	824,082
Tennessee	156	193	2.4	3.0	25	20	6,403,353
Texas	1,325	1,385	5.2	5.5	4	4	25,674,681
Utah	34	20	1.2	0.7	43	48	2,817,222
Vermont	8	5	1.3	0.8	38	46	626,431
Virginia	221	268	2.7	3.3	20	16	8,096,604
Washington	200	239	2.9	3.5	17	14	6,830,038
West Virginia	13	15	0.7	0.8	49	45	1,855,364
Wisconsin	70	55	1.2	1.0	42	43	5,711,767
Wyoming	4	7	0.7	1.2	48	42	568,158
American Samoa ^{1,2}	3	3	5.4	5.4	--	--	55,198
Fed. States of Micronesia ^{1,2}	140	172	131.0	160.5	--	--	106,836
Guam ^{1,2}	78	102	48.9	64.0	--	--	159,600
Marshall Islands ^{1,2}	149	211	221.8	320.4	--	--	67,182
N. Mariana Islands ^{1,2}	27	32	51.8	59.8	--	--	52,167
Puerto Rico ^{1,2}	50	80	1.3	2.1	--	--	3,706,690
Republic of Palau ^{1,2}	8	17	38.2	81.4	--	--	20,956
U.S. Virgin Islands ^{1,2}	...	...	...	...	--	--	105,784

¹ Not ranked with the states. See Table 20 for District of Columbia ranking among states.

² Not included in U.S. totals.

Note: Denominators for computing 2010 and 2011 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico (April 1, 2010– July 1, 2011) (<http://www.census.gov/popest/data/national/totals/2011/index.html>) (accessed July 20, 2012); for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/population/international/data/idb/informationGateway.php>) (accessed July 20, 2012). Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #4.

Table 20. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by Number of Cases: United States and the District of Columbia, 2011 and 2010

Reporting Area	2011		2010		2010–2011 % Change		Overall Rank by 2011 Rate
	No.	Rate	No.	Rate	No.	Rate	
>= 500 cases in 2011							
California	2,323	6.2	2,324	6.2	0.0	0.0	3
Texas	1,325	5.2	1,385	5.5	-4.3	-5.5	4
New York ¹	910	4.7	954	4.9	-4.6	-4.1	5
Florida	754	4.0	834	4.4	-9.6	-9.1	7
100 - 499 cases in 2011							
Illinois	359	2.8	372	2.9	-3.5	-3.4	19
Georgia	347	3.5	411	4.2	-15.6	-16.7	11
New Jersey	331	3.8	405	4.6	-18.3	-17.4	9
Pennsylvania	260	2.0	238	1.9	9.2	5.3	29
Arizona	255	3.9	282	4.4	-9.6	-11.4	8
North Carolina	244	2.5	296	3.1	-17.6	-19.4	23
Maryland	233	4.0	220	3.8	5.9	5.3	6
Virginia	221	2.7	268	3.3	-17.5	-18.2	20
Washington	200	2.9	239	3.5	-16.3	-17.1	17
Massachusetts	196	3.0	222	3.4	-11.7	-11.8	16
Michigan	170	1.7	183	1.9	-7.1	-10.5	32
Louisiana	167	3.7	200	4.4	-16.5	-15.9	10
Alabama	161	3.4	146	3.1	10.3	9.7	13
Tennessee	156	2.4	193	3.0	-19.2	-20.0	25
Ohio	145	1.3	190	1.6	-23.7	-18.8	39
South Carolina	140	3.0	153	3.3	-8.5	-9.1	15
Minnesota	137	2.6	135	2.5	1.5	4.0	22
Hawaii	123	8.9	115	8.4	7.0	6.0	2
Indiana	100	1.5	90	1.4	11.1	7.1	35
< 100 cases in 2011							
Missouri	98	1.6	107	1.8	-8.4	-11.1	33
Nevada	95	3.5	114	4.2	-16.7	-16.7	12
Oklahoma	94	2.5	86	2.3	9.3	8.7	24
Mississippi	91	3.1	116	3.9	-21.6	-20.5	14
Arkansas	85	2.9	78	2.7	9.0	7.4	18
Connecticut	83	2.3	85	2.4	-2.4	-4.2	27
Oregon	74	1.9	87	2.3	-14.9	-17.4	30
Kentucky	71	1.6	90	2.1	-21.1	-23.8	34
Colorado	70	1.4	71	1.4	-1.4	0.0	36
Wisconsin	70	1.2	55	1.0	27.3	20.0	42
Alaska	67	9.3	57	8.0	17.5	16.3	1
District of Columbia	56	9.1	43	7.1	30.2	28.2	--
New Mexico	49	2.4	50	2.4	-2.0	0.0	26
Iowa	40	1.3	48	1.6	-16.7	-18.8	37
Kansas	36	1.3	46	1.6	-21.7	-18.8	40
Utah	34	1.2	20	0.7	70.0	71.4	43
Rhode Island	27	2.6	26	2.5	3.8	4.0	21
Nebraska	23	1.2	27	1.5	-14.8	-20.0	41
Delaware	21	2.3	20	2.2	5.0	4.5	28
South Dakota	15	1.8	15	1.8	0.0	0.0	31
West Virginia	13	0.7	15	0.8	-13.3	-12.5	49
Idaho	12	0.8	15	1.0	-20.0	-20.0	47
New Hampshire	11	0.8	10	0.8	10.0	0.0	45
Maine	9	0.7	8	0.6	12.5	16.7	50
Montana	8	0.8	6	0.6	33.3	33.3	46
Vermont	8	1.3	5	0.8	60.0	62.5	38
North Dakota	7	1.0	9	1.3	-22.2	-23.1	44
Wyoming	4	0.7	7	1.2	-42.9	-41.7	48
Total	10,528	3.4	11,171	3.6	-5.8	-5.6	

¹ Includes New York City.

Note: Denominators for computing 2010 and 2011 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 2011) (www.census.gov/popest/data/national/totals/2011/index.html) (accessed July 20, 2012). See Table 20 for ranking of states without the District of Columbia.

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Table 21. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2011

Reporting Area	Under 5		5-14		15-24		25-44		45-64		≥65		Unknown or Missing	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	10,528	(3.3)	227	(2.2)	1,033	(9.8)	3,369	(32.0)	3,297	(31.3)	2,247	(21.3)	5	(0.0)
Alabama	161	(4.3)	4	(2.5)	14	(8.7)	49	(30.4)	62	(38.5)	25	(15.5)	0	(0.0)
Alaska	67	(6.0)	2	(3.0)	6	(9.0)	19	(28.4)	29	(43.3)	7	(10.4)	0	(0.0)
Arizona	255	(3.1)	5	(2.0)	27	(10.6)	95	(37.3)	58	(22.7)	62	(24.3)	0	(0.0)
Arkansas	85	(1.2)	3	(3.5)	6	(7.1)	21	(24.7)	30	(35.3)	24	(28.2)	0	(0.0)
California	2,323	(3.5)	46	(2.0)	180	(7.7)	625	(26.9)	774	(33.3)	614	(26.4)	3	(0.1)
Colorado	70	(7.1)	3	(4.3)	6	(8.6)	25	(35.7)	22	(31.4)	9	(12.9)	0	(0.0)
Connecticut	83	(2.4)	1	(1.2)	11	(13.3)	36	(43.4)	24	(28.9)	9	(10.8)	0	(0.0)
Delaware	21	(0.0)	0	(0.0)	4	(19.0)	13	(61.9)	2	(9.5)	2	(9.5)	0	(0.0)
District of Columbia	56	(1.8)	0	(0.0)	9	(16.1)	18	(32.1)	18	(32.1)	10	(17.9)	0	(0.0)
Florida	754	(2.8)	22	(2.9)	59	(7.8)	217	(28.8)	292	(38.7)	143	(19.0)	0	(0.0)
Georgia	347	(4.6)	10	(2.9)	39	(11.2)	121	(34.9)	115	(33.1)	46	(13.3)	0	(0.0)
Hawaii	123	(0.8)	0	(0.0)	12	(9.8)	26	(21.1)	46	(37.4)	38	(30.9)	0	(0.0)
Idaho	12	(0.0)	1	(8.3)	1	(8.3)	3	(25.0)	4	(33.3)	3	(25.0)	0	(0.0)
Illinois	359	(1.7)	11	(3.1)	31	(8.6)	104	(29.0)	115	(32.0)	92	(25.6)	0	(0.0)
Indiana	100	(3.0)	4	(4.0)	10	(10.0)	33	(33.0)	25	(25.0)	25	(25.0)	0	(0.0)
Iowa	40	(0.0)	1	(2.5)	9	(22.5)	14	(35.0)	9	(22.5)	7	(17.5)	0	(0.0)
Kansas	36	(2.8)	0	(0.0)	3	(8.3)	9	(25.0)	13	(36.1)	10	(27.8)	0	(0.0)
Kentucky	71	(1.4)	0	(0.0)	6	(8.5)	21	(29.6)	29	(40.8)	14	(19.7)	0	(0.0)
Louisiana	167	(3.0)	3	(1.8)	12	(7.2)	51	(30.5)	71	(42.5)	25	(15.0)	0	(0.0)
Maine	9	(0.0)	0	(0.0)	3	(33.3)	1	(11.1)	0	(0.0)	5	(55.6)	0	(0.0)
Maryland	233	(3.9)	6	(2.6)	19	(8.2)	105	(45.1)	56	(24.0)	38	(16.3)	0	(0.0)
Massachusetts	196	(4.1)	0	(0.0)	27	(13.8)	70	(35.7)	47	(24.0)	44	(22.4)	0	(0.0)
Michigan	170	(3.5)	1	(0.6)	15	(8.8)	41	(24.1)	65	(38.2)	42	(24.7)	0	(0.0)
Minnesota	137	(2.9)	6	(4.4)	25	(18.2)	53	(38.7)	28	(20.4)	21	(15.3)	0	(0.0)
Mississippi	91	(2.2)	0	(0.0)	5	(5.5)	23	(25.3)	39	(42.9)	22	(24.2)	0	(0.0)
Missouri	98	(2.0)	3	(3.1)	11	(11.2)	33	(33.7)	28	(28.6)	19	(19.4)	2	(2.0)
Montana	8	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)	4	(50.0)	2	(25.0)	0	(0.0)
Nebraska	23	(4.3)	1	(4.3)	5	(21.7)	6	(26.1)	8	(34.8)	2	(8.7)	0	(0.0)
Nevada	95	(6.3)	4	(4.2)	7	(7.4)	28	(29.5)	28	(29.5)	22	(23.2)	0	(0.0)
New Hampshire	11	(0.0)	0	(0.0)	1	(9.1)	2	(18.2)	4	(36.4)	4	(36.4)	0	(0.0)
New Jersey	331	(2.1)	7	(2.1)	35	(10.6)	124	(37.5)	86	(26.0)	72	(21.8)	0	(0.0)

Table 21. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2011

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.	(%)
New Mexico	49	(0.0)	0	(0.0)	1	(2.0)	2	(4.1)	11	(22.4)	18	(36.7)	17	(34.7)	0	(0.0)
New York	910	(2.0)	18	(2.0)	11	(1.2)	102	(11.2)	345	(37.9)	256	(28.1)	178	(19.6)	0	(0.0)
North Carolina	244	(4.5)	11	(4.5)	5	(2.0)	24	(9.8)	78	(32.0)	70	(28.7)	56	(23.0)	0	(0.0)
North Dakota	7	(14.3)	1	(14.3)	0	(0.0)	4	(57.1)	1	(14.3)	1	(14.3)	0	(0.0)	0	(0.0)
Ohio	145	(2.8)	4	(2.8)	3	(2.1)	15	(10.3)	52	(35.9)	31	(21.4)	40	(27.6)	0	(0.0)
Oklahoma	94	(9.6)	9	(9.6)	3	(3.2)	6	(6.4)	26	(27.7)	31	(33.0)	19	(20.2)	0	(0.0)
Oregon	74	(0.0)	0	(0.0)	1	(1.4)	9	(12.2)	30	(40.5)	20	(27.0)	14	(18.9)	0	(0.0)
Pennsylvania	260	(3.1)	8	(3.1)	3	(1.2)	25	(9.6)	92	(35.4)	77	(29.6)	55	(21.2)	0	(0.0)
Rhode Island	27	(7.4)	2	(7.4)	0	(0.0)	3	(11.1)	12	(44.4)	8	(29.6)	2	(7.4)	0	(0.0)
South Carolina	140	(3.6)	5	(3.6)	2	(1.4)	11	(7.9)	36	(25.7)	51	(36.4)	35	(25.0)	0	(0.0)
South Dakota	15	(6.7)	1	(6.7)	0	(0.0)	4	(26.7)	3	(20.0)	4	(26.7)	3	(20.0)	0	(0.0)
Tennessee	156	(3.2)	5	(3.2)	3	(1.9)	18	(11.5)	49	(31.4)	47	(30.1)	34	(21.8)	0	(0.0)
Texas	1,325	(5.0)	66	(5.0)	32	(2.4)	145	(10.9)	458	(34.6)	412	(31.1)	212	(16.0)	0	(0.0)
Utah	34	(2.9)	1	(2.9)	1	(2.9)	5	(14.7)	12	(35.3)	7	(20.6)	8	(23.5)	0	(0.0)
Vermont	8	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)	2	(25.0)	2	(25.0)	2	(25.0)	0	(0.0)
Virginia	221	(0.9)	2	(0.9)	6	(2.7)	22	(10.0)	94	(42.5)	58	(26.2)	39	(17.6)	0	(0.0)
Washington	200	(2.0)	4	(2.0)	8	(4.0)	25	(12.5)	62	(31.0)	46	(23.0)	55	(27.5)	0	(0.0)
West Virginia	13	(7.7)	1	(7.7)	0	(0.0)	1	(7.7)	1	(7.7)	5	(38.5)	5	(38.5)	0	(0.0)
Wisconsin	70	(5.7)	4	(5.7)	3	(4.3)	10	(14.3)	17	(24.3)	22	(31.4)	14	(20.0)	0	(0.0)
Wyoming	4	(0.0)	0	(0.0)	0	(0.0)	3	(75.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)
American Samoa ¹	3	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	2	(66.7)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ¹	140	(10.7)	15	(10.7)	26	(18.6)	30	(21.4)	36	(25.7)	27	(19.3)	6	(4.3)	0	(0.0)
Guam ¹	78	(3.8)	3	(3.8)	8	(10.3)	6	(7.7)	14	(17.9)	32	(41.0)	15	(19.2)	0	(0.0)
Marshall Islands ¹	149	(12.1)	18	(12.1)	23	(15.4)	27	(18.1)	42	(28.2)	34	(22.8)	5	(3.4)	0	(0.0)
N. Mariana Islands ¹	27	(0.0)	0	(0.0)	1	(3.7)	0	(0.0)	5	(18.5)	18	(66.7)	3	(11.1)	0	(0.0)
Puerto Rico ¹	50	(2.0)	1	(2.0)	0	(0.0)	2	(4.0)	16	(32.0)	21	(42.0)	10	(20.0)	0	(0.0)
Republic of Palau ¹	8	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	6	(75.0)	1	(12.5)	0	(0.0)
U.S. Virgin Islands ¹	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

¹Not included in U.S. totals.

Table 22. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2011

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.	(%)
New Mexico	49	(65.3)	9	(18.4)	1	(2.0)	4	(8.2)	0	(0.0)	3	(6.1)	0	(0.0)	0	(0.0)	0	(0.0)
New York	910	(27.9)	0	(0.0)	332	(36.5)	194	(21.3)	0	(0.0)	112	(12.3)	3	(0.3)	15	(1.6)	0	(0.0)
North Carolina	244	(19.3)	7	(2.9)	42	(17.2)	91	(37.3)	1	(0.4)	44	(18.0)	12	(4.9)	0	(0.0)	0	(0.0)
North Dakota	7	(0.0)	0	(0.0)	2	(28.6)	5	(71.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	145	(6.2)	0	(0.0)	37	(25.5)	51	(35.2)	0	(0.0)	48	(33.1)	0	(0.0)	0	(0.0)	0	(0.0)
Oklahoma	94	(17.0)	16	(17.0)	15	(16.0)	10	(10.6)	3	(3.2)	24	(25.5)	1	(1.1)	9	(9.6)	0	(0.0)
Oregon	74	(17.6)	2	(2.7)	29	(39.2)	10	(13.5)	2	(2.7)	18	(24.3)	0	(0.0)	0	(0.0)	0	(0.0)
Pennsylvania	260	(17.3)	0	(0.0)	84	(32.3)	69	(26.5)	0	(0.0)	59	(22.7)	3	(1.2)	0	(0.0)	0	(0.0)
Rhode Island	27	(22.2)	0	(0.0)	10	(37.0)	7	(25.9)	0	(0.0)	4	(14.8)	0	(0.0)	0	(0.0)	0	(0.0)
South Carolina	140	(11.4)	0	(0.0)	19	(13.6)	78	(55.7)	0	(0.0)	27	(19.3)	0	(0.0)	0	(0.0)	0	(0.0)
South Dakota	15	(0.0)	5	(33.3)	3	(20.0)	2	(13.3)	0	(0.0)	5	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	156	(16.7)	0	(0.0)	19	(12.2)	54	(34.6)	0	(0.0)	56	(35.9)	1	(0.6)	0	(0.0)	0	(0.0)
Texas	1,325	(52.6)	1	(0.1)	214	(16.2)	248	(18.7)	2	(0.2)	162	(12.2)	1	(0.1)	0	(0.0)	0	(0.0)
Utah	34	(29.4)	3	(8.8)	11	(32.4)	4	(11.8)	2	(5.9)	4	(11.8)	0	(0.0)	0	(0.0)	0	(0.0)
Vermont	8	(0.0)	0	(0.0)	2	(25.0)	3	(37.5)	0	(0.0)	3	(37.5)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	221	(19.0)	0	(0.0)	86	(38.9)	47	(21.3)	0	(0.0)	44	(19.9)	2	(0.9)	0	(0.0)	0	(0.0)
Washington	200	(9.0)	3	(1.5)	94	(47.0)	42	(21.0)	5	(2.5)	35	(17.5)	3	(1.5)	0	(0.0)	0	(0.0)
West Virginia	13	(7.7)	0	(0.0)	2	(15.4)	1	(7.7)	0	(0.0)	9	(69.2)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	70	(24.3)	0	(0.0)	32	(45.7)	13	(18.6)	0	(0.0)	8	(11.4)	0	(0.0)	0	(0.0)	0	(0.0)
Wyoming	4	(25.0)	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa ³	3	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia ³	140	(1.4)	0	(0.0)	4	(2.9)	0	(0.0)	132	(94.3)	0	(0.0)	1	(0.7)	1	(0.7)	0	(0.0)
Guam ³	78	(1.3)	0	(0.0)	39	(50.0)	0	(0.0)	37	(47.4)	0	(0.0)	0	(0.0)	1	(1.3)	0	(0.0)
Marshall Islands ³	149	(0.7)	0	(0.0)	1	(0.7)	0	(0.0)	147	(98.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
N. Mariana Islands ³	27	(0.0)	0	(0.0)	17	(63.0)	0	(0.0)	7	(25.9)	0	(0.0)	0	(0.0)	3	(11.1)	0	(0.0)
Puerto Rico ³	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)
Republic of Palau ³	8	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)	6	(75.0)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)
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 23. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons¹:
United States, 2011**

Reporting Area	Total Cases	U.S.-born Persons		Foreign-born Persons ¹		Unknown Origin	
		No.	(%)	No.	(%)	No.	(%)
United States	10,528	3,981	(37.8)	6,510	(61.8)	37	(0.4)
Alabama	161	113	(70.2)	48	(29.8)	0	(0.0)
Alaska	67	52	(77.6)	15	(22.4)	0	(0.0)
Arizona	255	85	(33.3)	170	(66.7)	0	(0.0)
Arkansas	85	66	(77.6)	19	(22.4)	0	(0.0)
California	2,323	513	(22.1)	1,782	(76.7)	28	(1.2)
Colorado	70	21	(30.0)	49	(70.0)	0	(0.0)
Connecticut	83	18	(21.7)	65	(78.3)	0	(0.0)
Delaware	21	5	(23.8)	16	(76.2)	0	(0.0)
District of Columbia	56	26	(46.4)	30	(53.6)	0	(0.0)
Florida	754	362	(48.0)	392	(52.0)	0	(0.0)
Georgia	347	188	(54.2)	159	(45.8)	0	(0.0)
Hawaii	123	32	(26.0)	91	(74.0)	0	(0.0)
Idaho	12	6	(50.0)	6	(50.0)	0	(0.0)
Illinois	359	133	(37.0)	226	(63.0)	0	(0.0)
Indiana	100	57	(57.0)	43	(43.0)	0	(0.0)
Iowa	40	11	(27.5)	29	(72.5)	0	(0.0)
Kansas	36	16	(44.4)	20	(55.6)	0	(0.0)
Kentucky	71	48	(67.6)	23	(32.4)	0	(0.0)
Louisiana	167	128	(76.6)	39	(23.4)	0	(0.0)
Maine	9	3	(33.3)	5	(55.6)	1	(11.1)
Maryland	233	66	(28.3)	167	(71.7)	0	(0.0)
Massachusetts	196	32	(16.3)	164	(83.7)	0	(0.0)
Michigan	170	82	(48.2)	83	(48.8)	5	(2.9)
Minnesota	137	21	(15.3)	116	(84.7)	0	(0.0)
Mississippi	91	73	(80.2)	18	(19.8)	0	(0.0)
Missouri	98	60	(61.2)	38	(38.8)	0	(0.0)
Montana	8	7	(87.5)	1	(12.5)	0	(0.0)
Nebraska	23	9	(39.1)	13	(56.5)	1	(4.3)
Nevada	95	26	(27.4)	69	(72.6)	0	(0.0)
New Hampshire	11	5	(45.5)	6	(54.5)	0	(0.0)
New Jersey	331	85	(25.7)	246	(74.3)	0	(0.0)
New Mexico	49	24	(49.0)	25	(51.0)	0	(0.0)
New York	910	203	(22.3)	706	(77.6)	1	(0.1)
North Carolina	244	137	(56.1)	107	(43.9)	0	(0.0)
North Dakota	7	0	(0.0)	7	(100.0)	0	(0.0)
Ohio	145	63	(43.4)	82	(56.6)	0	(0.0)
Oklahoma	94	70	(74.5)	24	(25.5)	0	(0.0)
Oregon	74	24	(32.4)	50	(67.6)	0	(0.0)
Pennsylvania	260	104	(40.0)	156	(60.0)	0	(0.0)
Rhode Island	27	6	(22.2)	21	(77.8)	0	(0.0)
South Carolina	140	107	(76.4)	33	(23.6)	0	(0.0)
South Dakota	15	9	(60.0)	6	(40.0)	0	(0.0)
Tennessee	156	101	(64.7)	55	(35.3)	0	(0.0)
Texas	1,325	625	(47.2)	700	(52.8)	0	(0.0)
Utah	34	10	(29.4)	24	(70.6)	0	(0.0)
Vermont	8	3	(37.5)	5	(62.5)	0	(0.0)
Virginia	221	69	(31.2)	152	(68.8)	0	(0.0)
Washington	200	45	(22.5)	155	(77.5)	0	(0.0)
West Virginia	13	8	(61.5)	5	(38.5)	0	(0.0)
Wisconsin	70	23	(32.9)	46	(65.7)	1	(1.4)
Wyoming	4	1	(25.0)	3	(75.0)	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 #14.

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Table 24. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Top 7 Countries of Birth: United States, 2011

Reporting Area	Total Cases	Country of Origin														Unknown or Missing			
		Mexico		Philippines		Vietnam		India		China		Haiti		Guatemala			All Others ²		
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)		No.	(%)	No.
United States	6,510	1,432	(22.0)	757	(11.6)	546	(8.4)	502	(7.7)	376	(5.8)	187	(2.9)	166	(2.5)	2,492	(38.3)	52	(0.8)
Alabama	48	9	(18.8)	2	(4.2)	5	(10.4)	11	(22.9)	1	(2.1)	0	(0.0)	7	(14.6)	13	(27.1)	0	(0.0)
Alaska	15	1	(6.7)	7	(46.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(33.3)	2	(13.3)
Arizona	170	104	(61.2)	14	(8.2)	5	(2.9)	4	(2.4)	4	(2.4)	0	(0.0)	4	(2.4)	35	(20.6)	0	(0.0)
Arkansas	19	4	(21.1)	1	(5.3)	6	(31.6)	2	(10.5)	0	(0.0)	0	(0.0)	1	(5.3)	5	(26.3)	0	(0.0)
California	1,782	498	(27.9)	375	(21.0)	240	(13.5)	89	(5.0)	121	(6.8)	3	(0.2)	36	(2.0)	418	(23.5)	2	(0.1)
Colorado	49	12	(24.5)	2	(4.1)	3	(6.1)	4	(8.2)	1	(2.0)	0	(0.0)	0	(0.0)	27	(55.1)	0	(0.0)
Connecticut	65	4	(6.2)	6	(9.2)	5	(7.7)	10	(15.4)	0	(0.0)	7	(10.8)	2	(3.1)	31	(47.7)	0	(0.0)
Delaware	16	2	(12.5)	2	(12.5)	1	(6.3)	1	(6.3)	0	(0.0)	0	(0.0)	1	(6.3)	9	(56.3)	0	(0.0)
District of Columbia	30	1	(3.3)	1	(3.3)	0	(0.0)	1	(3.3)	0	(0.0)	0	(0.0)	1	(3.3)	26	(86.7)	0	(0.0)
Florida	392	45	(11.5)	26	(6.6)	21	(5.4)	20	(5.1)	7	(1.8)	101	(25.8)	13	(3.3)	159	(40.6)	0	(0.0)
Georgia	159	41	(25.8)	6	(3.8)	8	(5.0)	19	(11.9)	0	(0.0)	2	(1.3)	14	(8.8)	69	(43.4)	0	(0.0)
Hawaii	91	0	(0.0)	68	(74.7)	8	(8.8)	0	(0.0)	5	(5.5)	0	(0.0)	0	(0.0)	10	(11.0)	0	(0.0)
Idaho	6	1	(16.7)	2	(33.3)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	2	(33.3)	0	(0.0)
Illinois	226	66	(29.2)	26	(11.5)	8	(3.5)	37	(16.4)	16	(7.1)	2	(0.9)	3	(1.3)	67	(29.6)	1	(0.4)
Indiana	43	6	(14.0)	5	(11.6)	0	(0.0)	7	(16.3)	0	(0.0)	0	(0.0)	1	(2.3)	23	(53.5)	1	(2.3)
Iowa	29	0	(0.0)	0	(0.0)	3	(10.3)	3	(10.3)	0	(0.0)	0	(0.0)	0	(0.0)	8	(27.6)	15	(51.7)
Kansas	20	5	(25.0)	2	(10.0)	4	(20.0)	1	(5.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(40.0)	0	(0.0)
Kentucky	23	7	(30.4)	2	(8.7)	0	(0.0)	2	(8.7)	0	(0.0)	0	(0.0)	2	(8.7)	10	(43.5)	0	(0.0)
Louisiana	39	6	(15.4)	4	(10.3)	13	(33.3)	2	(5.1)	1	(2.6)	0	(0.0)	1	(2.6)	12	(30.8)	0	(0.0)
Maine	5	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(100.0)	0	(0.0)
Maryland	167	6	(3.6)	15	(9.0)	11	(6.6)	17	(10.2)	3	(1.8)	1	(0.6)	3	(1.8)	111	(66.5)	0	(0.0)
Massachusetts	164	2	(1.2)	3	(1.8)	16	(9.8)	17	(10.4)	15	(9.1)	15	(9.1)	2	(1.2)	81	(49.4)	13	(7.9)
Michigan	83	7	(8.4)	12	(14.5)	7	(8.4)	10	(12.0)	3	(3.6)	0	(0.0)	1	(1.2)	43	(51.8)	0	(0.0)
Minnesota	116	8	(6.9)	3	(2.6)	9	(7.8)	7	(6.0)	0	(0.0)	0	(0.0)	1	(0.9)	88	(75.9)	0	(0.0)
Mississippi	18	6	(33.3)	2	(11.1)	2	(11.1)	3	(16.7)	0	(0.0)	0	(0.0)	1	(5.6)	4	(22.2)	0	(0.0)
Missouri	38	1	(2.6)	0	(0.0)	8	(21.1)	4	(10.5)	3	(7.9)	1	(2.6)	1	(2.6)	15	(39.5)	5	(13.2)
Montana	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)

Table 24. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Top 7 Countries of Birth: United States, 2011

Reporting Area	Total Cases	Country of Origin														Unknown or Missing					
		Mexico		Philippines		Vietnam		India		China		Haiti		Guatemala			All Others ²				
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)		No.	(%)	No.	(%)	
Nebraska	13	1	(7.7)	0	(0.0)	1	(7.7)	1	(7.7)	1	(7.7)	1	(7.7)	0	(0.0)	0	(0.0)	9	(69.2)	0	(0.0)
Nevada	69	19	(27.5)	23	(33.3)	2	(2.9)	1	(1.4)	2	(2.9)	0	(0.0)	0	(0.0)	2	(2.9)	20	(29.0)	0	(0.0)
New Hampshire	6	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	2	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	3	(50.0)	0	(0.0)
New Jersey	246	27	(11.0)	25	(10.2)	5	(2.0)	53	(21.5)	9	(3.7)	15	(6.1)	13	(5.3)	97	(39.4)	97	(39.4)	2	(0.8)
New Mexico	25	21	(84.0)	1	(4.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(12.0)	0	(0.0)
New York	706	56	(7.9)	24	(3.4)	5	(0.7)	45	(6.4)	111	(15.7)	37	(5.2)	10	(1.4)	417	(59.1)	417	(59.1)	1	(0.1)
North Carolina	107	23	(21.5)	5	(4.7)	10	(9.3)	7	(6.5)	4	(3.7)	2	(1.9)	6	(5.6)	40	(37.4)	40	(37.4)	10	(9.3)
North Dakota	7	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(100.0)	7	(100.0)	0	(0.0)
Ohio	82	2	(2.4)	5	(6.1)	3	(3.7)	13	(15.9)	7	(8.5)	0	(0.0)	4	(4.9)	48	(58.5)	48	(58.5)	0	(0.0)
Oklahoma	24	8	(33.3)	1	(4.2)	1	(4.2)	2	(8.3)	1	(4.2)	0	(0.0)	1	(4.2)	10	(41.7)	10	(41.7)	0	(0.0)
Oregon	50	7	(14.0)	4	(8.0)	10	(20.0)	1	(2.0)	6	(12.0)	0	(0.0)	1	(2.0)	21	(42.0)	21	(42.0)	0	(0.0)
Pennsylvania	156	8	(5.1)	11	(7.1)	16	(10.3)	21	(13.5)	14	(9.0)	0	(0.0)	5	(3.2)	81	(51.9)	81	(51.9)	0	(0.0)
Rhode Island	21	0	(0.0)	2	(9.5)	1	(4.8)	2	(9.5)	1	(4.8)	0	(0.0)	0	(0.0)	15	(71.4)	15	(71.4)	0	(0.0)
South Carolina	33	8	(24.2)	2	(6.1)	5	(15.2)	3	(9.1)	3	(9.1)	0	(0.0)	1	(3.0)	11	(33.3)	11	(33.3)	0	(0.0)
South Dakota	6	0	(0.0)	1	(16.7)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	4	(66.7)	4	(66.7)	0	(0.0)
Tennessee	55	17	(30.9)	1	(1.8)	1	(1.8)	7	(12.7)	1	(1.8)	0	(0.0)	7	(12.7)	21	(38.2)	21	(38.2)	0	(0.0)
Texas	700	352	(50.3)	25	(3.6)	62	(8.9)	36	(5.1)	15	(2.1)	0	(0.0)	14	(2.0)	196	(28.0)	196	(28.0)	0	(0.0)
Utah	24	6	(25.0)	1	(4.2)	1	(4.2)	4	(16.7)	1	(4.2)	0	(0.0)	0	(0.0)	11	(45.8)	11	(45.8)	0	(0.0)
Vermont	5	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(100.0)	5	(100.0)	0	(0.0)
Virginia	152	8	(5.3)	14	(9.2)	13	(8.6)	19	(12.5)	8	(5.3)	1	(0.7)	5	(3.3)	84	(55.3)	84	(55.3)	0	(0.0)
Washington	155	15	(9.7)	25	(16.1)	26	(16.8)	9	(5.8)	5	(3.2)	0	(0.0)	2	(1.3)	73	(47.1)	73	(47.1)	0	(0.0)
West Virginia	5	1	(20.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(60.0)	3	(60.0)	0	(0.0)
Wisconsin	46	11	(23.9)	0	(0.0)	1	(2.2)	5	(10.9)	4	(8.7)	0	(0.0)	0	(0.0)	25	(54.3)	25	(54.3)	0	(0.0)
Wyoming	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)	3	(100.0)	0	(0.0)

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

² Includes 143 countries.

Note: See Surveillance Slide #17.

Table 25. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Number of Years in the United States: United States, 2011

Reporting Area	Total Cases	<1 Year		1–4		5–9		10–19		≥20		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	6,510	925	(14.2)	1,104	(17.0)	1,032	(15.9)	1,302	(20.0)	1,503	(23.1)	644	(9.9)
Alabama	48	3	(6.3)	17	(35.4)	15	(31.3)	7	(14.6)	6	(12.5)	0	(0.0)
Alaska	15	2	(13.3)	2	(13.3)	1	(6.7)	3	(20.0)	3	(20.0)	4	(26.7)
Arizona	170	38	(22.4)	21	(12.4)	21	(12.4)	30	(17.6)	34	(20.0)	26	(15.3)
Arkansas	19	5	(26.3)	6	(31.6)	3	(15.8)	2	(10.5)	3	(15.8)	0	(0.0)
California	1,782	174	(9.8)	181	(10.2)	190	(10.7)	315	(17.7)	585	(32.8)	337	(18.9)
Colorado	49	13	(26.5)	10	(20.4)	5	(10.2)	5	(10.2)	11	(22.4)	5	(10.2)
Connecticut	65	6	(9.2)	21	(32.3)	13	(20.0)	16	(24.6)	9	(13.8)	0	(0.0)
Delaware	16	4	(25.0)	7	(43.8)	3	(18.8)	2	(12.5)	0	(0.0)	0	(0.0)
District of Columbia	30	4	(13.3)	13	(43.3)	8	(26.7)	2	(6.7)	3	(10.0)	0	(0.0)
Florida	392	60	(15.3)	64	(16.3)	59	(15.1)	102	(26.0)	84	(21.4)	23	(5.9)
Georgia	159	26	(16.4)	33	(20.8)	41	(25.8)	29	(18.2)	27	(17.0)	3	(1.9)
Hawaii	91	21	(23.1)	9	(9.9)	10	(11.0)	17	(18.7)	22	(24.2)	12	(13.2)
Idaho	6	2	(33.3)	0	(0.0)	1	(16.7)	3	(50.0)	0	(0.0)	0	(0.0)
Illinois	226	31	(13.7)	33	(14.6)	37	(16.4)	57	(25.2)	62	(27.4)	6	(2.7)
Indiana	43	11	(25.6)	9	(20.9)	7	(16.3)	1	(2.3)	0	(0.0)	15	(34.9)
Iowa	29	1	(3.4)	3	(10.3)	1	(3.4)	1	(3.4)	0	(0.0)	23	(79.3)
Kansas	20	2	(10.0)	5	(25.0)	2	(10.0)	1	(5.0)	9	(45.0)	1	(5.0)
Kentucky	23	8	(34.8)	9	(39.1)	2	(8.7)	3	(13.0)	1	(4.3)	0	(0.0)
Louisiana	39	3	(7.7)	8	(20.5)	12	(30.8)	7	(17.9)	8	(20.5)	1	(2.6)
Maine	5	0	(0.0)	1	(20.0)	2	(40.0)	1	(20.0)	1	(20.0)	0	(0.0)
Maryland	167	24	(14.4)	35	(21.0)	43	(25.7)	38	(22.8)	27	(16.2)	0	(0.0)
Massachusetts	164	35	(21.3)	36	(22.0)	22	(13.4)	34	(20.7)	36	(22.0)	1	(0.6)
Michigan	83	10	(12.0)	10	(12.0)	12	(14.5)	18	(21.7)	13	(15.7)	20	(24.1)
Minnesota	116	21	(18.1)	24	(20.7)	27	(23.3)	28	(24.1)	16	(13.8)	0	(0.0)
Mississippi	18	3	(16.7)	6	(33.3)	3	(16.7)	2	(11.1)	4	(22.2)	0	(0.0)
Missouri	38	2	(5.3)	3	(7.9)	0	(0.0)	0	(0.0)	0	(0.0)	33	(86.8)
Montana	1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(100.0)	0	(0.0)
Nebraska	13	2	(15.4)	7	(53.8)	2	(15.4)	2	(15.4)	0	(0.0)	0	(0.0)
Nevada	69	10	(14.5)	7	(10.1)	11	(15.9)	11	(15.9)	29	(42.0)	1	(1.4)
New Hampshire	6	1	(16.7)	2	(33.3)	1	(16.7)	0	(0.0)	1	(16.7)	1	(16.7)
New Jersey	246	28	(11.4)	46	(18.7)	40	(16.3)	45	(18.3)	44	(17.9)	43	(17.5)
New Mexico	25	5	(20.0)	5	(20.0)	1	(4.0)	3	(12.0)	11	(44.0)	0	(0.0)
New York	706	100	(14.2)	153	(21.7)	123	(17.4)	170	(24.1)	131	(18.6)	29	(4.1)
North Carolina	107	22	(20.6)	19	(17.8)	21	(19.6)	15	(14.0)	11	(10.3)	19	(17.8)
North Dakota	7	3	(42.9)	1	(14.3)	2	(28.6)	0	(0.0)	0	(0.0)	1	(14.3)
Ohio	82	15	(18.3)	12	(14.6)	14	(17.1)	24	(29.3)	13	(15.9)	4	(4.9)
Oklahoma	24	4	(16.7)	2	(8.3)	5	(20.8)	0	(0.0)	2	(8.3)	11	(45.8)
Oregon	50	7	(14.0)	8	(16.0)	7	(14.0)	9	(18.0)	4	(8.0)	15	(30.0)
Pennsylvania	156	25	(16.0)	29	(18.6)	33	(21.2)	39	(25.0)	28	(17.9)	2	(1.3)
Rhode Island	21	3	(14.3)	7	(33.3)	3	(14.3)	5	(23.8)	3	(14.3)	0	(0.0)
South Carolina	33	4	(12.1)	10	(30.3)	7	(21.2)	5	(15.2)	6	(18.2)	1	(3.0)
South Dakota	6	2	(33.3)	3	(50.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	55	11	(20.0)	12	(21.8)	11	(20.0)	10	(18.2)	11	(20.0)	0	(0.0)
Texas	700	108	(15.4)	134	(19.1)	138	(19.7)	149	(21.3)	171	(24.4)	0	(0.0)
Utah	24	6	(25.0)	4	(16.7)	4	(16.7)	6	(25.0)	4	(16.7)	0	(0.0)
Vermont	5	3	(60.0)	1	(20.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	152	21	(13.8)	29	(19.1)	35	(23.0)	41	(27.0)	26	(17.1)	0	(0.0)
Washington	155	25	(16.1)	33	(21.3)	24	(15.5)	36	(23.2)	33	(21.3)	4	(2.6)
West Virginia	5	1	(20.0)	2	(40.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(40.0)
Wisconsin	46	10	(21.7)	9	(19.6)	8	(17.4)	8	(17.4)	10	(21.7)	1	(2.2)
Wyoming	3	0	(0.0)	3	(100.0)	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 26. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease: Reporting Areas, 2011

Reporting Area	Total Cases	Pulmonary ¹		Extrapulmonary ²		Pulmonary and Extrapulmonary Cases		
		No.	(%)	No.	(%)	Total ³		Miliary
						No.	(%)	No.
United States	10,528	7,024	(66.7)	2,188	(20.8)	1,309	(12.4)	428
Alabama	161	126	(78.3)	24	(14.9)	11	(6.8)	5
Alaska	67	57	(85.1)	7	(10.4)	3	(4.5)	2
Arizona	255	204	(80.0)	34	(13.3)	17	(6.7)	9
Arkansas	85	59	(69.4)	14	(16.5)	12	(14.1)	4
California	2,323	1,564	(67.3)	465	(20.0)	294	(12.7)	87
Colorado	70	44	(62.9)	19	(27.1)	7	(10.0)	2
Connecticut	83	47	(56.6)	20	(24.1)	16	(19.3)	1
Delaware	21	14	(66.7)	6	(28.6)	1	(4.8)	1
District of Columbia	56	38	(67.9)	14	(25.0)	4	(7.1)	3
Florida	754	518	(68.7)	159	(21.1)	77	(10.2)	41
Georgia	347	234	(67.4)	68	(19.6)	43	(12.4)	18
Hawaii	123	93	(75.6)	18	(14.6)	12	(9.8)	7
Idaho	12	10	(83.3)	1	(8.3)	1	(8.3)	0
Illinois	359	225	(62.7)	84	(23.4)	50	(13.9)	22
Indiana	100	72	(72.0)	15	(15.0)	13	(13.0)	6
Iowa	40	22	(55.0)	11	(27.5)	6	(15.0)	4
Kansas	36	31	(86.1)	5	(13.9)	0	(0.0)	0
Kentucky	71	52	(73.2)	12	(16.9)	7	(9.9)	3
Louisiana	167	134	(80.2)	22	(13.2)	11	(6.6)	6
Maine	9	5	(55.6)	3	(33.3)	1	(11.1)	1
Maryland	233	149	(63.9)	59	(25.3)	25	(10.7)	8
Massachusetts	196	118	(60.2)	53	(27.0)	24	(12.2)	7
Michigan	170	106	(62.4)	58	(34.1)	6	(3.5)	6
Minnesota	137	60	(43.8)	58	(42.3)	19	(13.9)	8
Mississippi	91	66	(72.5)	15	(16.5)	10	(11.0)	3
Missouri	98	68	(69.4)	20	(20.4)	8	(8.2)	0
Montana	8	2	(25.0)	5	(62.5)	1	(12.5)	0
Nebraska	23	15	(65.2)	7	(30.4)	1	(4.3)	0
Nevada	95	74	(77.9)	18	(18.9)	3	(3.2)	2
New Hampshire	11	8	(72.7)	1	(9.1)	2	(18.2)	2
New Jersey	331	199	(60.1)	80	(24.2)	52	(15.7)	13
New Mexico	49	32	(65.3)	13	(26.5)	4	(8.2)	3
New York	910	570	(62.6)	207	(22.7)	133	(14.6)	36
North Carolina	244	164	(67.2)	43	(17.6)	37	(15.2)	13
North Dakota	7	3	(42.9)	3	(42.9)	0	(0.0)	0
Ohio	145	90	(62.1)	33	(22.8)	22	(15.2)	7
Oklahoma	94	54	(57.4)	26	(27.7)	14	(14.9)	7
Oregon	74	40	(54.1)	25	(33.8)	9	(12.2)	2
Pennsylvania	260	167	(64.2)	62	(23.8)	31	(11.9)	9
Rhode Island	27	15	(55.6)	11	(40.7)	1	(3.7)	0
South Carolina	140	79	(56.4)	32	(22.9)	29	(20.7)	13
South Dakota	15	10	(66.7)	4	(26.7)	1	(6.7)	1
Tennessee	156	104	(66.7)	30	(19.2)	22	(14.1)	9
Texas	1,325	952	(71.8)	169	(12.8)	204	(15.4)	47
Utah	34	13	(38.2)	16	(47.1)	5	(14.7)	0
Vermont	8	6	(75.0)	2	(25.0)	0	(0.0)	0
Virginia	221	147	(66.5)	48	(21.7)	26	(11.8)	5
Washington	200	97	(48.5)	73	(36.5)	30	(15.0)	5
West Virginia	13	12	(92.3)	1	(7.7)	0	(0.0)	0
Wisconsin	70	51	(72.9)	15	(21.4)	4	(5.7)	0
Wyoming	4	4	(100.0)	0	(0.0)	0	(0.0)	0
American Samoa ⁴	3	0	(0.0)	0	(0.0)	3	(100.0)	3
Fed. States of Micronesia ⁴	140	106	(75.7)	20	(14.3)	14	(10.0)	8
Guam ⁴	78	60	(76.9)	8	(10.3)	10	(12.8)	4
Marshall Islands ⁴	149	75	(50.3)	50	(33.6)	24	(16.1)	3
N. Mariana Islands ⁴	27	23	(85.2)	0	(0.0)	4	(14.8)	3
Puerto Rico ⁴	50	42	(84.0)	8	(16.0)	0	(0.0)	0
Republic of Palau ⁴	8	8	(100.0)	0	(0.0)	0	(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: 7 cases had missing and/or unknown site of disease.

Table 27. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2011

Reporting Area	Total Extrapulmonary Cases ¹		Total Extrapulmonary Sites ²		Site of Disease													
	No.		No.		Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other	
	(%)	(%)	(%)	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	2,188	2,298	(16.9)	(37.2)	389	(16.9)	856	(37.2)	256	(11.1)	114	(5.0)	132	(5.7)	124	(5.4)	427	(18.6)
Alabama	24	25	(24.0)	(28.0)	6	(24.0)	7	(28.0)	1	(4.0)	0	(0.0)	2	(8.0)	1	(4.0)	8	(32.0)
Alaska	7	7	(14.3)	(14.3)	1	(14.3)	1	(14.3)	1	(14.3)	1	(14.3)	1	(14.3)	1	(14.3)	1	(14.3)
Arizona	34	35	(14.3)	(28.6)	10	(14.3)	10	(28.6)	5	(14.3)	3	(8.6)	2	(5.7)	2	(5.7)	8	(22.9)
Arkansas	14	14	(35.7)	(14.3)	2	(14.3)	2	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(7.1)	6	(42.9)
California	465	479	(14.8)	(39.7)	71	(14.8)	190	(39.7)	51	(10.6)	25	(5.2)	15	(3.1)	33	(6.9)	94	(19.6)
Colorado	19	20	(15.0)	(25.0)	3	(15.0)	5	(25.0)	0	(0.0)	4	(20.0)	0	(0.0)	3	(15.0)	5	(25.0)
Connecticut	20	22	(9.1)	(59.1)	2	(9.1)	13	(59.1)	3	(13.6)	2	(9.1)	1	(4.5)	1	(4.5)	0	(0.0)
Delaware	6	6	(0.0)	(33.3)	0	(0.0)	2	(33.3)	1	(16.7)	1	(16.7)	0	(0.0)	0	(0.0)	2	(33.3)
District of Columbia	14	14	(42.9)	(28.6)	6	(42.9)	4	(28.6)	1	(7.1)	0	(0.0)	1	(7.1)	1	(7.1)	1	(7.1)
Florida	159	164	(14.6)	(35.4)	24	(14.6)	58	(35.4)	20	(12.2)	9	(5.5)	14	(8.5)	8	(4.9)	31	(18.9)
Georgia	68	69	(23.2)	(30.4)	16	(23.2)	21	(30.4)	8	(11.6)	0	(0.0)	6	(8.7)	3	(4.3)	15	(21.7)
Hawaii	18	18	(38.9)	(16.7)	3	(38.9)	3	(16.7)	2	(11.1)	1	(5.6)	0	(0.0)	1	(5.6)	4	(22.2)
Idaho	1	1	(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)
Illinois	84	95	(20.0)	(26.3)	19	(20.0)	25	(26.3)	16	(16.8)	5	(5.3)	7	(7.4)	5	(5.3)	18	(18.9)
Indiana	15	16	(6.3)	(37.5)	1	(6.3)	6	(37.5)	2	(12.5)	0	(0.0)	2	(12.5)	2	(12.5)	3	(18.8)
Iowa	11	13	(7.7)	(46.2)	1	(7.7)	6	(46.2)	2	(15.4)	0	(0.0)	3	(23.1)	1	(7.7)	0	(0.0)
Kansas	5	5	(0.0)	(40.0)	0	(0.0)	2	(40.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	2	(40.0)
Kentucky	12	13	(30.8)	(38.5)	4	(30.8)	5	(38.5)	2	(15.4)	0	(0.0)	0	(0.0)	1	(7.7)	1	(7.7)
Louisiana	22	22	(54.5)	(18.2)	12	(54.5)	4	(18.2)	1	(4.5)	2	(9.1)	0	(0.0)	0	(0.0)	3	(13.6)
Maine	3	3	(0.0)	(100.0)	0	(0.0)	3	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Maryland	59	61	(19.7)	(44.3)	12	(19.7)	27	(44.3)	3	(4.9)	2	(3.3)	6	(9.8)	5	(8.2)	6	(9.8)
Massachusetts	53	58	(20.7)	(32.8)	12	(20.7)	19	(32.8)	6	(10.3)	4	(6.9)	4	(6.9)	2	(3.4)	11	(19.0)
Michigan	58	61	(18.0)	(18.0)	11	(18.0)	11	(18.0)	14	(23.0)	2	(3.3)	0	(0.0)	1	(1.6)	22	(36.1)
Minnesota	58	64	(12.5)	(43.8)	8	(12.5)	28	(43.8)	10	(15.6)	5	(7.8)	3	(4.7)	3	(4.7)	7	(10.9)
Mississippi	15	15	(53.3)	(13.3)	8	(53.3)	2	(13.3)	2	(13.3)	0	(0.0)	0	(0.0)	1	(6.7)	2	(13.3)
Missouri	20	21	(14.3)	(42.9)	3	(14.3)	9	(42.9)	2	(9.5)	0	(0.0)	1	(4.8)	1	(4.8)	5	(23.8)
Montana	5	5	(20.0)	(20.0)	1	(20.0)	1	(20.0)	1	(20.0)	0	(0.0)	0	(0.0)	1	(20.0)	1	(20.0)
Nebraska	7	7	(14.3)	(57.1)	1	(14.3)	4	(57.1)	1	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(14.3)
Nevada	18	18	(5.6)	(50.0)	1	(5.6)	9	(50.0)	2	(11.1)	1	(5.6)	0	(0.0)	1	(5.6)	4	(22.2)
New Hampshire	1	1	(0.0)	(100.0)	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
New Jersey	80	84	(22.6)	(41.7)	19	(22.6)	35	(41.7)	11	(13.1)	3	(3.6)	5	(6.0)	3	(3.6)	8	(9.5)

Table 27. (Cont'd) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2011

Reporting Area	Total Extrapulmonary Cases ¹		Total Extrapulmonary Sites ²		Site of Disease													
	No.	%	No.	%	Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other	
					No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	13		13		6	(46.2)	2	(15.4)	0	(0.0)	3	(23.1)	0	(0.0)	0	(0.0)	2	(15.4)
New York	207		217		31	(14.3)	92	(42.4)	20	(9.2)	12	(5.5)	12	(5.5)	8	(3.7)	42	(19.4)
North Carolina	43		47		12	(25.5)	12	(25.5)	4	(8.5)	3	(6.4)	4	(8.5)	2	(4.3)	10	(21.3)
North Dakota	3		3		0	(0.0)	1	(33.3)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	33		36		2	(5.6)	14	(38.9)	4	(11.1)	2	(5.6)	2	(5.6)	4	(11.1)	8	(22.2)
Oklahoma	26		26		3	(11.5)	16	(61.5)	0	(0.0)	2	(7.7)	3	(11.5)	0	(0.0)	2	(7.7)
Oregon	25		27		4	(14.8)	8	(29.6)	2	(7.4)	0	(0.0)	2	(7.4)	2	(7.4)	9	(33.3)
Pennsylvania	62		64		12	(18.8)	25	(39.1)	8	(12.5)	2	(3.1)	4	(6.3)	4	(6.3)	9	(14.1)
Rhode Island	11		13		1	(7.7)	3	(23.1)	0	(0.0)	3	(23.1)	0	(0.0)	1	(7.7)	5	(38.5)
South Carolina	32		34		11	(32.4)	11	(32.4)	2	(5.9)	1	(2.9)	3	(8.8)	1	(2.9)	5	(14.7)
South Dakota	4		5		0	(0.0)	0	(0.0)	2	(40.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(60.0)
Tennessee	30		32		7	(21.9)	14	(43.8)	1	(3.1)	1	(3.1)	4	(12.5)	2	(6.3)	3	(9.4)
Texas	169		179		16	(8.9)	70	(39.1)	22	(12.3)	9	(5.0)	19	(10.6)	9	(5.0)	34	(19.0)
Utah	16		20		3	(15.0)	8	(40.0)	3	(15.0)	1	(5.0)	1	(5.0)	0	(0.0)	4	(20.0)
Vermont	2		2		0	(0.0)	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	48		50		6	(12.0)	24	(48.0)	4	(8.0)	1	(2.0)	3	(6.0)	2	(4.0)	10	(20.0)
Washington	73		76		12	(15.8)	32	(42.1)	13	(17.1)	2	(2.6)	1	(1.3)	7	(9.2)	9	(11.8)
West Virginia	1		1		0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	15		17		4	(23.5)	8	(47.1)	1	(5.9)	1	(5.9)	1	(5.9)	0	(0.0)	2	(11.8)
Wyoming	0		0		0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa ³	...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia ³	20		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guam ³	8		8		2	(25.0)	3	(37.5)	1	(12.5)	0	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)
Marshall Islands ³	50		52		21	(40.4)	23	(44.2)	0	(0.0)	0	(0.0)	0	(0.0)	8	(15.4)	0	(0.0)
N. Mariana Islands ³	...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerto Rico ³	8		8		1	(12.5)	2	(25.0)	0	(0.0)	0	(0.0)	3	(37.5)	0	(0.0)	2	(25.0)
Republic of Palau ³	...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...
U.S. Virgin Islands ³	...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...

¹ Excludes cases with pulmonary site of disease.
² Patient may have more than one extrapulmonary site of disease.
³ Not included in U.S. totals.
Note: Ellipses indicate data not available.
 See Technical Notes.

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Morbidity Tables Reporting Areas, 2011 and 2009

Table 28. Tuberculosis Cases and Percentages by Residence in Correctional Facilities,¹ Age ≥ 15: Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Cases Reported As Residents of Correctional Facilities ²	
		No.	(%)	No.	(%)
United States	9,946	9,884	(99.4)	424	(4.3)
Alabama	150	150	(100.0)	11	(7.3)
Alaska	61	60	(98.4)	1	(1.7)
Arizona	242	242	(100.0)	64	(26.4)
Arkansas	81	81	(100.0)	3	(3.7)
California	2,193	2,167	(98.8)	75	(3.5)
Colorado	62	62	(100.0)	2	(3.2)
Connecticut	80	76	(95.0)	0	(0.0)
Delaware	21	21	(100.0)	0	(0.0)
District of Columbia	55	55	(100.0)	1	(1.8)
Florida	711	711	(100.0)	21	(3.0)
Georgia	321	320	(99.7)	31	(9.7)
Hawaii	122	122	(100.0)	2	(1.6)
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	341	(99.7)	4	(1.2)
Indiana	93	91	(97.8)	4	(4.4)
Iowa	39	39	(100.0)	0	(0.0)
Kansas	35	35	(100.0)	1	(2.9)
Kentucky	70	70	(100.0)	5	(7.1)
Louisiana	159	159	(100.0)	8	(5.0)
Maine	9	9	(100.0)	0	(0.0)
Maryland	218	218	(100.0)	2	(0.9)
Massachusetts	188	188	(100.0)	4	(2.1)
Michigan	163	160	(98.2)	1	(0.6)
Minnesota	127	127	(100.0)	2	(1.6)
Mississippi	89	89	(100.0)	1	(1.1)
Missouri	91	86	(94.5)	3	(3.5)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	0	(0.0)
Nevada	85	85	(100.0)	1	(1.2)
New Hampshire	11	11	(100.0)	0	(0.0)
New Jersey	317	317	(100.0)	1	(0.3)
New Mexico	48	48	(100.0)	3	(6.3)
New York State ³	206	206	(100.0)	5	(2.4)
New York City	675	661	(97.9)	9	(1.4)
North Carolina	228	228	(100.0)	6	(2.6)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	135	(97.8)	1	(0.7)
Oklahoma	82	81	(98.8)	4	(4.9)
Oregon	73	73	(100.0)	2	(2.7)
Pennsylvania	249	249	(100.0)	9	(3.6)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	133	133	(100.0)	2	(1.5)
South Dakota	14	14	(100.0)	0	(0.0)
Tennessee	148	148	(100.0)	7	(4.7)
Texas	1,227	1,227	(100.0)	116	(9.5)
Utah	32	32	(100.0)	0	(0.0)
Vermont	7	7	(100.0)	0	(0.0)
Virginia	213	213	(100.0)	9	(4.2)
Washington	188	188	(100.0)	2	(1.1)
West Virginia	12	12	(100.0)	0	(0.0)
Wisconsin	63	62	(98.4)	1	(1.6)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa ⁴	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	99	99	(100.0)	1	(1.0)
Guam ⁴	67	67	(100.0)	1	(1.5)
Marshall Islands ⁴	108	108	(100.0)	0	(0.0)
N. Mariana Islands ⁴	26	26	(100.0)	0	(0.0)
Puerto Rico ⁴	49	49	(100.0)	2	(4.1)
Republic of Palau ⁴	8	8	(100.0)	0	(0.0)
U.S. Virgin Islands ⁴	...	...	...	...	...

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 New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.
See Surveillance Slide #26

**Table 29. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15:
Reporting Areas, 2011**

Reporting Area	Total Cases	Cases with Information on Homeless Status		Cases Reported As Being Homeless ²	
		No.	(%)	No.	(%)
United States	9,946	9,814	(98.7)	565	(5.8)
Alabama	150	150	(100.0)	9	(6.0)
Alaska	61	60	(98.4)	14	(23.3)
Arizona	242	209	(86.4)	15	(7.2)
Arkansas	81	81	(100.0)	8	(9.9)
California	2,193	2,167	(98.8)	124	(5.7)
Colorado	62	62	(100.0)	4	(6.5)
Connecticut	80	76	(95.0)	0	(0.0)
Delaware	21	21	(100.0)	0	(0.0)
District of Columbia	55	55	(100.0)	2	(3.6)
Florida	711	704	(99.0)	64	(9.1)
Georgia	321	319	(99.4)	32	(10.0)
Hawaii	122	107	(87.7)	9	(8.4)
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	339	(99.1)	33	(9.7)
Indiana	93	93	(100.0)	9	(9.7)
Iowa	39	39	(100.0)	2	(5.1)
Kansas	35	35	(100.0)	1	(2.9)
Kentucky	70	70	(100.0)	6	(8.6)
Louisiana	159	159	(100.0)	12	(7.5)
Maine	9	9	(100.0)	1	(11.1)
Maryland	218	217	(99.5)	13	(6.0)
Massachusetts	188	187	(99.5)	8	(4.3)
Michigan	163	160	(98.2)	17	(10.6)
Minnesota	127	127	(100.0)	2	(1.6)
Mississippi	89	89	(100.0)	11	(12.4)
Missouri	91	86	(94.5)	4	(4.7)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	2	(9.5)
Nevada	85	85	(100.0)	4	(4.7)
New Hampshire	11	11	(100.0)	1	(9.1)
New Jersey	317	316	(99.7)	7	(2.2)
New Mexico	48	48	(100.0)	4	(8.3)
New York State ³	206	202	(98.1)	3	(1.5)
New York City	675	661	(97.9)	16	(2.4)
North Carolina	228	227	(99.6)	15	(6.6)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	133	(96.4)	3	(2.3)
Oklahoma	82	79	(96.3)	6	(7.6)
Oregon	73	73	(100.0)	7	(9.6)
Pennsylvania	249	248	(99.6)	5	(2.0)
Rhode Island	25	25	(100.0)	2	(8.0)
South Carolina	133	132	(99.2)	8	(6.1)
South Dakota	14	14	(100.0)	0	(0.0)
Tennessee	148	148	(100.0)	11	(7.4)
Texas	1,227	1,227	(100.0)	59	(4.8)
Utah	32	32	(100.0)	2	(6.3)
Vermont	7	7	(100.0)	0	(0.0)
Virginia	213	213	(100.0)	1	(0.5)
Washington	188	188	(100.0)	9	(4.8)
West Virginia	12	12	(100.0)	0	(0.0)
Wisconsin	63	62	(98.4)	0	(0.0)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa ⁴	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	99	99	(100.0)	7	(7.1)
Guam ⁴	67	67	(100.0)	3	(4.5)
Marshall Islands ⁴	108	108	(100.0)	0	(0.0)
N. Mariana Islands ⁴	26	26	(100.0)	0	(0.0)
Puerto Rico ⁴	49	49	(100.0)	3	(6.1)
Republic of Palau ⁴	8	8	(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 #27

Table 30. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,¹ Age ≥15: Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Residence in Long-term Care Facilities		Cases Reported As Residents of Long-term Care Facilities ²	
		No.	(%)	No.	(%)
United States	9,946	9,883	(99.4)	224	(2.3)
Alabama	150	150	(100.0)	1	(0.7)
Alaska	61	61	(100.0)	0	(0.0)
Arizona	242	242	(100.0)	8	(3.3)
Arkansas	81	81	(100.0)	3	(3.7)
California	2,193	2,167	(98.8)	43	(2.0)
Colorado	62	62	(100.0)	0	(0.0)
Connecticut	80	76	(95.0)	5	(6.6)
Delaware	21	21	(100.0)	1	(4.8)
District of Columbia	55	55	(100.0)	2	(3.6)
Florida	711	711	(100.0)	5	(0.7)
Georgia	321	320	(99.7)	4	(1.3)
Hawaii	122	122	(100.0)	3	(2.5)
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	340	(99.4)	12	(3.5)
Indiana	93	91	(97.8)	3	(3.3)
Iowa	39	39	(100.0)	0	(0.0)
Kansas	35	35	(100.0)	0	(0.0)
Kentucky	70	70	(100.0)	2	(2.9)
Louisiana	159	159	(100.0)	2	(1.3)
Maine	9	9	(100.0)	0	(0.0)
Maryland	218	218	(100.0)	6	(2.8)
Massachusetts	188	188	(100.0)	4	(2.1)
Michigan	163	161	(98.8)	5	(3.1)
Minnesota	127	127	(100.0)	2	(1.6)
Mississippi	89	89	(100.0)	2	(2.2)
Missouri	91	86	(94.5)	3	(3.5)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	21	21	(100.0)	2	(9.5)
Nevada	85	85	(100.0)	1	(1.2)
New Hampshire	11	11	(100.0)	1	(9.1)
New Jersey	317	316	(99.7)	6	(1.9)
New Mexico	48	48	(100.0)	2	(4.2)
New York State ³	206	205	(99.5)	5	(2.4)
New York City	675	663	(98.2)	37	(5.6)
North Carolina	228	228	(100.0)	3	(1.3)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	134	(97.1)	3	(2.2)
Oklahoma	82	82	(100.0)	3	(3.7)
Oregon	73	73	(100.0)	1	(1.4)
Pennsylvania	249	248	(99.6)	6	(2.4)
Rhode Island	25	25	(100.0)	0	(0.0)
South Carolina	133	133	(100.0)	3	(2.3)
South Dakota	14	14	(100.0)	3	(21.4)
Tennessee	148	148	(100.0)	3	(2.0)
Texas	1,227	1,227	(100.0)	23	(1.9)
Utah	32	32	(100.0)	0	(0.0)
Vermont	7	7	(100.0)	0	(0.0)
Virginia	213	213	(100.0)	0	(0.0)
Washington	188	187	(99.5)	5	(2.7)
West Virginia	12	12	(100.0)	1	(8.3)
Wisconsin	63	62	(98.4)	0	(0.0)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa ⁴	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	99	99	(100.0)	4	(4.0)
Guam ⁴	67	67	(100.0)	1	(1.5)
Marshall Islands ⁴	108	107	(99.1)	0	(0.0)
N. Mariana Islands ⁴	26	24	(92.3)	0	(0.0)
Puerto Rico ⁴	49	49	(100.0)	4	(8.2)
Republic of Palau ⁴	8	8	(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 31. Tuberculosis Cases and Percentages by Injecting Drug Use,¹ Age ≥ 15 : Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Cases Reporting Injecting Drug Use	
		No.	(%)	No.	(%)
United States	9,946	9,692	(97.4)	146	(1.5)
Alabama	150	149	(99.3)	6	(4.0)
Alaska	61	58	(95.1)	3	(5.2)
Arizona	242	200	(82.6)	8	(4.0)
Arkansas	81	81	(100.0)	0	(0.0)
California	2,193	2,139	(97.5)	21	(1.0)
Colorado	62	62	(100.0)	0	(0.0)
Connecticut	80	72	(90.0)	1	(1.4)
Delaware	21	21	(100.0)	0	(0.0)
District of Columbia	55	55	(100.0)	0	(0.0)
Florida	711	702	(98.7)	13	(1.9)
Georgia	321	317	(98.8)	5	(1.6)
Hawaii	122	81	(66.4)	--	--
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	336	(98.2)	3	(0.9)
Indiana	93	93	(100.0)	5	(5.4)
Iowa	39	39	(100.0)	0	(0.0)
Kansas	35	35	(100.0)	1	(2.9)
Kentucky	70	70	(100.0)	2	(2.9)
Louisiana	159	158	(99.4)	5	(3.2)
Maine	9	9	(100.0)	0	(0.0)
Maryland	218	217	(99.5)	1	(0.5)
Massachusetts	188	186	(98.9)	2	(1.1)
Michigan	163	156	(95.7)	7	(4.5)
Minnesota	127	127	(100.0)	1	(0.8)
Mississippi	89	89	(100.0)	1	(1.1)
Missouri	91	86	(94.5)	0	(0.0)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	21	20	(95.2)	0	(0.0)
Nevada	85	85	(100.0)	0	(0.0)
New Hampshire	11	11	(100.0)	0	(0.0)
New Jersey	317	316	(99.7)	3	(0.9)
New Mexico	48	48	(100.0)	2	(4.2)
New York State ²	206	196	(95.1)	1	(0.5)
New York City	675	662	(98.1)	9	(1.4)
North Carolina	228	228	(100.0)	1	(0.4)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	130	(94.2)	2	(1.5)
Oklahoma	82	75	(91.5)	5	(6.7)
Oregon	73	73	(100.0)	1	(1.4)
Pennsylvania	249	244	(98.0)	1	(0.4)
Rhode Island	25	25	(100.0)	1	(4.0)
South Carolina	133	128	(96.2)	2	(1.6)
South Dakota	14	14	(100.0)	0	(0.0)
Tennessee	148	148	(100.0)	4	(2.7)
Texas	1,227	1,213	(98.9)	26	(2.1)
Utah	32	32	(100.0)	0	(0.0)
Vermont	7	7	(100.0)	0	(0.0)
Virginia	213	213	(100.0)	1	(0.5)
Washington	188	185	(98.4)	2	(1.1)
West Virginia	12	12	(100.0)	0	(0.0)
Wisconsin	63	61	(96.8)	0	(0.0)
Wyoming	4	3	(75.0)	0	(0.0)
American Samoa ³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ³	99	99	(100.0)	0	(0.0)
Guam ³	67	65	(97.0)	0	(0.0)
Marshall Islands ³	108	108	(100.0)	1	(0.9)
N. Mariana Islands ³	26	26	(100.0)	0	(0.0)
Puerto Rico ³	49	49	(100.0)	9	(18.4)
Republic of Palau ³	8	8	(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 $\geq 75\%$ of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 32. Tuberculosis Cases and Percentages by Noninjecting Drug Use,¹ Age ≥15: Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Cases Reporting Noninjecting Drug Use	
		No.	(%)	No.	(%)
United States	9,946	9,686	(97.4)	735	(7.6)
Alabama	150	149	(99.3)	23	(15.4)
Alaska	61	58	(95.1)	8	(13.8)
Arizona	242	200	(82.6)	25	(12.5)
Arkansas	81	81	(100.0)	2	(2.5)
California	2,193	2,138	(97.5)	118	(5.5)
Colorado	62	62	(100.0)	1	(1.6)
Connecticut	80	72	(90.0)	2	(2.8)
Delaware	21	21	(100.0)	1	(4.8)
District of Columbia	55	55	(100.0)	4	(7.3)
Florida	711	703	(98.9)	74	(10.5)
Georgia	321	318	(99.1)	27	(8.5)
Hawaii	122	80	(65.6)	--	--
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	337	(98.5)	32	(9.5)
Indiana	93	93	(100.0)	11	(11.8)
Iowa	39	39	(100.0)	1	(2.6)
Kansas	35	35	(100.0)	3	(8.6)
Kentucky	70	70	(100.0)	5	(7.1)
Louisiana	159	158	(99.4)	26	(16.5)
Maine	9	9	(100.0)	0	(0.0)
Maryland	218	217	(99.5)	5	(2.3)
Massachusetts	188	185	(98.4)	5	(2.7)
Michigan	163	154	(94.5)	24	(15.6)
Minnesota	127	127	(100.0)	3	(2.4)
Mississippi	89	89	(100.0)	10	(11.2)
Missouri	91	86	(94.5)	10	(11.6)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	21	20	(95.2)	0	(0.0)
Nevada	85	85	(100.0)	6	(7.1)
New Hampshire	11	11	(100.0)	0	(0.0)
New Jersey	317	316	(99.7)	14	(4.4)
New Mexico	48	48	(100.0)	7	(14.6)
New York State ²	206	197	(95.6)	7	(3.6)
New York City	675	657	(97.3)	38	(5.8)
North Carolina	228	228	(100.0)	18	(7.9)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	130	(94.2)	13	(10.0)
Oklahoma	82	74	(90.2)	17	(23.0)
Oregon	73	73	(100.0)	5	(6.8)
Pennsylvania	249	244	(98.0)	8	(3.3)
Rhode Island	25	25	(100.0)	3	(12.0)
South Carolina	133	128	(96.2)	15	(11.7)
South Dakota	14	14	(100.0)	1	(7.1)
Tennessee	148	148	(100.0)	12	(8.1)
Texas	1,227	1,213	(98.9)	129	(10.6)
Utah	32	32	(100.0)	0	(0.0)
Vermont	7	7	(100.0)	0	(0.0)
Virginia	213	213	(100.0)	13	(6.1)
Washington	188	184	(97.9)	3	(1.6)
West Virginia	12	12	(100.0)	0	(0.0)
Wisconsin	63	62	(98.4)	3	(4.8)
Wyoming	4	4	(100.0)	1	(25.0)
American Samoa ³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ³	99	99	(100.0)	7	(7.1)
Guam ³	67	65	(97.0)	0	(0.0)
Marshall Islands ³	108	108	(100.0)	1	(0.9)
N. Mariana Islands ³	26	26	(100.0)	0	(0.0)
Puerto Rico ³	49	49	(100.0)	12	(24.5)
Republic of Palau ³	8	8	(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 33. Tuberculosis Cases and Percentages by Excess Alcohol Use,¹ Age ≥ 15 : Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Cases Reporting Excess Alcohol Use	
		No.	(%)	No.	(%)
United States	9,946	9,732	(97.8)	1,208	(12.4)
Alabama	150	148	(98.7)	36	(24.3)
Alaska	61	59	(96.7)	28	(47.5)
Arizona	242	199	(82.2)	34	(17.1)
Arkansas	81	81	(100.0)	3	(3.7)
California	2,193	2,141	(97.6)	209	(9.8)
Colorado	62	62	(100.0)	3	(4.8)
Connecticut	80	75	(93.8)	6	(8.0)
Delaware	21	21	(100.0)	0	(0.0)
District of Columbia	55	55	(100.0)	9	(16.4)
Florida	711	703	(98.9)	119	(16.9)
Georgia	321	318	(99.1)	43	(13.5)
Hawaii	122	110	(90.2)	15	(13.6)
Idaho	11	11	(100.0)	0	(0.0)
Illinois	342	337	(98.5)	48	(14.2)
Indiana	93	93	(100.0)	16	(17.2)
Iowa	39	39	(100.0)	8	(20.5)
Kansas	35	35	(100.0)	4	(11.4)
Kentucky	70	70	(100.0)	9	(12.9)
Louisiana	159	158	(99.4)	36	(22.8)
Maine	9	9	(100.0)	1	(11.1)
Maryland	218	218	(100.0)	12	(5.5)
Massachusetts	188	185	(98.4)	15	(8.1)
Michigan	163	154	(94.5)	25	(16.2)
Minnesota	127	127	(100.0)	5	(3.9)
Mississippi	89	89	(100.0)	13	(14.6)
Missouri	91	86	(94.5)	13	(15.1)
Montana	8	8	(100.0)	1	(12.5)
Nebraska	21	19	(90.5)	1	(5.3)
Nevada	85	85	(100.0)	7	(8.2)
New Hampshire	11	11	(100.0)	1	(9.1)
New Jersey	317	316	(99.7)	25	(7.9)
New Mexico	48	48	(100.0)	13	(27.1)
New York State ²	206	199	(96.6)	20	(10.1)
New York City	675	663	(98.2)	12	(1.8)
North Carolina	228	228	(100.0)	32	(14.0)
North Dakota	6	6	(100.0)	0	(0.0)
Ohio	138	129	(93.5)	15	(11.6)
Oklahoma	82	78	(95.1)	16	(20.5)
Oregon	73	73	(100.0)	4	(5.5)
Pennsylvania	249	244	(98.0)	21	(8.6)
Rhode Island	25	25	(100.0)	1	(4.0)
South Carolina	133	130	(97.7)	28	(21.5)
South Dakota	14	13	(92.9)	1	(7.7)
Tennessee	148	147	(99.3)	21	(14.3)
Texas	1,227	1,214	(98.9)	241	(19.9)
Utah	32	32	(100.0)	3	(9.4)
Vermont	7	6	(85.7)	0	(0.0)
Virginia	213	213	(100.0)	16	(7.5)
Washington	188	184	(97.9)	13	(7.1)
West Virginia	12	12	(100.0)	1	(8.3)
Wisconsin	63	62	(98.4)	4	(6.5)
Wyoming	4	4	(100.0)	1	(25.0)
American Samoa ³	3	3	(100.0)	2	(66.7)
Fed. States of Micronesia ³	99	98	(99.0)	1	(1.0)
Guam ³	67	65	(97.0)	3	(4.6)
Marshall Islands ³	108	105	(97.2)	20	(19.0)
N. Mariana Islands ³	26	26	(100.0)	0	(0.0)
Puerto Rico ³	49	49	(100.0)	4	(8.2)
Republic of Palau ³	8	8	(100.0)	0	(0.0)
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 $\geq 75\%$ of cases.

² Excludes New York City.

³ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 34. Tuberculosis Cases and Percentages by Primary Occupation, Age ≥15: Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on Occupation		Percentage of Cases by Occupation ¹						
		No.	(%)	Unemployed	Health Care Worker	Correctional Employee	Migrant Worker	Retired	Not Seeking Employment	Other
United States	9,946	9,587	96.4	(30.4)	(3.7)	(0.1)	(1.6)	(16.1)	(13.9)	(34.2)
Alabama	150	150	100	(23.3)	(1.3)	(0.7)	(3.3)	(13.3)	(26.7)	(31.3)
Alaska	61	55	90.2	(58.2)	(1.8)	(0.0)	(0.0)	(9.1)	(5.5)	(25.5)
Arizona	242	205	84.7	(35.6)	(4.9)	(0.0)	(9.3)	(14.1)	(13.2)	(22.9)
Arkansas	81	81	100	(21.0)	(4.9)	(1.2)	(0.0)	(21.0)	(13.6)	(38.3)
California	2,193	2,158	98.4	(26.7)	(3.7)	(0.1)	(2.5)	(20.5)	(13.9)	(32.5)
Colorado	62	62	100	(14.5)	(8.1)	(0.0)	(0.0)	(9.7)	(29.0)	(38.7)
Connecticut	80	72	90	(25.0)	(6.9)	(0.0)	(1.4)	(9.7)	(15.3)	(41.7)
Delaware	21	21	100	(9.5)	(14.3)	(0.0)	(0.0)	(14.3)	(0.0)	(61.9)
District of Columbia	55	55	100	(81.8)	(0.0)	(0.0)	(0.0)	(5.5)	(0.0)	(12.7)
Florida	711	696	97.9	(64.7)	(2.6)	(0.0)	(1.7)	(3.4)	(0.7)	(26.9)
Georgia	321	312	97.2	(35.6)	(3.2)	(0.6)	(0.0)	(11.5)	(8.7)	(40.4)
Hawaii	122	111	91	(18.9)	(1.8)	(0.0)	(0.9)	(23.4)	(18.0)	(36.9)
Idaho	11	11	100	(18.2)	(0.0)	(0.0)	(0.0)	(27.3)	(9.1)	(45.5)
Illinois	342	336	98.2	(18.8)	(2.7)	(0.3)	(0.9)	(22.6)	(15.8)	(39.0)
Indiana	93	92	98.9	(20.7)	(4.3)	(0.0)	(1.1)	(22.8)	(21.7)	(29.3)
Iowa	39	38	97.4	(13.2)	(2.6)	(0.0)	(2.6)	(21.1)	(26.3)	(34.2)
Kansas	35	35	100	(28.6)	(2.9)	(0.0)	(0.0)	(20.0)	(22.9)	(25.7)
Kentucky	70	70	100	(14.3)	(1.4)	(0.0)	(5.7)	(18.6)	(22.9)	(37.1)
Louisiana	159	157	98.7	(34.4)	(3.2)	(0.6)	(2.5)	(17.2)	(7.6)	(34.4)
Maine	9	9	100	(11.1)	(0.0)	(0.0)	(0.0)	(55.6)	(11.1)	(22.2)
Maryland	218	216	99.1	(18.5)	(6.9)	(0.5)	(1.4)	(13.9)	(10.6)	(48.1)
Massachusetts	188	188	100	(29.3)	(4.3)	(0.0)	(1.1)	(21.8)	(12.8)	(30.9)
Michigan	163	152	93.3	(65.1)	(4.6)	(0.0)	(1.3)	(0.0)	(0.0)	(28.9)
Minnesota	127	127	100	(16.5)	(7.9)	(0.0)	(0.0)	(16.5)	(31.5)	(27.6)
Mississippi	89	89	100	(46.1)	(3.4)	(0.0)	(0.0)	(16.9)	(7.9)	(25.8)
Missouri	91	0	0	--	--	--	--	--	--	--
Montana	8	8	100	(0.0)	(12.5)	(0.0)	(0.0)	(25.0)	(12.5)	(50.0)
Nebraska	21	21	100	(19.0)	(0.0)	(0.0)	(0.0)	(19.0)	(9.5)	(52.4)
Nevada	85	84	98.8	(6.0)	(4.8)	(0.0)	(0.0)	(10.7)	(40.5)	(38.1)
New Hampshire	11	11	100	(27.3)	(0.0)	(0.0)	(0.0)	(36.4)	(0.0)	(36.4)
New Jersey	317	317	100	(20.5)	(5.0)	(0.0)	(0.9)	(16.4)	(14.8)	(42.3)
New Mexico	48	48	100	(41.7)	(0.0)	(0.0)	(2.1)	(22.9)	(6.3)	(27.1)
New York State ²	206	197	95.6	(24.4)	(6.6)	(0.5)	(0.5)	(18.8)	(10.7)	(38.6)
New York City	675	616	91.3	(46.3)	(3.2)	(0.0)	(1.5)	(15.1)	(1.9)	(32.0)
North Carolina	228	228	100	(31.6)	(3.5)	(0.4)	(1.3)	(20.2)	(8.3)	(34.6)
North Dakota	6	4	66.7	--	--	--	--	--	--	--
Ohio	138	134	97.1	(23.1)	(1.5)	(0.0)	(1.5)	(26.1)	(17.9)	(29.9)
Oklahoma	82	67	81.7	(23.9)	(0.0)	(0.0)	(1.5)	(23.9)	(6.0)	(44.8)
Oregon	73	73	100	(20.5)	(4.1)	(0.0)	(0.0)	(19.2)	(28.8)	(27.4)
Pennsylvania	249	249	100	(23.7)	(5.2)	(0.0)	(0.0)	(20.1)	(14.9)	(36.1)
Rhode Island	25	25	100	(12.0)	(8.0)	(0.0)	(0.0)	(8.0)	(36.0)	(36.0)
South Carolina	133	132	99.2	(34.1)	(2.3)	(0.0)	(1.5)	(22.0)	(9.1)	(31.1)
South Dakota	14	14	100	(0.0)	(7.1)	(0.0)	(0.0)	(7.1)	(78.6)	(7.1)
Tennessee	148	148	100	(29.7)	(3.4)	(0.0)	(4.1)	(14.9)	(15.5)	(32.4)
Texas	1,227	1,199	97.7	(29.1)	(3.2)	(0.2)	(0.7)	(13.5)	(17.0)	(36.4)
Utah	32	32	100	(15.6)	(3.1)	(0.0)	(0.0)	(18.8)	(21.9)	(40.6)
Vermont	7	7	100	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(85.7)	(14.3)
Virginia	213	213	100	(0.0)	(3.3)	(0.0)	(0.0)	(9.9)	(33.3)	(53.5)
Washington	188	185	98.4	(10.3)	(4.3)	(0.0)	(0.5)	(17.3)	(36.8)	(30.8)
West Virginia	12	12	100	(8.3)	(0.0)	(0.0)	(0.0)	(33.3)	(50.0)	(8.3)
Wisconsin	63	61	96.8	(21.3)	(1.6)	(0.0)	(1.6)	(16.4)	(24.6)	(34.4)
Wyoming	4	4	100	(25.0)	(0.0)	(0.0)	(0.0)	(0.0)	(25.0)	(50.0)
American Samoa ³	3	3	100	(0.0)	(0.0)	(0.0)	(0.0)	(33.3)	(0.0)	(66.7)
Fed. States of Micronesia ³	99	98	99	(55.1)	(0.0)	(3.1)	(1.0)	(3.1)	(16.3)	(21.4)
Guam ³	67	67	100	(26.9)	(3.0)	(0.0)	(0.0)	(22.4)	(6.0)	(41.8)
Marshall Islands ³	108	108	100	(48.1)	(1.9)	(0.0)	(0.0)	(3.7)	(18.5)	(27.8)
N. Mariana Islands ³	26	26	100	(30.8)	(0.0)	(0.0)	(30.8)	(3.8)	(0.0)	(34.6)
Puerto Rico ³	49	49	100	(44.9)	(4.1)	(0.0)	(0.0)	(8.2)	(16.3)	(26.5)
Republic of Palau ³	8	8	100	(12.5)	(0.0)	(0.0)	(25.0)	(37.5)	(0.0)	(25.0)
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 35. Tuberculosis Cases and Percentages by Initial Drug Regimen: Reporting Areas, 2011

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		
			No.	(%)	IR	IRZ	IRZE ³
United States	10,528	10,279	10,183	(99.1)	(0.7)	(2.7)	(86.2)
Alabama	161	156	156	(100.0)	(0.6)	(7.1)	(82.7)
Alaska	67	65	64	(98.5)	(0.0)	(1.6)	(79.7)
Arizona	255	246	238	(96.7)	(0.0)	(2.9)	(92.0)
Arkansas	85	82	82	(100.0)	(0.0)	(7.3)	(86.6)
California	2,323	2,272	2,254	(99.2)	(0.6)	(1.6)	(88.1)
Colorado	70	68	68	(100.0)	(0.0)	(0.0)	(83.8)
Connecticut	83	81	76	(93.8)	(0.0)	(1.3)	(25.0)
Delaware	21	21	21	(100.0)	(0.0)	(4.8)	(81.0)
District of Columbia	56	56	55	(98.2)	(0.0)	(0.0)	(92.7)
Florida	754	737	735	(99.7)	(0.8)	(3.3)	(86.3)
Georgia	347	332	331	(99.7)	(2.1)	(0.0)	(94.6)
Hawaii	123	122	122	(100.0)	(0.8)	(1.6)	(89.3)
Idaho	12	12	11	(91.7)	(0.0)	(0.0)	(100.0)
Illinois	359	351	347	(98.9)	(1.2)	(3.7)	(87.6)
Indiana	100	98	98	(100.0)	(2.0)	(2.0)	(86.7)
Iowa	40	40	40	(100.0)	(0.0)	(0.0)	(90.0)
Kansas	36	34	34	(100.0)	(0.0)	(0.0)	(97.1)
Kentucky	71	69	69	(100.0)	(0.0)	(0.0)	(82.6)
Louisiana	167	164	161	(98.2)	(0.6)	(5.6)	(90.7)
Maine	9	8	8	(100.0)	(0.0)	(0.0)	(100.0)
Maryland	233	228	227	(99.6)	(2.2)	(4.8)	(83.3)
Massachusetts	196	191	191	(100.0)	(0.5)	(2.6)	(76.4)
Michigan	170	168	166	(98.8)	(0.0)	(5.4)	(79.5)
Minnesota	137	133	133	(100.0)	(0.8)	(6.0)	(86.5)
Mississippi	91	89	88	(98.9)	(2.3)	(8.0)	(80.7)
Missouri	98	95	92	(96.8)	(0.0)	(5.4)	(75.0)
Montana	8	8	8	(100.0)	(0.0)	(0.0)	(100.0)
Nebraska	23	23	23	(100.0)	(0.0)	(17.4)	(69.6)
Nevada	95	93	92	(98.9)	(0.0)	(1.1)	(95.7)
New Hampshire	11	11	11	(100.0)	(0.0)	(0.0)	(81.8)
New Jersey	331	322	318	(98.8)	(0.9)	(1.6)	(87.4)
New Mexico	49	46	46	(100.0)	(0.0)	(0.0)	(91.3)
New York State ⁴	221	218	218	(100.0)	(0.0)	(2.3)	(86.7)
New York City	689	674	654	(97.0)	(0.3)	(2.6)	(84.6)
North Carolina	244	235	235	(100.0)	(0.9)	(0.9)	(81.3)
North Dakota	7	7	7	(100.0)	(0.0)	(0.0)	(100.0)
Ohio	145	143	141	(98.6)	(0.0)	(2.8)	(84.4)
Oklahoma	94	89	88	(98.9)	(15.9)	(12.5)	(60.2)
Oregon	74	74	74	(100.0)	(0.0)	(4.1)	(91.9)
Pennsylvania	260	252	251	(99.6)	(0.0)	(2.4)	(62.9)
Rhode Island	27	27	27	(100.0)	(0.0)	(3.7)	(88.9)
South Carolina	140	134	134	(100.0)	(0.0)	(4.5)	(86.6)
South Dakota	15	15	15	(100.0)	(0.0)	(6.7)	(86.7)
Tennessee	156	149	149	(100.0)	(0.0)	(2.7)	(91.9)
Texas	1,325	1,300	1,287	(99.0)	(0.5)	(2.5)	(90.9)
Utah	34	34	34	(100.0)	(2.9)	(5.9)	(82.4)
Vermont	8	8	8	(100.0)	(0.0)	(0.0)	(62.5)
Virginia	221	218	216	(99.1)	(0.0)	(0.5)	(95.4)
Washington	200	196	196	(100.0)	(0.0)	(2.0)	(88.3)
West Virginia	13	12	12	(100.0)	(0.0)	(0.0)	(91.7)
Wisconsin	70	69	68	(98.6)	(1.5)	(10.3)	(79.4)
Wyoming	4	4	4	(100.0)	(0.0)	(0.0)	(100.0)
American Samoa ⁵	3	3	3	(100.0)	(0.0)	(0.0)	(66.7)
Fed. States of Micronesia ⁵	140	140	140	(100.0)	(0.0)	(0.7)	(97.1)
Guam ⁵	78	78	76	(97.4)	(0.0)	(2.6)	(89.5)
Marshall Islands ⁵	149	149	149	(100.0)	(0.0)	(0.0)	(81.9)
N. Mariana Islands ⁵	27	27	27	(100.0)	(0.0)	(0.0)	(74.1)
Puerto Rico ⁵	50	47	39	(83.0)	(0.0)	(0.0)	(97.4)
Republic of Palau ⁵	8	8	8	(100.0)	(0.0)	(0.0)	(100.0)
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.

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Excluding cases with no information on drug regimen, 226 (2.17%) persons were not started on any drugs, 13 (0.12%) were started on one drug, and 1,045 (10.02%) had an initial multidrug regimen other than IR, IRZ, or IRZE.

Table 36. Culture-Positive Tuberculosis Cases and Percentages with Drug-Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2011

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	8,070	7,727	(95.7)	736	(9.5)	124	(1.6)
Alabama	119	108	(90.8)	5	(4.6)	2	(1.9)
Alaska	60	59	(98.3)	14	(23.7)	4	(6.8)
Arizona	193	190	(98.4)	15	(7.9)	1	(0.5)
Arkansas	60	59	(98.3)	4	(6.8)	1	(1.7)
California	1,840	1,773	(96.4)	192	(10.8)	34	(1.9)
Colorado	52	52	(100.0)	7	(13.5)	1	(1.9)
Connecticut	69	66	(95.7)	6	(9.1)	0	(0.0)
Delaware	19	19	(100.0)	2	(10.5)	0	(0.0)
District of Columbia	46	46	(100.0)	3	(6.5)	0	(0.0)
Florida	604	567	(93.9)	42	(7.4)	6	(1.1)
Georgia	240	237	(98.8)	23	(9.7)	1	(0.4)
Hawaii	76	75	(98.7)	7	(9.3)	1	(1.3)
Idaho	10	9	(90.0)	2	(22.2)	0	(0.0)
Illinois	274	248	(90.5)	22	(8.9)	3	(1.2)
Indiana	74	73	(98.6)	8	(11.0)	2	(2.7)
Iowa	31	8	(25.8)	--	--	--	--
Kansas	36	35	(97.2)	4	(11.4)	0	(0.0)
Kentucky	53	53	(100.0)	5	(9.4)	2	(3.8)
Louisiana	137	128	(93.4)	10	(7.8)	0	(0.0)
Maine	8	8	(100.0)	0	(0.0)	0	(0.0)
Maryland	166	165	(99.4)	13	(7.9)	2	(1.2)
Massachusetts	144	137	(95.1)	14	(10.2)	0	(0.0)
Michigan	123	122	(99.2)	9	(7.4)	1	(0.8)
Minnesota	101	101	(100.0)	12	(11.9)	3	(3.0)
Mississippi	66	66	(100.0)	6	(9.1)	0	(0.0)
Missouri	75	34	(45.3)	--	--	--	--
Montana	5	5	(100.0)	0	(0.0)	0	(0.0)
Nebraska	18	18	(100.0)	0	(0.0)	0	(0.0)
Nevada	65	60	(92.3)	8	(13.3)	0	(0.0)
New Hampshire	10	10	(100.0)	1	(10.0)	0	(0.0)
New Jersey	267	262	(98.1)	34	(13.0)	8	(3.1)
New Mexico	43	43	(100.0)	0	(0.0)	0	(0.0)
New York State ³	172	169	(98.3)	18	(10.7)	6	(3.6)
New York City	495	481	(97.2)	56	(11.6)	14	(2.9)
North Carolina	183	174	(95.1)	14	(8.0)	2	(1.1)
North Dakota	4	0	(0.0)	--	--	--	--
Ohio	112	110	(98.2)	7	(6.4)	2	(1.8)
Oklahoma	68	67	(98.5)	2	(3.0)	1	(1.5)
Oregon	59	59	(100.0)	5	(8.5)	1	(1.7)
Pennsylvania	199	177	(88.9)	22	(12.4)	4	(2.3)
Rhode Island	20	20	(100.0)	1	(5.0)	0	(0.0)
South Carolina	107	101	(94.4)	4	(4.0)	0	(0.0)
South Dakota	7	7	(100.0)	1	(14.3)	0	(0.0)
Tennessee	109	106	(97.2)	7	(6.6)	0	(0.0)
Texas	1,009	982	(97.3)	88	(9.0)	16	(1.6)
Utah	24	24	(100.0)	3	(12.5)	1	(4.2)
Vermont	6	6	(100.0)	0	(0.0)	0	(0.0)
Virginia	175	174	(99.4)	15	(8.6)	2	(1.1)
Washington	160	158	(98.8)	14	(8.9)	1	(0.6)
West Virginia	13	12	(92.3)	1	(8.3)	0	(0.0)
Wisconsin	60	60	(100.0)	6	(10.0)	2	(3.3)
Wyoming	4	4	(100.0)	0	(0.0)	0	(0.0)
American Samoa ⁴	3	3	(100.0)	1	(33.3)	0	(0.0)
Fed. States of Micronesia ⁴	52	47	(90.4)	1	(2.1)	1	(2.1)
Guam ⁴	43	39	(90.7)	4	(10.3)	0	(0.0)
Marshall Islands ⁴	59	54	(91.5)	2	(3.7)	1	(1.9)
N. Mariana Islands ⁴	16	15	(93.8)	2	(13.3)	0	(0.0)
Puerto Rico ⁴	46	34	(73.9)	--	--	--	--
Republic of Palau ⁴	7	6	(85.7)	0	(0.0)	0	(0.0)
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 37. Tuberculosis Cases and Percentages by HIV Status: Reporting Areas, 2011

Reporting Area	Total Cases	Cases with Information on HIV Status ¹		Cases in Persons with HIV-Positive Results ²	
		No.	(%)	No.	(%)
United States	10,528	8,683	(82.5)	672	(7.7)
Alabama	161	153	(95.0)	7	(4.6)
Alaska	67	58	(86.6)	1	(1.7)
Arizona	255	211	(82.7)	10	(4.7)
Arkansas	85	73	(85.9)	4	(5.5)
California	2,323	1,820	(78.3)	100	(5.5)
Colorado	70	64	(91.4)	3	(4.7)
Connecticut	83	59	(71.1)	7	(11.9)
Delaware	21	21	(100.0)	0	(0.0)
District of Columbia	56	54	(96.4)	9	(16.7)
Florida	754	623	(82.6)	113	(18.1)
Georgia	347	310	(89.3)	31	(10.0)
Hawaii	123	108	(87.8)	1	(0.9)
Idaho	12	8	(66.7)	0	(0.0)
Illinois	359	311	(86.6)	22	(7.1)
Indiana	100	74	(74.0)	6	(8.1)
Iowa	40	32	(80.0)	1	(3.1)
Kansas	36	35	(97.2)	1	(2.9)
Kentucky	71	64	(90.1)	6	(9.4)
Louisiana	167	145	(86.8)	12	(8.3)
Maine	9	8	(88.9)	0	(0.0)
Maryland	233	205	(88.0)	13	(6.3)
Massachusetts	196	117	(59.7)	10	(8.5)
Michigan	170	135	(79.4)	5	(3.7)
Minnesota	137	121	(88.3)	3	(2.5)
Mississippi	91	87	(95.6)	9	(10.3)
Missouri	98	79	(80.6)	6	(7.6)
Montana	8	8	(100.0)	0	(0.0)
Nebraska	23	19	(82.6)	2	(10.5)
Nevada	95	89	(93.7)	2	(2.2)
New Hampshire	11	8	(72.7)	1	(12.5)
New Jersey	331	247	(74.6)	26	(10.5)
New Mexico	49	45	(91.8)	3	(6.7)
New York State ³	221	174	(78.7)	11	(6.3)
New York City	689	546	(79.2)	58	(10.6)
North Carolina	244	238	(97.5)	12	(5.0)
North Dakota	7	6	(85.7)	0	(0.0)
Ohio	145	124	(85.5)	6	(4.8)
Oklahoma	94	59	(62.8)	1	(1.7)
Oregon	74	70	(94.6)	4	(5.7)
Pennsylvania	260	201	(77.3)	21	(10.4)
Rhode Island	27	26	(96.3)	2	(7.7)
South Carolina	140	124	(88.6)	12	(9.7)
South Dakota	15	12	(80.0)	0	(0.0)
Tennessee	156	149	(95.5)	20	(13.4)
Texas	1,325	1,081	(81.6)	95	(8.8)
Utah	34	33	(97.1)	1	(3.0)
Vermont	8	0	(0.0)	0	.
Virginia	221	203	(91.9)	9	(4.4)
Washington	200	171	(85.5)	6	(3.5)
West Virginia	13	10	(76.9)	0	(0.0)
Wisconsin	70	61	(87.1)	0	(0.0)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa ⁴	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia ⁴	140	117	(83.6)	0	(0.0)
Guam ⁴	78	48	(61.5)	0	(0.0)
Marshall Islands ⁴	149	88	(59.1)	1	(1.1)
N. Mariana Islands ⁴	27	19	(70.4)	0	(0.0)
Puerto Rico ⁴	50	40	(80.0)	9	(22.5)
Republic of Palau ⁴	8	8	(100.0)	1	(12.5)
U.S. Virgin Islands ⁴	...	...	...	...	...

¹ Includes only those cases in persons with negative, positive, or indeterminate HIV test results.

² Counts and percentages shown only for reporting areas with information reported for $\geq 75\%$ of cases. All 2011 Vermont cases are missing HIV status because these HIV data were not available at time of publication.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

See Technical Notes.

Table 38. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2009¹

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 Department and Private/Other
United States	11,528	11,282	11,028	(97.7)	(70.7)	(22.9)	(6.4)
Alabama	168	164	164	(100.0)	(96.3)	(3.7)	(0.0)
Alaska	37	36	36	(100.0)	(52.8)	(8.3)	(38.9)
Arizona	232	227	209	(92.1)	(77.5)	(22.5)	(0.0)
Arkansas	82	76	75	(98.7)	(80.0)	(20.0)	(0.0)
California	2,467	2,425	2,388	(98.5)	(50.6)	(34.9)	(14.4)
Colorado	85	84	83	(98.8)	(89.2)	(10.8)	(0.0)
Connecticut	95	92	92	(100.0)	(15.2)	(30.4)	(54.3)
Delaware	19	19	19	(100.0)	(100.0)	(0.0)	(0.0)
District of Columbia	41	39	39	(100.0)	(92.3)	(7.7)	(0.0)
Florida	822	795	790	(99.4)	(69.7)	(30.3)	(0.0)
Georgia	412	407	381	(93.6)	(74.3)	(25.7)	(0.0)
Hawaii	117	116	116	(100.0)	(73.3)	(26.7)	(0.0)
Idaho	18	18	18	(100.0)	(50.0)	(50.0)	(0.0)
Illinois	418	408	405	(99.3)	(85.2)	(14.8)	(0.0)
Indiana	119	117	117	(100.0)	(95.7)	(4.3)	(0.0)
Iowa	42	41	41	(100.0)	(19.5)	(80.5)	(0.0)
Kansas	64	61	61	(100.0)	(95.1)	(4.9)	(0.0)
Kentucky	75	74	73	(98.6)	(86.3)	(13.7)	(0.0)
Louisiana	192	184	184	(100.0)	(87.5)	(12.5)	(0.0)
Maine	9	9	9	(100.0)	(0.0)	(100.0)	(0.0)
Maryland	218	212	207	(97.6)	(93.2)	(6.8)	(0.0)
Massachusetts	242	239	232	(97.1)	(73.7)	(18.1)	(8.2)
Michigan	144	135	132	(97.8)	(81.8)	(18.2)	(0.0)
Minnesota	161	161	161	(100.0)	(55.3)	(44.7)	(0.0)
Mississippi	121	117	117	(100.0)	(97.4)	(2.6)	(0.0)
Missouri	79	78	0	(0.0)	--	--	--
Montana	8	8	8	(100.0)	(75.0)	(25.0)	(0.0)
Nebraska	32	31	30	(96.8)	(56.7)	(43.3)	(0.0)
Nevada	106	103	99	(96.1)	(97.0)	(3.0)	(0.0)
New Hampshire	16	16	16	(100.0)	(12.5)	(87.5)	(0.0)
New Jersey	405	401	401	(100.0)	(81.0)	(19.0)	(0.0)
New Mexico	48	41	41	(100.0)	(73.2)	(26.8)	(0.0)
New York State ³	246	240	239	(99.6)	(72.8)	(27.2)	(0.0)
New York City	759	743	709	(95.4)	(44.6)	(19.2)	(36.2)
North Carolina	250	244	244	(100.0)	(95.1)	(4.9)	(0.0)
North Dakota	5	5	0	(0.0)	--	--	--
Ohio	180	177	169	(95.5)	(79.3)	(20.7)	(0.0)
Oklahoma	102	98	98	(100.0)	(99.0)	(1.0)	(0.0)
Oregon	89	88	88	(100.0)	(48.9)	(29.5)	(21.6)
Pennsylvania	236	230	230	(100.0)	(81.3)	(18.7)	(0.0)
Rhode Island	24	24	24	(100.0)	(95.8)	(4.2)	(0.0)
South Carolina	164	158	158	(100.0)	(88.6)	(11.4)	(0.0)
South Dakota	18	17	17	(100.0)	(64.7)	(35.3)	(0.0)
Tennessee	202	199	199	(100.0)	(89.9)	(10.1)	(0.0)
Texas	1,501	1,473	1,459	(99.0)	(76.9)	(23.1)	(0.0)
Utah	37	36	36	(100.0)	(100.0)	(0.0)	(0.0)
Vermont	6	6	6	(100.0)	(83.3)	(16.7)	(0.0)
Virginia	271	269	269	(100.0)	(85.5)	(14.5)	(0.0)
Washington	256	254	254	(100.0)	(89.4)	(10.6)	(0.0)
West Virginia	19	19	19	(100.0)	(73.7)	(26.3)	(0.0)
Wisconsin	67	66	65	(98.5)	(72.3)	(27.7)	(0.0)
Wyoming	2	2	1	(50.0)	--	--	--
American Samoa ⁴	4	4	3	(75.0)	(100.0)	(0.0)	(0.0)
Fed. States of Micronesia ⁴	190	190	136	(71.6)	--	--	--
Guam ⁴	102	100	94	(94.0)	(94.7)	(5.3)	(0.0)
Marshall Islands ⁴	125	125	56	(44.8)	--	--	--
N. Mariana Islands ⁴	32	32	30	(93.8)	(100.0)	(0.0)	(0.0)
Puerto Rico ⁴	63	58	58	(100.0)	(89.7)	(8.6)	(1.7)
Republic of Palau ⁴	18	18	7	(38.9)	--	--	--
U.S. Virgin Islands ⁴	...	...	...	...	...	...	...

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 ≥75% of cases.

³ Excludes New York City.

⁴ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 39. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2009¹

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	11,528	11,153	11,031	(98.9)	(59.5)	(30.3)
Alabama	168	164	164	(100.0)	(39.0)	(61.0)
Alaska	37	36	36	(100.0)	(91.7)	(8.3)
Arizona	232	213	203	(95.3)	(73.9)	(17.7)
Arkansas	82	76	76	(100.0)	(30.3)	(13.2)
California	2,467	2,391	2,320	(97.0)	(51.9)	(31.4)
Colorado	85	84	84	(100.0)	(82.1)	(14.3)
Connecticut	95	91	91	(100.0)	(42.9)	(29.7)
Delaware	19	19	19	(100.0)	(47.4)	(52.6)
District of Columbia	41	39	39	(100.0)	(94.9)	(0.0)
Florida	822	790	789	(99.9)	(40.2)	(54.8)
Georgia	412	400	396	(99.0)	(79.3)	(17.9)
Hawaii	117	115	114	(99.1)	(32.5)	(50.9)
Idaho	18	18	18	(100.0)	(27.8)	(50.0)
Illinois	418	407	402	(98.8)	(46.0)	(38.3)
Indiana	119	116	116	(100.0)	(87.1)	(10.3)
Iowa	42	41	41	(100.0)	(70.7)	(9.8)
Kansas	64	61	61	(100.0)	(93.4)	(6.6)
Kentucky	75	73	70	(95.9)	(61.4)	(31.4)
Louisiana	192	184	184	(100.0)	(72.8)	(15.2)
Maine	9	9	9	(100.0)	(100.0)	(0.0)
Maryland	218	212	209	(98.6)	(78.0)	(18.2)
Massachusetts	242	227	225	(99.1)	(44.4)	(32.9)
Michigan	144	133	130	(97.7)	(50.8)	(49.2)
Minnesota	161	161	161	(100.0)	(88.8)	(11.2)
Mississippi	121	117	117	(100.0)	(59.8)	(40.2)
Missouri	79	77	76	(98.7)	(36.8)	(50.0)
Montana	8	8	8	(100.0)	(75.0)	(25.0)
Nebraska	32	31	30	(96.8)	(73.3)	(16.7)
Nevada	106	103	103	(100.0)	(76.7)	(22.3)
New Hampshire	16	16	16	(100.0)	(87.5)	(12.5)
New Jersey	405	400	399	(99.8)	(58.9)	(19.5)
New Mexico	48	41	41	(100.0)	(87.8)	(12.2)
New York State ⁴	246	239	239	(100.0)	(18.4)	(77.0)
New York City	759	723	721	(99.7)	(6.7)	(69.1)
North Carolina	250	242	242	(100.0)	(97.1)	(2.9)
North Dakota	5	5	5	(100.0)	(0.0)	(80.0)
Ohio	180	176	174	(98.9)	(72.4)	(10.3)
Oklahoma	102	85	84	(98.8)	(91.7)	(6.0)
Oregon	89	88	88	(100.0)	(83.0)	(14.8)
Pennsylvania	236	229	229	(100.0)	(69.4)	(21.0)
Rhode Island	24	24	24	(100.0)	(25.0)	(75.0)
South Carolina	164	158	158	(100.0)	(93.0)	(5.1)
South Dakota	18	17	17	(100.0)	(41.2)	(58.8)
Tennessee	202	199	199	(100.0)	(96.5)	(3.5)
Texas	1,501	1,467	1,459	(99.5)	(76.7)	(22.1)
Utah	37	36	36	(100.0)	(100.0)	(0.0)
Vermont	6	6	6	(100.0)	(50.0)	(50.0)
Virginia	271	268	268	(100.0)	(92.5)	(5.2)
Washington	256	251	251	(100.0)	(70.1)	(15.5)
West Virginia	19	19	18	(94.7)	(72.2)	(16.7)
Wisconsin	67	66	64	(97.0)	(54.7)	(43.8)
Wyoming	2	2	2	(100.0)	(50.0)	(50.0)
American Samoa ⁵	4	4	4	(100.0)	(0.0)	(100.0)
Fed. States of Micronesia ⁵	190	190	189	(99.5)	(77.2)	(20.1)
Guam ⁵	102	100	95	(95.0)	(96.8)	(2.1)
Marshall Islands ⁵	125	125	122	(97.6)	(93.4)	(6.6)
N. Mariana Islands ⁵	32	32	29	(90.6)	(100.0)	(0.0)
Puerto Rico ⁵	63	58	42	(72.4)	--	--
Republic of Palau ⁵	18	18	2	(11.1)	--	--
U.S. Virgin Islands ⁵	...	...	...	...	...	...

¹ Most recent year for which data are available.

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

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

⁴ Excludes New York City.

⁵ Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 40. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2009¹

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	11,528	9854	(87.7)	(95.3)	629	(63.0)	10487	(93.3)
Alabama	168	146	(93.2)	(98.6)	8	(75.0)	154	(97.4)
Alaska	37	32	(84.4)	(87.5)	2	(100.0)	34	(88.2)
Arizona	232	178	(82.6)	(87.1)	29	(37.9)	207	(80.2)
Arkansas	82	59	(86.4)	(93.2)	7	(28.6)	66	(86.4)
California	2,467	2,145	(83.2)	(91.9)	66	(78.8)	2,212	(91.5)
Colorado	85	69	(94.2)	(100.0)	10	(60.0)	79	(94.9)
Connecticut	95	82	(86.6)	(98.8)	3	(33.3)	85	(96.5)
Delaware	19	18	(77.8)	(88.9)	0	...	18	(88.9)
District of Columbia	41	32	(81.3)	(96.9)	4	(75.0)	36	(94.4)
Florida	822	695	(93.2)	(98.3)	39	(56.4)	734	(96.0)
Georgia	412	348	(83.6)	(92.8)	26	(57.7)	374	(90.4)
Hawaii	117	96	(83.3)	(99.0)	7	(57.1)	103	(96.1)
Idaho	18	17	(94.1)	(94.1)	1	(0.0)	18	(88.9)
Illinois	418	364	(87.4)	(97.0)	25	(64.0)	389	(94.9)
Indiana	119	106	(90.6)	(97.2)	9	(77.8)	115	(95.7)
Iowa	42	39	(87.2)	(97.4)	1	(0.0)	40	(95.0)
Kansas	64	55	(100.0)	(100.0)	3	(100.0)	58	(100.0)
Kentucky	75	62	(91.9)	(96.8)	1	(100.0)	63	(96.8)
Louisiana	192	170	(86.5)	(95.3)	3	(66.7)	173	(94.8)
Maine	9	7	(100.0)	(100.0)	1	(0.0)	8	(87.5)
Maryland	218	191	(88.5)	(96.3)	13	(84.6)	204	(95.6)
Massachusetts	242	207	(83.1)	(96.6)	14	(71.4)	221	(95.0)
Michigan	144	114	(89.5)	(94.7)	12	(58.3)	126	(91.3)
Minnesota	161	146	(91.8)	(97.3)	13	(61.5)	159	(94.3)
Mississippi	121	106	(88.7)	(96.2)	5	(100.0)	111	(96.4)
Missouri	79	74	(81.1)	(91.9)	3	(66.7)	77	(90.9)
Montana	8	7	(100.0)	(100.0)	0	...	7	(100.0)
Nebraska	32	29	(86.2)	(89.7)	1	(100.0)	30	(90.0)
Nevada	106	94	(87.2)	(97.9)	6	(50.0)	100	(95.0)
New Hampshire	16	15	(93.3)	(100.0)	0	...	15	(100.0)
New Jersey	405	349	(92.6)	(97.4)	30	(60.0)	379	(94.5)
New Mexico	48	32	(90.6)	(100.0)	3	(66.7)	35	(97.1)
New York State ⁶	246	204	(82.4)	(91.2)	14	(85.7)	221	(89.6)
New York City	759	665	(92.2)	(97.1)	27	(81.5)	692	(96.5)
North Carolina	250	221	(93.2)	(99.5)	6	(66.7)	227	(98.7)
North Dakota	5	5	(60.0)	(100.0)	0	...	5	(100.0)
Ohio	180	147	(91.2)	(95.2)	9	(88.9)	156	(94.9)
Oklahoma	102	83	(89.2)	(96.4)	1	(0.0)	84	(95.2)
Oregon	89	79	(97.5)	(100.0)	6	(83.3)	85	(98.8)
Pennsylvania	236	202	(83.7)	(95.5)	11	(81.8)	213	(94.8)
Rhode Island	24	23	(87.0)	(95.7)	1	(0.0)	24	(91.7)
South Carolina	164	137	(92.0)	(97.1)	9	(88.9)	146	(96.6)
South Dakota	18	17	(88.2)	(94.1)	0	...	17	(94.1)
Tennessee	202	176	(93.8)	(98.3)	11	(81.8)	187	(97.3)
Texas	1,501	1,228	(87.6)	(95.4)	156	(51.9)	1,384	(90.5)
Utah	37	28	(100.0)	(100.0)	5	(100.0)	33	(100.0)
Vermont	6	5	(80.0)	(100.0)	1	(0.0)	6	(83.3)
Virginia	271	244	(87.7)	(96.7)	11	(63.6)	255	(95.3)
Washington	256	232	(91.4)	(97.0)	12	(33.3)	244	(93.9)
West Virginia	19	16	(88.8)	(91.7)	4	(75.0)	112	(91.1)
Wisconsin	67	56	(82.1)	(96.4)	3	(66.7)	59	(94.9)
Wyoming	2	2	(50.0)	(100.0)	0	...	2	(100.0)
American Samoa ⁷	4	3	(100.0)	(100.0)	0	...	3	(100.0)
Fed. States of Micronesia ⁷	190	175	(82.9)	(91.4)	10	(80.0)	186	(90.3)
Guam ⁷	102	93	(96.8)	(96.8)	4	(50.0)	97	(94.8)
Marshall Islands ⁷	125	108	(88.9)	(91.7)	4	(75.0)	112	(91.1)
N. Mariana Islands ⁷	32	28	(96.4)	(100.0)	1	(0.0)	29	(96.6)
Puerto Rico ⁷	63	51	(86.3)	(86.3)	1	(100.0)	52	(86.5)
Republic of Palau ⁷	18	15	(26.7)	(26.7)	1	(0.0)	16	(25.0)
U.S. Virgin Islands ⁷	0	0	--	--	0	...	0	--

¹ Most recent year for which data are available.

² Initial isolate susceptible to rifampin (n=7,258) or susceptibility unknown (n=187); culture negative (n=2,008); culture status unknown (n=401).

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 Excludes initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture, and those who moved out of country during 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 41. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2009¹

Reporting Area	Cases with Initial Drug Regimen Prescribed ²		Completed Therapy		Adverse Event		Moved ³		Lost		Refused		Died ⁴		Unknown ⁵	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	11,153	(87.8)	9,790	(87.8)	20	(0.2)	99	(0.9)	192	(1.7)	83	(0.7)	666	(6.0)	303	(2.7)
Alabama	164	(91.5)	150	(91.5)	0	(0.0)	0	(0.0)	2	(1.2)	1	(0.6)	10	(6.1)	1	(0.6)
Alaska	36	(83.3)	30	(83.3)	0	(0.0)	1	(2.8)	0	(0.0)	3	(8.3)	2	(5.6)	0	(0.0)
Arizona	213	(77.9)	166	(77.9)	1	(0.5)	0	(0.0)	7	(3.3)	0	(0.0)	6	(2.8)	33	(15.5)
Arkansas	76	(75.0)	57	(75.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(2.6)	10	(13.2)	7	(9.2)
California	2,391	(84.7)	2,025	(84.7)	3	(0.1)	90	(3.8)	23	(1.0)	17	(0.7)	179	(7.5)	54	(2.3)
Colorado	84	(89.3)	75	(89.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.2)	5	(6.0)	3	(3.6)
Connecticut	91	(90.1)	82	(90.1)	0	(0.0)	0	(0.0)	3	(3.3)	0	(0.0)	6	(6.6)	0	(0.0)
Delaware	19	(84.2)	16	(84.2)	1	(5.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.3)	1	(5.3)
District of Columbia	39	(87.2)	34	(87.2)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(7.7)	2	(5.1)
Florida	790	(89.2)	705	(89.2)	1	(0.1)	0	(0.0)	9	(1.1)	4	(0.5)	56	(7.1)	15	(1.9)
Georgia	400	(84.5)	338	(84.5)	1	(0.3)	1	(0.3)	17	(4.3)	2	(0.5)	26	(6.5)	15	(3.8)
Hawaii	115	(86.1)	99	(86.1)	0	(0.0)	0	(0.0)	4	(3.5)	0	(0.0)	12	(10.4)	0	(0.0)
Idaho	18	(88.9)	16	(88.9)	0	(0.0)	0	(0.0)	1	(5.6)	0	(0.0)	0	(0.0)	1	(5.6)
Illinois	407	(90.7)	369	(90.7)	0	(0.0)	0	(0.0)	15	(3.7)	3	(0.7)	18	(4.4)	2	(0.5)
Indiana	116	(94.8)	110	(94.8)	0	(0.0)	0	(0.0)	1	(0.9)	3	(2.6)	1	(0.9)	1	(0.9)
Iowa	41	(92.7)	38	(92.7)	0	(0.0)	1	(2.4)	1	(2.4)	0	(0.0)	1	(2.4)	0	(0.0)
Kansas	61	(95.1)	58	(95.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(4.9)	0	(0.0)
Kentucky	73	(83.6)	61	(83.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	10	(13.7)	2	(2.7)
Louisiana	184	(89.1)	164	(89.1)	1	(0.5)	0	(0.0)	7	(3.8)	0	(0.0)	11	(6.0)	1	(0.5)
Maine	9	(77.8)	7	(77.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)	1	(11.1)
Maryland	212	(92.0)	195	(92.0)	0	(0.0)	0	(0.0)	7	(3.3)	2	(0.9)	8	(3.8)	0	(0.0)
Massachusetts	227	(92.5)	210	(92.5)	0	(0.0)	0	(0.0)	1	(0.4)	2	(0.9)	6	(2.6)	8	(3.5)
Michigan	133	(86.5)	115	(86.5)	0	(0.0)	0	(0.0)	5	(3.8)	1	(0.8)	7	(5.3)	5	(3.8)
Minnesota	161	(93.2)	150	(93.2)	0	(0.0)	0	(0.0)	0	(0.0)	2	(1.2)	2	(1.2)	7	(4.3)
Mississippi	117	(91.5)	107	(91.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(5.1)	4	(3.4)
Missouri	77	(90.9)	70	(90.9)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(9.1)
Montana	8	(87.5)	7	(87.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)
Nebraska	31	(87.1)	27	(87.1)	0	(0.0)	0	(0.0)	2	(6.5)	0	(0.0)	1	(3.2)	1	(3.2)
Nevada	103	(92.2)	95	(92.2)	0	(0.0)	0	(0.0)	3	(2.9)	0	(0.0)	3	(2.9)	2	(1.9)
New Hampshire	16	(93.8)	15	(93.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)	0	(0.0)
New Jersey	400	(89.5)	358	(89.5)	0	(0.0)	0	(0.0)	16	(4.0)	1	(0.3)	21	(5.3)	4	(1.0)
New Mexico	41	(82.9)	34	(82.9)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(14.6)	1	(2.4)

Table 41. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2009¹

Reporting Area	Cases with Initial Drug Regimen Prescribed ²		Completed Therapy		Adverse Event		Moved ³		Lost		Refused		Died ⁴		Unknown ⁵	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State ⁶	239	(84.1)	201	(0.0)	0	(0.0)	0	(0.0)	4	(1.7)	3	(1.3)	18	(7.5)	13	(5.4)
New York City	723	(92.4)	668	(0.0)	0	(0.0)	6	(0.8)	6	(0.8)	7	(1.0)	31	(4.3)	5	(0.7)
North Carolina	242	(92.6)	224	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.4)	15	(6.2)	2	(0.8)
North Dakota	5	(100.0)	5	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	176	(84.1)	148	(0.0)	0	(0.0)	0	(0.0)	4	(2.3)	2	(1.1)	20	(11.4)	2	(1.1)
Oklahoma	85	(94.1)	80	(1.2)	0	(0.0)	0	(0.0)	1	(1.2)	1	(1.2)	1	(1.2)	1	(1.2)
Oregon	88	(95.5)	84	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(3.4)	1	(1.1)
Pennsylvania	229	(88.2)	202	(0.4)	1	(0.4)	0	(0.0)	6	(2.6)	1	(0.4)	16	(7.0)	3	(1.3)
Rhode Island	24	(91.7)	22	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.2)	0	(0.0)	1	(4.2)
South Carolina	158	(89.2)	141	(1.3)	2	(1.3)	0	(0.0)	3	(1.9)	0	(0.0)	12	(7.6)	0	(0.0)
South Dakota	17	(94.1)	16	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.9)	0	(0.0)	0	(0.0)
Tennessee	199	(91.5)	182	(0.0)	0	(0.0)	0	(0.0)	2	(1.0)	1	(0.5)	12	(6.0)	2	(1.0)
Texas	1,467	(85.4)	1,253	(0.2)	3	(0.2)	0	(0.0)	38	(2.6)	12	(0.8)	83	(5.7)	78	(5.3)
Utah	36	(91.7)	33	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(8.3)	0	(0.0)
Vermont	6	(83.3)	5	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)
Virginia	268	(90.7)	243	(0.0)	0	(0.0)	0	(0.0)	3	(1.1)	4	(1.5)	13	(4.9)	5	(1.9)
Washington	251	(91.2)	229	(1.2)	3	(1.2)	0	(0.0)	1	(0.4)	4	(1.6)	7	(2.8)	7	(2.8)
West Virginia	19	(68.4)	13	(10.5)	2	(10.5)	0	(0.0)	0	(0.0)	1	(5.3)	2	(10.5)	1	(5.3)
Wisconsin	66	(84.8)	56	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(10.6)	3	(4.5)
Wyoming	2	(100.0)	2	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa ⁷	4	(75.0)	3	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)
Fed. States of Micronesia ⁷	190	(88.9)	169	(0.0)	0	(0.0)	0	(0.0)	1	(0.5)	7	(3.7)	4	(2.1)	9	(4.7)
Guam ⁷	100	(92.0)	92	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(3.0)	5	(5.0)
Marshall Islands ⁷	125	(81.6)	102	(0.0)	0	(0.0)	0	(0.0)	7	(5.6)	0	(0.0)	13	(10.4)	3	(2.4)
N. Mariana Islands ⁷	32	(87.5)	28	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(9.4)	1	(3.1)
Puerto Rico ⁷	58	(77.6)	45	(0.0)	0	(0.0)	0	(0.0)	1	(1.7)	2	(3.4)	6	(10.3)	4	(6.9)
Republic of Palau ⁷	18	(22.2)	4	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(11.1)	12	(66.7)
U.S. Virgin Islands ⁷	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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).

³Moved variable was utilized by the following reporting areas: Alaska, California, Georgia, Iowa, and New York City

⁴Died = Died of any cause.

⁵Includes cases reported as Other, Missing, or Unknown.

⁶Excludes New York City.

⁷Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 42. Completion of Tuberculosis Therapy (COT) Cases and Percentages¹ by Hispanic Ethnicity and Non-Hispanic Race:
Reporting Areas, 2009²

Reporting Area	Total Cases ³		Hispanic ⁴		Non-Hispanic										Multiple Race		Unknown or Missing			
	No.	(%)	No.	(%)	American Indian or Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
					No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	9854	(87.7)	74	(85.1)	2784	(87.4)	2502	(87.9)	67	(89.6)	1547	(88.1)	34	(88.2)	25	(84.0)				
Alabama	146	(79.2)	0	...	9	(100.0)	65	(93.8)	0	...	48	(97.9)	0	...	0	...	0	...	0	...
Alaska	32	...	20	(80.0)	9	(88.9)	1	(100.0)	0	...	2	(100.0)	0	...	0	...	0	...	0	...
Arizona	178	(79.2)	13	(84.6)	43	(93.0)	20	(85.0)	1	(100.0)	24	(70.8)	0	...	0	...	0	...	0	...
Arkansas	59	(100.0)	0	...	3	(100.0)	19	(78.9)	9	(100.0)	19	(78.9)	0	...	0	...	0	...	0	...
California	2145	(81.0)	1	(100.0)	968	(85.3)	166	(80.1)	11	(90.9)	183	(84.2)	5	(80.0)	12	(83.3)				
Colorado	69	(96.7)	1	(100.0)	17	(94.1)	11	(100.0)	0	...	10	(80.0)	0	...	0	...	0	...	0	...
Connecticut	82	(96.0)	0	...	20	(75.0)	17	(76.5)	0	...	20	(95.0)	0	...	0	...	0	...	0	...
Delaware	18	(85.7)	0	...	1	(100.0)	4	(75.0)	0	...	6	(66.7)	0	...	0	...	0	...	0	...
District of Columbia	32	(83.3)	0	...	3	(66.7)	19	(84.2)	0	...	4	(75.0)	0	...	0	...	0	...	0	...
Florida	695	(96.0)	1	(100.0)	65	(93.8)	291	(93.1)	2	(50.0)	161	(90.7)	0	...	0	...	0	...	0	...
Georgia	348	(75.7)	0	...	59	(86.4)	153	(84.3)	0	...	62	(88.7)	0	...	0	...	0	...	0	...
Hawaii	96	(100.0)	0	...	71	(78.9)	2	(100.0)	17	(94.1)	4	(100.0)	1	(100.0)	0	...	0	...	0	...
Idaho	17	(87.5)	0	...	2	(100.0)	1	(100.0)	0	...	6	(100.0)	0	...	0	...	0	...	0	...
Illinois	364	(84.9)	1	(100.0)	113	(90.3)	110	(86.4)	0	...	47	(87.2)	0	...	0	...	0	...	0	...
Indiana	106	(91.3)	0	...	21	(90.5)	31	(93.5)	0	...	31	(87.1)	0	...	0	...	0	...	0	...
Iowa	39	(100.0)	1	(0.0)	13	(76.9)	2	(100.0)	2	(100.0)	16	(93.8)	0	...	0	...	0	...	0	...
Kansas	55	(100.0)	0	...	19	(100.0)	12	(100.0)	1	(100.0)	10	(100.0)	0	...	0	...	0	...	0	...
Kentucky	62	(90.0)	0	...	5	(100.0)	13	(92.3)	0	...	33	(93.9)	1	(0.0)	0	...	0	...	0	...
Louisiana	170	(90.0)	1	(100.0)	17	(82.4)	87	(86.2)	1	(0.0)	53	(88.7)	1	(100.0)	0	...	0	...	0	...
Maine	7	...	0	...	0	...	4	(100.0)	0	...	3	(100.0)	0	...	0	...	0	...	0	...
Maryland	191	(87.5)	0	...	67	(91.0)	81	(86.4)	0	...	11	(90.9)	0	...	0	...	0	...	0	...
Massachusetts	207	(82.1)	0	...	60	(80.0)	65	(83.1)	0	...	42	(88.1)	0	...	1	(100.0)				
Michigan	114	(80.0)	0	...	24	(100.0)	49	(87.8)	0	...	21	(90.5)	0	...	0	...	0	...	0	...
Minnesota	146	(92.9)	1	(100.0)	39	(92.3)	74	(90.5)	0	...	18	(94.4)	0	...	0	...	0	...	0	...
Mississippi	106	(85.7)	0	...	4	(75.0)	74	(87.8)	0	...	21	(95.2)	0	...	0	...	0	...	0	...
Missouri	74	(80.0)	0	...	24	(75.0)	20	(85.0)	0	...	20	(85.0)	0	...	0	...	0	...	0	...
Montana	7	...	1	(100.0)	3	(100.0)	1	(100.0)	0	...	2	(100.0)	0	...	0	...	0	...	0	...
Nebraska	29	(90.9)	0	...	4	(75.0)	12	(83.3)	0	...	1	(100.0)	1	(100.0)	0	...	0	...	0	...
Nevada	94	(90.9)	2	(100.0)	39	(87.2)	12	(75.0)	1	(0.0)	18	(94.4)	0	...	0	...	0	...	0	...
New Hampshire	15	(0.0)	0	...	8	(100.0)	4	(100.0)	0	...	2	(100.0)	0	...	0	...	0	...	0	...
New Jersey	349	(94.3)	0	...	124	(91.1)	76	(90.8)	0	...	40	(95.0)	3	(100.0)	0	...	0	...	0	...

Table 42. (Cont'd) Completion of Tuberculosis Therapy (COT) Cases and Percentages¹ by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2009²

Reporting Area	Total Cases ³		Non-Hispanic										Hispanic ⁴		Unknown or Missing (%)
	No.	No. (%)	American Indian or Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Multiple Race	Hispanic ⁴		Non-Hispanic				
									No.	(%)	No.	(%)	No.	(%)	
New Mexico	32	20 (95.0)	5 (100.0)	2 (100.0)	2 (50.0)	0	3 (66.7)	0	0	3 (66.7)	0	0	0	...	
New York State ⁵	204	61 (85.2)	0	64 (78.1)	33 (84.8)	0	43 (81.4)	0	0	43 (81.4)	0	3	3	(100.0)	
New York City	665	210 (95.7)	1 (100.0)	230 (89.1)	161 (91.9)	1 (100.0)	54 (94.4)	2	2	54 (94.4)	2	6	6	(83.3)	
North Carolina	221	47 (93.6)	5 (100.0)	25 (100.0)	97 (91.8)	0	45 (91.1)	2	2	45 (91.1)	2	0	0	...	
North Dakota	5	0	1 (100.0)	3 (66.7)	1 (0.0)	0	0	0	0	0	0	0	0	...	
Ohio	147	23 (91.3)	0	30 (93.3)	53 (92.5)	0	39 (99.7)	0	2	39 (99.7)	0	2	2	(50.0)	
Oklahoma	83	12 (83.3)	9 (88.9)	11 (100.0)	13 (76.9)	4 (100.0)	28 (99.3)	6	6	28 (99.3)	6	0	0	...	
Oregon	79	26 (100.0)	0	21 (90.5)	5 (100.0)	4 (100.0)	23 (100.0)	0	0	23 (100.0)	0	0	0	...	
Pennsylvania	202	22 (95.5)	0	64 (79.7)	65 (80.0)	0	47 (87.2)	4	4	47 (87.2)	4	0	0	...	
Rhode Island	23	6 (83.3)	0	9 (100.0)	2 (100.0)	0	6 (66.7)	0	0	6 (66.7)	0	0	0	...	
South Carolina	137	37 (91.9)	0	16 (100.0)	69 (91.3)	0	15 (86.7)	0	0	15 (86.7)	0	0	0	...	
South Dakota	17	1 (100.0)	5 (60.0)	1 (100.0)	4 (100.0)	0	5 (100.0)	1	1	5 (100.0)	1	0	0	...	
Tennessee	176	25 (100.0)	2 (100.0)	25 (96.0)	69 (89.9)	0	54 (94.4)	1	1	54 (94.4)	1	0	0	...	
Texas	1228	584 (90.4)	0	204 (88.2)	277 (84.8)	0	162 (81.5)	1	1	162 (81.5)	1	0	0	...	
Utah	28	11 (100.0)	0	9 (100.0)	3 (100.0)	3 (100.0)	2 (100.0)	0	0	2 (100.0)	0	0	0	...	
Vermont	5	1 (100.0)	0	2 (50.0)	1 (100.0)	0	1 (100.0)	0	0	1 (100.0)	0	0	0	...	
Virginia	244	40 (87.5)	0	97 (87.6)	87 (90.8)	0	18 (77.8)	2	2	18 (77.8)	2	0	0	...	
Washington	232	31 (93.5)	3 (66.7)	91 (93.4)	51 (88.2)	10 (80.0)	42 (92.9)	3	3	42 (92.9)	3	1	1	(100.0)	
West Virginia	16	1 (100.0)	0	6 (50.0)	2 (100.0)	0	7 (71.4)	0	0	7 (71.4)	0	0	0	...	
Wisconsin	56	12 (75.0)	0	19 (89.5)	10 (100.0)	0	15 (66.7)	0	0	15 (66.7)	0	0	0	...	
Wyoming	2	0	0	1 (100.0)	1 (0.0)	0	0	0	0	0	0	0	0	...	
American Samoa ⁶	3	0	0	1 (100.0)	0	2 (100.0)	0	0	0	0	0	0	0	...	
Fed. States of Micronesia ⁶	175	1 (0.0)	0	2 (50.0)	0	170 (84.1)	0	0	0	0	0	2	2	(50.0)	
Guam ⁶	93	1 (100.0)	0	44 (97.7)	0	46 (95.7)	0	1	1	46 (95.7)	1	1	1	(100.0)	
Marshall Islands ⁶	108	0	0	0	0	106 (89.6)	1 (100.0)	1	1	106 (89.6)	1	0	0	...	
N. Mariana Islands ⁶	28	0	0	12 (91.7)	0	14 (100.0)	0	0	0	14 (100.0)	0	2	2	(100.0)	
Puerto Rico ⁶	51	51 (86.3)	0	0	0	0	0	0	0	0	0	0	0	...	
Republic of Palau ⁶	15	--	--	--	--	--	--	--	--	--	--	--	--	...	
U.S. Virgin Islands ⁶	0	--	--	--	--	--	--	--	--	--	--	--	--	...	

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

² Most recent year for which data are available.

³ Therapy < 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningial disease, or pediatric patient (aged <15) with miliary disease or positive blood culture, and those who moved out of country during 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 43. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2005–2009¹

Reporting Area	Year									
	2005		2006		2007		2008		2009	
	No. ²	(%) ³	No.^{2}	(%)^{3}	No.^{2}	(%)^{3}	No.^{2}	(%)^{3}	No.^{2}	(%)^{3}
United States	12349	(83.2)	12032	(84.1)	11759	(84.8)	11388	(85.2)	9854	(87.7)
Alabama	194	(89.7)	166	(86.7)	149	(91.9)	150	(90.0)	146	(93.2)
Alaska	57	(93.0)	63	(88.9)	43	(88.4)	45	(88.9)	32	(84.4)
Arizona	245	(83.7)	272	(79.8)	242	(71.1)	195	(72.8)	178	(82.6)
Arkansas	103	...	89	(89.9)	96	(92.7)	74	(79.7)	59	(86.4)
California	2541	(81.3)	2398	(81.4)	2424	(79.6)	2386	(83.9)	2145	(83.2)
Colorado	85	(96.5)	108	(88.9)	91	(97.8)	94	(92.6)	69	(94.2)
Connecticut	87	(83.9)	77	(88.3)	96	(82.3)	88	(90.9)	82	(86.6)
Delaware	24	(87.5)	24	(83.3)	18	(94.4)	22	(81.8)	18	(77.8)
District of Columbia	49	(87.8)	64	(70.3)	51	(70.6)	49	(79.6)	32	(81.3)
Florida	968	(88.6)	919	(89.4)	884	(90.2)	826	(89.6)	695	(93.2)
Georgia	449	(82.0)	445	(82.5)	422	(85.1)	413	(87.9)	348	(83.6)
Hawaii	95	(74.7)	101	(79.2)	109	(77.1)	115	(77.4)	96	(83.3)
Idaho	21	(76.2)	18	(77.8)	8	(75.0)	11	(90.9)	17	(94.1)
Illinois	524	(80.0)	500	(82.2)	455	(84.6)	408	(86.8)	364	(87.4)
Indiana	133	(91.0)	116	(90.5)	118	(89.0)	102	(91.2)	106	(90.6)
Iowa	52	(84.6)	37	(86.5)	36	(88.9)	47	(89.4)	39	(87.2)
Kansas	57	(86.0)	73	(93.2)	53	(83.0)	54	(92.6)	55	(100.0)
Kentucky	104	(87.5)	75	(84.0)	108	(89.8)	88	(80.7)	62	(91.9)
Louisiana	218	...	178	(77.0)	196	(79.6)	210	(79.5)	170	(86.5)
Maine	16	(75.0)	13	(100.0)	18	(88.9)	8	(87.5)	7	(100.0)
Maryland	249	(89.2)	226	(90.7)	246	(89.4)	248	(89.1)	191	(88.5)
Massachusetts	235	(78.7)	239	(85.8)	205	(81.0)	235	(80.9)	207	(83.1)
Michigan	201	(80.1)	200	(79.5)	186	(81.2)	146	(82.9)	114	(89.5)
Minnesota	183	(92.9)	200	(90.0)	225	(88.9)	199	(90.5)	146	(91.8)
Mississippi	84	(84.5)	97	(85.6)	118	(95.8)	96	(92.7)	106	(88.7)
Missouri	91	(85.7)	92	(78.3)	106	(76.4)	100	(86.0)	74	(81.1)
Montana	8	(87.5)	10	(90.0)	11	(100.0)	5	(100.0)	7	(100.0)
Nebraska	29	(75.9)	23	(100.0)	24	(95.8)	30	(80.0)	29	(86.2)
Nevada	106	...	82	(90.2)	82	(86.6)	89	(83.1)	94	(87.2)
New Hampshire	4	(75.0)	15	(93.3)	10	(90.0)	17	(82.4)	15	(93.3)
New Jersey	423	(86.5)	463	(84.9)	411	(85.2)	379	(87.6)	349	(92.6)
New Mexico	26	(80.8)	37	(81.1)	43	(90.7)	48	(91.7)	32	(90.6)
New York State ⁴	266	(87.6)	271	(85.6)	228	(87.3)	275	(85.8)	204	(82.4)
New York City	844	(82.0)	823	(84.4)	792	(90.7)	798	(88.7)	665	(92.2)
North Carolina	290	(85.9)	339	(87.3)	312	(91.7)	304	(90.8)	221	(93.2)
North Dakota	6	(50.0)	10	(60.0)	4	(100.0)	3	(33.3)	5	(60.0)
Ohio	231	(87.0)	205	(82.9)	221	(87.3)	189	(85.7)	147	(91.2)
Oklahoma	118	(85.6)	129	(81.4)	131	(81.7)	86	(76.7)	83	(89.2)
Oregon	95	(93.7)	71	(91.5)	88	(90.9)	70	(97.1)	79	(97.5)
Pennsylvania	270	...	290	(83.4)	249	(84.3)	333	(81.1)	202	(83.7)
Rhode Island	41	(82.9)	24	(79.2)	40	(90.0)	34	(85.3)	23	(87.0)
South Carolina	231	(87.4)	194	(86.1)	188	(89.4)	160	(85.0)	137	(92.0)
South Dakota	13	(53.8)	12	(50.0)	11	(100.0)	15	(93.3)	17	(88.2)
Tennessee	267	(88.8)	239	(88.3)	202	(86.6)	247	(88.7)	176	(93.8)
Texas	1342	(82.3)	1363	(83.1)	1340	(81.9)	1319	(79.5)	1228	(87.6)
Utah	26	(96.2)	32	(84.4)	35	(94.3)	23	(95.7)	28	(100.0)
Vermont	7	(100.0)	6	(83.3)	3	(33.3)	5	(60.0)	5	(80.0)
Virginia	321	(83.2)	292	(85.3)	292	(88.4)	269	(83.6)	244	(87.7)
Washington	227	(83.3)	227	(81.9)	264	(88.6)	197	(90.4)	232	(91.4)
West Virginia	24	(58.3)	18	(77.8)	16	(100.0)	22	(95.5)	16	(68.8)
Wisconsin	69	(84.1)	63	(88.9)	57	(77.2)	57	(73.7)	56	(82.1)
Wyoming	0	...	4	(100.0)	2	(50.0)	5	(80.0)	2	(50.0)
American Samoa ⁵	5	...	2	(100.0)	3	...	3	(100.0)	3	(100.0)
Fed. States of Micronesia ⁵	71	...	76	...	126	...	157	...	175	(82.9)
Guam ⁵	58	(79.3)	52	(86.5)	90	(91.1)	84	(92.9)	93	(96.8)
Marshall Islands ⁵	63	...	33	...	124	...	115	(80.0)	108	(88.9)
N. Mariana Islands ⁵	54	...	44	...	38	(84.2)	34	(70.6)	28	(96.4)
Puerto Rico ⁵	86	(87.2)	89	(96.6)	81	(97.5)	69	(95.7)	51	(86.3)
Republic of Palau ⁵	10	(100.0)	9	(66.7)	12	...	14	...	15	...
U.S. Virgin Islands ⁵	0	...	0	...	0	...	4	(50.0)	0	...

¹ Most recent year for which data are available.

² Total cases for which therapy less than 1 year indicated in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die 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, and those who moved out of country during treatment.

³ Percentage of total cases in persons who completed therapy within one year for whom therapy less than 1 year was indicated.

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.

Morbidity Tables

Cities and Metropolitan Statistical Areas, 2011

Table 44. Tuberculosis Cases in Selected Cities¹: 2011 and 2010

City	Cases ²	
	2011	2010
Albuquerque, NM	12	10
Anaheim, CA	24	30
Arlington, TX	21	19
Atlanta, GA	15	9
Austin, TX	45	60
Baltimore, MD	39	41
Birmingham, AL	25	17
Boston, MA	44	58
Buffalo, NY	13	9
Charlotte, NC	35	38
Chicago, IL	166	161
Cincinnati, OH	8	22
Cleveland, OH	27	26
Colorado Springs, CO	7	8
Columbus, OH	38	54
Corpus Christi, TX	10	12
Dallas, TX	130	131
Denver, CO	23	25
Detroit, MI	48	49
El Paso, TX	28	40
Fort Worth, TX	35	70
Fresno, CA	25	34
Honolulu, HI	51	52
Houston, TX	225	234
Indianapolis, IN	30	35
Jacksonville, FL	66	67
Kansas City, MO	16	14
Las Vegas, NV	76	85
Long Beach, CA	29	42
Los Angeles, CA	246	238
Louisville, KY	22	35
Memphis, TN	45	46
Mesa, AZ	13	10
Miami, FL	111	98
Milwaukee, WI	19	19
Minneapolis, MN	38	39
Nashville, TN	29	30
Newark, NJ	20	25
New Orleans, LA	24	44
New York, NY	689	711
Norfolk, VA	4	3
Oakland, CA	45	58
Omaha, NE	11	15
Philadelphia, PA	101	93
Phoenix, AZ	56	81
Pittsburgh, PA	7	5
Portland, OR	30	41
Sacramento, CA	56	46
St. Louis, MO	31	28
St. Paul, MN	26	31
San Antonio, TX	94	83
San Diego, CA	147	125
San Francisco, CA	108	98
San Jose, CA	116	127
Santa Ana, CA	40	42
Seattle, WA	53	51
Tampa, FL	17	24
Toledo, OH	1	2
Tucson, AZ	23	17
Virginia Beach, VA	4	14
Washington, DC	56	42
Wichita, KS	7	12
TOTAL - 62 CITIES	3,600	3,785
San Juan, PR	17	31

¹ Historical list of cities.² Excludes cases known to not be within city limits. Residence within city limits was determined by the health department.

Table 45. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011 and 2010

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2011
	2011	2010	2011	2010	
Akron, OH	2	3	0.3	0.4	701,456
Albany-Schenectady-Troy, NY	13	20	1.5	2.3	871,478
Albuquerque, NM	14	17	1.6	1.9	898,642
Allentown-Bethlehem-Easton, PA-NJ	11	11	1.3	1.3	824,916
Atlanta-Sandy Springs-Marietta, GA	211	252	3.9	4.8	5,359,205
Augusta-Richmond County, GA-SC	26	35	4.6	6.3	561,858
Austin-Round Rock, TX	71	82	4.0	4.7	1,783,519
Bakersfield, CA	40	36	4.7	4.3	851,710
Baltimore-Towson, MD	91	89	3.3	3.3	2,729,110
Baton Rouge, LA	20	22	2.5	2.7	808,242
Birmingham-Hoover, AL	36	39	3.2	3.5	1,132,264
Boise City-Nampa, ID	5	12	0.8	1.9	627,664
Boston-Cambridge-Quincy, MA-NH	158	181	3.4	4.0	4,591,112
Bridgeport-Stamford-Norwalk, CT	33	33	3.6	3.6	925,899
Buffalo-Niagara Falls, NY	15	11	1.3	1.0	1,134,039
Cape Coral-Fort Myers, FL	26	26	4.1	4.2	631,330
Charleston-North Charleston, SC	21	34	3.1	5.1	682,121
Charlotte-Gastonia-Concord, NC-SC	53	52	3.0	2.9	1,795,472
Chattanooga, TN-GA	10	12	1.9	2.3	533,372
Chicago-Naperville-Joliet, IL	336	343	3.5	3.6	9,504,753
Cincinnati-Middleton, OH-KY-IN	19	37	0.9	1.7	2,138,038
Cleveland-Elyria-Mentor, OH	43	42	2.1	2.0	2,068,283
Colorado Springs, CO	7	8	1.1	1.2	660,319
Columbia, SC	16	10	2.1	1.3	777,116
Columbus, OH	56	68	3.0	3.7	1,858,464
Dallas-Fort Worth-Arlington, TX	342	373	5.2	5.8	6,526,548
Dayton, OH	9	10	1.1	1.2	845,388
Denver-Aurora, CO	48	49	1.8	1.9	2,599,504
Des Moines-West Des Moines, IA	12	14	2.1	2.4	580,255
Detroit-Warren-Livonia, MI	55	60	1.3	1.4	4,285,832
Durham-Chapel Hill, NC	13	18	2.5	3.6	512,979
El Paso, TX	37	48	4.5	6.0	820,790
Fresno, CA	46	54	4.9	5.8	942,904
Grand Rapids-Wyoming, MI	21	17	2.7	2.2	779,604
Greensboro-High Point, NC	26	34	3.6	4.7	730,966
Greenville, SC	15	16	2.3	2.5	647,401
Harrisburg-Carlisle, PA	7	11	1.3	2.0	552,911
Hartford-West Hartford-East Hartford, CT	21	30	1.7	2.5	1,213,255
Honolulu, HI	103	81	10.7	8.5	963,607
Houston-Sugar Land-Baytown, TX	397	402	6.5	6.7	6,086,538
Indianapolis-Carmel, IN	44	45	2.5	2.6	1,778,568
Jackson, MS	41	39	7.5	7.2	545,394
Jacksonville, FL	77	80	5.7	5.9	1,360,251
Kansas City, MO-KS	35	35	1.7	1.7	2,052,676
Knoxville, TN	2	11	0.3	1.6	704,500
Lakeland, FL	16	16	2.6	2.7	609,492
Lancaster, PA	5	12	1.0	2.3	523,594
Las Vegas-Paradise, NV	57	97	2.9	5.0	1,969,975
Little Rock-North Little Rock-Conway, AR	19	16	2.7	2.3	709,901
Los Angeles-Long Beach-Santa Ana, CA	923	946	7.1	7.4	12,944,801
Louisville-Jefferson County, KY-IN	27	41	2.1	3.2	1,294,849
Madison, WI	12	11	2.1	1.9	576,467
McAllen-Edinburg-Mission, TX	80	69	10.0	8.8	797,810
Memphis, TN-MS-AR	53	62	4.0	4.7	1,325,605
Miami-Fort Lauderdale-Pompano Beach, FL	292	292	5.1	5.2	5,670,125
Milwaukee-Waukesha-West Allis, WI	30	23	1.9	1.5	1,562,216
Minneapolis-St. Paul-Bloomington, MN-WI	103	120	3.1	3.7	3,318,486

Table 45. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011 and 2010

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2011
	2011	2010	2011	2010	
Modesto, CA	9	16	1.7	3.1	518,522
Nashville-Davidson-Murfreesboro-Franklin, TN	55	56	3.4	3.5	1,617,142
New Haven-Milford, CT	19	15	2.2	1.7	861,113
New Orleans-Metairie-Kenner, LA	61	82	5.1	7.0	1,191,089
New York-Northern New Jersey-Long Island, NY-NJ-PA	1092	1191	5.7	6.3	19,015,900
Ogden-Clearfield, UT	4	6	0.7	1.1	555,916
Oklahoma City, OK	34	31	2.7	2.5	1,278,053
Omaha-Council Bluffs, NE-IA	12	16	1.4	1.8	877,110
Orlando-Kissimmee, FL	80	82	3.7	3.8	2,171,360
Oxnard-Thousand Oaks-Ventura, CA	35	33	4.2	4.0	831,771
Palm Bay-Melbourne-Titusville, FL	9	10	1.7	1.8	543,566
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	196	202	3.3	3.4	5,992,414
Phoenix-Mesa-Scottsdale, AZ	171	203	4.0	4.8	4,263,236
Pittsburgh, PA	30	16	1.3	0.7	2,359,746
Portland-South Portland-Biddeford, ME	3	6	0.6	1.2	515,807
Portland-Vancouver-Beaverton, OR-WA	60	80	2.7	3.6	2,262,605
Poughkeepsie-Newburgh-Middletown, NY	12	14	1.8	2.1	672,871
Providence-New Bedford-Fall River, RI-MA	34	37	2.1	2.3	1,600,224
Provo-Orem, UT	4	.	0.7	.	540,834
Raleigh-Cary, NC	31	44	2.7	3.9	1,163,515
Richmond, VA	30	43	2.4	3.4	1,269,380
Riverside-San Bernardino-Ontario, CA	121	134	2.8	3.2	4,304,997
Rochester, NY	26	19	2.5	1.8	1,055,278
Sacramento-Arden Arcade-Roseville, CA	85	75	3.9	3.5	2,176,235
St. Louis, MO-IL	49	56	1.7	2.0	2,817,355
Salt Lake City, UT	17	13	1.5	1.2	1,145,905
San Antonio, TX	104	96	4.7	4.5	2,194,927
San Diego-Carlsbad-San Marcos, CA	263	222	8.4	7.1	3,140,069
San Francisco-Oakland-Fremont, CA	372	388	8.5	8.9	4,391,037
San Jose-Sunnyvale-Santa Clara, CA	184	194	9.9	10.5	1,865,450
Sarasota-Bradenton-Venice, FL	24	29	3.4	4.1	709,355
Scranton-Wilkes-Barre, PA	9	5	1.6	0.9	563,223
Seattle-Tacoma-Bellevue, WA	155	156	4.4	4.5	3,500,026
Springfield, MA	16	16	2.3	2.3	693,204
Stockton, CA	44	46	6.3	6.7	696,214
Syracuse, NY	8	13	1.2	2.0	662,553
Tampa-St. Petersburg-Clearwater, FL	82	125	2.9	4.5	2,824,724
Toledo, OH	3	3	0.5	0.5	650,266
Tucson, AZ	28	19	2.8	1.9	989,569
Tulsa, OK	24	15	2.5	1.6	946,962
Virginia Beach-Norfolk-Newport News, VA-NC	20	34	1.2	2.0	1,679,894
Washington-Arlington-Alexandria, DC-VA-MD-WV	333	314	5.8	5.6	5,703,948
Wichita, KS	8	12	1.3	1.9	625,526
Worcester, MA	14	18	1.7	2.3	801,227
Youngstown-Warren-Boardman, OH-PA	3	6	0.5	1.1	562,739
Total - 102 Areas	8274	8799	4.0	4.3	205,086,431
San Juan-Caguas-Guaynabo, PR	13	4	0.5	0.2	2,468,598

Note: 2011 and 2010 population case counts and rates updated using U.S. Census Annual Estimates of the Resident Population for Counties: April 1, 2000 to July 1, 2009 (<http://www.census.gov/popest/data/counties/totals/2009/CO-EST2009-01.html>) and (<http://www.census.gov/popest/data/counties/totals/2011/files/CO-EST2011-Alldata.csv>) (accessed August 8, 2012). See Technical Notes for definition of MSA.

Table 46. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥ 65	Unknown or Missing
Akron, OH	2	0	0	0	0	2	0	0
Albany-Schenectady-Troy, NY	13	0	1	1	5	1	5	0
Albuquerque, NM	14	0	0	1	2	6	5	0
Allentown-Bethlehem-Easton, PA-NJ	11	1	0	1	5	1	3	0
Atlanta-Sandy Springs-Marietta, GA	211	6	10	26	78	65	26	0
Augusta-Richmond County, GA-SC	26	0	0	1	15	10	0	0
Austin-Round Rock, TX	71	3	3	6	25	26	8	0
Bakersfield, CA	40	5	1	2	16	12	4	0
Baltimore-Towson, MD	91	2	2	5	45	22	15	0
Baton Rouge, LA	20	2	0	3	5	7	3	0
Birmingham-Hoover, AL	36	3	3	2	14	10	4	0
Boise City-Nampa, ID	5	0	1	1	2	1	0	0
Boston-Cambridge-Quincy, MA-NH	158	6	0	19	59	39	35	0
Bridgeport-Stamford-Norwalk, CT	33	2	0	4	14	7	6	0
Buffalo-Niagara Falls, NY	15	0	0	4	2	5	4	0
Cape Coral-Fort Myers, FL	26	1	0	3	6	12	4	0
Charleston-North Charleston, SC	21	1	0	2	6	5	7	0
Charlotte-Gastonia-Concord, NC-SC	53	2	0	3	21	20	7	0
Chattanooga, TN-GA	10	1	0	2	3	2	2	0
Chicago-Naperville-Joliet, IL	336	5	11	25	101	109	85	0
Cincinnati-Middletown, OH-KY-IN	19	0	0	2	10	4	3	0
Cleveland-Elyria-Mentor, OH	43	2	0	1	11	11	18	0
Colorado Springs, CO	7	1	0	1	2	2	1	0
Columbia, SC	16	0	0	2	7	4	3	0
Columbus, OH	56	1	3	11	22	9	10	0
Dallas-Fort Worth-Arlington, TX	342	10	10	34	134	108	46	0
Dayton, OH	9	0	0	0	5	2	2	0
Denver-Aurora, CO	48	2	3	5	17	14	7	0
Des Moines-West Des Moines, IA	12	0	0	1	6	3	2	0
Detroit-Warren-Livonia, MI	55	0	1	4	11	16	23	0
Durham-Chapel Hill, NC	13	0	1	1	5	2	4	0
El Paso, TX	37	2	0	3	14	6	12	0
Fresno, CA	46	3	2	1	7	20	13	0
Grand Rapids-Wyoming, MI	21	0	0	6	8	6	1	0
Greensboro-High Point, NC	26	1	1	6	6	5	7	0
Greenville, SC	15	1	1	3	1	4	5	0
Harrisburg-Carlisle, PA	7	1	0	1	1	3	1	0
Hartford-West Hartford-East Hartford, CT	21	0	1	2	7	9	2	0
Honolulu, HI	103	1	0	10	20	38	34	0
Houston-Sugar Land-Baytown, TX	397	18	6	47	131	129	66	0
Indianapolis-Carmel, IN	44	1	1	6	12	12	12	0
Jackson, MS	41	1	0	4	12	21	3	0
Jacksonville, FL	77	1	3	10	17	34	12	0
Kansas City, MO-KS	35	1	3	7	6	11	7	0
Knoxville, TN	2	0	0	1	1	0	0	0
Lakeland, FL	16	0	0	0	2	8	6	0
Lancaster, PA	5	0	0	0	2	2	1	0
Las Vegas-Paradise, NV	57	6	2	3	15	18	13	0
Little Rock-North Little Rock-Conway, AR	19	0	0	2	5	5	7	0
Los Angeles-Long Beach-Santa Ana, CA	923	32	16	72	242	305	256	0
Louisville-Jefferson County, KY-IN	27	1	0	1	6	15	4	0
Madison, WI	12	0	0	3	5	2	2	0
McAllen-Edinburg-Mission, TX	80	7	2	8	28	22	13	0
Memphis, TN-MS-AR	53	2	3	11	14	16	7	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	10	5	24	98	104	51	0
Milwaukee-Waukesha-West Allis, WI	30	4	1	2	5	12	6	0
Minneapolis-St. Paul-Bloomington, MN-WI	103	2	5	20	42	22	12	0

Table 46. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2011

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥65	Unknown or Missing
Modesto, CA	9	0	0	1	1	4	3	0
Nashville-Davidson-Murfreesboro-Franklin, TN	55	1	0	6	29	15	4	0
New Haven-Milford, CT	19	0	0	4	8	6	1	0
New Orleans-Metairie-Kenner, LA	61	2	2	5	20	25	7	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1092	21	14	123	415	299	220	0
Ogden-Clearfield, UT	4	0	0	0	2	0	2	0
Oklahoma City, OK	34	3	0	2	15	9	5	0
Omaha-Council Bluffs, NE-IA	12	1	1	2	3	4	1	0
Orlando-Kissimmee, FL	80	1	3	5	24	29	18	0
Oxnard-Thousand Oaks-Ventura, CA	35	2	1	1	12	13	6	0
Palm Bay-Melbourne-Titusville, FL	9	0	1	0	2	4	2	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	196	4	1	20	75	61	35	0
Phoenix-Mesa-Scottsdale, AZ	171	3	2	23	74	34	35	0
Pittsburgh, PA	30	1	1	2	11	6	9	0
Portland-South Portland-Biddeford, ME	3	0	0	1	1	0	1	0
Portland-Vancouver-Beaverton, OR-WA	60	0	2	8	23	11	16	0
Poughkeepsie-Newburgh-Middletown, NY	12	0	0	0	5	3	4	0
Providence-New Bedford-Fall River, RI-MA	34	3	0	3	15	8	5	0
Provo-Orem, UT	4	0	0	2	1	1	0	0
Raleigh-Cary, NC	31	3	0	4	16	4	4	0
Richmond, VA	30	0	1	2	13	7	7	0
Riverside-San Bernardino-Ontario, CA	121	3	0	7	34	49	28	0
Rochester, NY	26	1	1	2	8	11	3	0
Sacramento-Arden Arcade-Roseville, CA	85	1	2	7	26	28	21	0
St. Louis, MO-IL	49	2	0	4	21	15	6	1
Salt Lake City, UT	17	1	1	2	7	4	2	0
San Antonio, TX	104	10	3	7	33	29	22	0
San Diego-Carlsbad-San Marcos, CA	263	7	8	29	68	81	70	0
San Francisco-Oakland-Fremont, CA	372	12	12	26	97	118	107	0
San Jose-Sunnyvale-Santa Clara, CA	184	4	2	12	52	61	53	0
Sarasota-Bradenton-Venice, FL	24	0	0	1	12	5	6	0
Scranton-Wilkes-Barre, PA	9	0	0	2	2	5	0	0
Seattle-Tacoma-Bellevue, WA	155	4	7	20	46	38	40	0
Springfield, MA	16	1	0	6	3	2	4	0
Stockton, CA	44	3	1	0	14	14	12	0
Syracuse, NY	8	1	0	2	4	1	0	0
Tampa-St. Petersburg-Clearwater, FL	82	3	7	8	20	30	14	0
Toledo, OH	3	0	0	0	0	1	2	0
Tucson, AZ	28	2	3	0	6	9	8	0
Tulsa, OK	24	5	2	0	5	9	3	0
Virginia Beach-Norfolk-Newport News, VA-NC	20	0	4	1	3	6	6	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	333	10	5	39	144	87	48	0
Wichita, KS	8	0	0	1	2	3	2	0
Worcester, MA	14	0	0	2	3	5	4	0
Youngstown-Warren-Boardman, OH-PA	3	0	0	0	0	0	3	0
Total - 102 Areas	8274	266	189	818	2736	2520	1744	1
San Juan-Caguas-Guaynabo, PR	13	1	0	1	6	3	2	0

Note: See Technical Notes for definition of MSA.

Table 47. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011

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	2	1	0	0	0	0	1	0	0
Albany-Schenectady-Troy, NY	13	1	0	7	2	0	3	0	0
Albuquerque, NM	14	9	0	0	3	0	2	0	0
Allentown-Bethlehem-Easton, PA-NJ	11	2	0	4	2	0	3	0	0
Atlanta-Sandy Springs-Marietta, GA	211	44	0	46	98	0	23	0	0
Augusta-Richmond County, GA-SC	26	3	0	3	18	0	2	0	0
Austin-Round Rock, TX	71	29	0	24	9	0	9	0	0
Bakersfield, CA	40	23	0	8	6	0	3	0	0
Baltimore-Towson, MD	91	13	0	28	33	0	17	0	0
Baton Rouge, LA	20	3	0	1	8	0	7	1	0
Birmingham-Hoover, AL	36	1	0	6	24	0	5	0	0
Boise City-Nampa, ID	5	0	0	2	2	0	0	1	0
Boston-Cambridge-Quincy, MA-NH	158	25	0	58	45	0	25	1	4
Bridgeport-Stamford-Norwalk, CT	33	8	0	11	9	0	5	0	0
Buffalo-Niagara Falls, NY	15	0	0	3	6	0	6	0	0
Cape Coral-Fort Myers, FL	26	8	0	6	5	0	7	0	0
Charleston-North Charleston, SC	21	2	0	1	13	0	5	0	0
Charlotte-Gastonia-Concord, NC-SC	53	14	0	9	19	0	10	1	0
Chattanooga, TN-GA	10	3	0	2	2	0	3	0	0
Chicago-Naperville-Joliet, IL	336	95	0	108	87	0	46	0	0
Cincinnati-Middleton, OH-KY-IN	19	4	0	7	3	0	5	0	0
Cleveland-Elyria-Mentor, OH	43	0	0	14	21	0	8	0	0
Colorado Springs, CO	7	2	0	2	2	1	0	0	0
Columbia, SC	16	6	0	2	5	0	3	0	0
Columbus, OH	56	2	0	11	25	0	18	0	0
Dallas-Fort Worth-Arlington, TX	342	109	0	73	105	1	54	0	0
Dayton, OH	9	0	0	1	1	0	7	0	0
Denver-Aurora, CO	48	14	0	15	11	0	8	0	0
Des Moines-West Des Moines, IA	12	1	0	5	5	0	1	0	0
Detroit-Warren-Livonia, MI	55	3	0	23	11	0	16	0	2
Durham-Chapel Hill, NC	13	5	0	2	4	0	2	0	0
El Paso, TX	37	35	0	2	0	0	0	0	0
Fresno, CA	46	29	0	15	1	0	1	0	0
Grand Rapids-Wyoming, MI	21	5	0	7	4	1	3	0	1
Greensboro-High Point, NC	26	3	0	8	10	0	5	0	0
Greenville, SC	15	2	0	6	2	0	5	0	0
Harrisburg-Carlisle, PA	7	0	0	2	1	0	4	0	0
Hartford-West Hartford-East Hartford, CT	21	2	0	8	4	0	7	0	0
Honolulu, HI	103	1	0	82	1	18	1	0	0
Houston-Sugar Land-Baytown, TX	397	172	0	83	90	0	52	0	0
Indianapolis-Carmel, IN	44	7	0	11	8	0	18	0	0
Jackson, MS	41	5	0	3	30	0	3	0	0
Jacksonville, FL	77	9	0	11	45	1	11	0	0
Kansas City, MO-KS	35	7	0	9	13	1	5	0	0
Knoxville, TN	2	1	0	1	0	0	0	0	0
Lakeland, FL	16	4	0	1	5	0	6	0	0
Lancaster, PA	5	1	0	1	1	0	2	0	0
Las Vegas-Paradise, NV	57	21	0	18	8	1	9	0	0
Little Rock-North Little Rock-Conway, AR	19	2	0	1	11	0	5	0	0
Los Angeles-Long Beach-Santa Ana, CA	923	381	1	421	48	3	65	0	4
Louisville-Jefferson County, KY-IN	27	3	0	3	9	0	12	0	0
Madison, WI	12	3	0	7	2	0	0	0	0
McAllen-Edinburg-Mission, TX	80	80	0	0	0	0	0	0	0
Memphis, TN-MS-AR	53	3	0	4	38	0	7	1	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	104	1	20	123	5	39	0	0
Milwaukee-Waukesha-West Allis, WI	30	3	0	13	9	0	5	0	0
Minneapolis-St. Paul-Bloomington, MN-WI	103	8	0	34	57	0	4	0	0

Table 47. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011

Metropolitan Statistical Area	Total Cases	Hispanic or Latino ¹	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race ²	Unknown or Missing
Modesto, CA	9	5	0	3	0	0	0	0	1
Nashville-Davidson-Murfreesboro-Franklin, TN	55	14	0	11	14	0	16	0	0
New Haven-Milford, CT	19	4	0	8	3	0	4	0	0
New Orleans-Metairie-Kenner, LA	61	10	0	14	22	0	15	0	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1092	329	0	396	230	0	121	2	14
Ogden-Clearfield, UT	4	1	0	1	1	0	1	0	0
Oklahoma City, OK	34	11	3	10	1	0	6	0	3
Omaha-Council Bluffs, NE-IA	12	1	0	2	4	1	4	0	0
Orlando-Kissimmee, FL	80	17	0	18	28	0	17	0	0
Oxnard-Thousand Oaks-Ventura, CA	35	15	0	15	1	0	4	0	0
Palm Bay-Melbourne-Titusville, FL	9	1	0	0	3	0	5	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	196	34	0	75	59	0	26	2	0
Phoenix-Mesa-Scottsdale, AZ	171	94	3	38	12	0	24	0	0
Pittsburgh, PA	30	2	0	10	8	0	10	0	0
Portland-South Portland-Biddeford, ME	3	0	0	1	1	0	1	0	0
Portland-Vancouver-Beaverton, OR-WA	60	7	0	30	10	1	11	1	0
Poughkeepsie-Newburgh-Middletown, NY	12	4	0	4	2	0	2	0	0
Providence-New Bedford-Fall River, RI-MA	34	7	0	11	7	0	8	0	1
Provo-Orem, UT	4	2	0	0	0	2	0	0	0
Raleigh-Cary, NC	31	3	0	12	13	0	3	0	0
Richmond, VA	30	4	0	10	6	0	10	0	0
Riverside-San Bernardino-Ontario, CA	121	61	0	38	7	0	15	0	0
Rochester, NY	26	3	0	3	9	0	11	0	0
Sacramento-Arden Arcade-Roseville, CA	85	12	0	44	15	2	10	0	2
St. Louis, MO-IL	49	2	0	12	23	0	11	0	1
Salt Lake City, UT	17	4	0	9	2	0	2	0	0
San Antonio, TX	104	76	0	13	9	0	6	0	0
San Diego-Carlsbad-San Marcos, CA	263	127	1	94	13	3	25	0	0
San Francisco-Oakland-Fremont, CA	372	49	1	239	32	16	29	3	3
San Jose-Sunnyvale-Santa Clara, CA	184	21	0	142	7	1	11	1	1
Sarasota-Bradenton-Venice, FL	24	6	0	8	2	0	8	0	0
Scranton-Wilkes-Barre, PA	9	3	0	1	1	0	3	1	0
Seattle-Tacoma-Bellevue, WA	155	8	1	77	41	3	25	0	0
Springfield, MA	16	2	0	12	0	0	2	0	0
Stockton, CA	44	17	0	25	0	0	2	0	0
Syracuse, NY	8	0	0	4	3	0	1	0	0
Tampa-St. Petersburg-Clearwater, FL	82	13	0	16	28	0	25	0	0
Toledo, OH	3	0	0	1	0	0	2	0	0
Tucson, AZ	28	11	2	2	7	0	6	0	0
Tulsa, OK	24	1	3	4	5	0	9	0	2
Virginia Beach-Norfolk-Newport News, VA-NC	20	0	0	3	10	0	7	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	333	76	0	119	114	0	22	2	0
Wichita, KS	8	1	0	3	4	0	0	0	0
Worcester, MA	14	0	0	7	3	0	3	0	1
Youngstown-Warren-Boardman, OH-PA	3	0	0	0	0	0	3	0	0
Total - 102 Areas	8274	2379	16	2798	1864	61	1099	17	40
San Juan-Caguas-Guaynabo, PR	13	13	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 for definition of MSA and Hispanic ethnicity and non-Hispanic race.

Table 48. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Akron, OH	2	1	(50.0)	1	(50.0)	0	(0.0)
Albany-Schenectady-Troy, NY	13	3	(23.1)	10	(76.9)	0	(0.0)
Albuquerque, NM	14	8	(57.1)	6	(42.9)	0	(0.0)
Allentown-Bethlehem-Easton, PA-NJ	11	4	(36.4)	7	(63.6)	0	(0.0)
Atlanta-Sandy Springs-Marietta, GA	211	93	(44.1)	118	(55.9)	0	(0.0)
Augusta-Richmond County, GA-SC	26	20	(76.9)	6	(23.1)	0	(0.0)
Austin-Round Rock, TX	71	28	(39.4)	43	(60.6)	0	(0.0)
Bakersfield, CA	40	16	(40.0)	24	(60.0)	0	(0.0)
Baltimore-Towson, MD	91	32	(35.2)	59	(64.8)	0	(0.0)
Baton Rouge, LA	20	17	(85.0)	3	(15.0)	0	(0.0)
Birmingham-Hoover, AL	36	24	(66.7)	12	(33.3)	0	(0.0)
Boise City-Nampa, ID	5	1	(20.0)	4	(80.0)	0	(0.0)
Boston-Cambridge-Quincy, MA-NH	158	28	(17.7)	130	(82.3)	0	(0.0)
Bridgeport-Stamford-Norwalk, CT	33	6	(18.2)	27	(81.8)	0	(0.0)
Buffalo-Niagara Falls, NY	15	8	(53.3)	7	(46.7)	0	(0.0)
Cape Coral-Fort Myers, FL	26	14	(53.8)	12	(46.2)	0	(0.0)
Charleston-North Charleston, SC	21	17	(81.0)	4	(19.0)	0	(0.0)
Charlotte-Gastonia-Concord, NC-SC	53	24	(45.3)	29	(54.7)	0	(0.0)
Chattanooga, TN-GA	10	5	(50.0)	5	(50.0)	0	(0.0)
Chicago-Naperville-Joliet, IL	336	118	(35.1)	218	(64.9)	0	(0.0)
Cincinnati-Midleton, OH-KY-IN	19	5	(26.3)	14	(73.7)	0	(0.0)
Cleveland-Elyria-Mentor, OH	43	25	(58.1)	18	(41.9)	0	(0.0)
Colorado Springs, CO	7	1	(14.3)	6	(85.7)	0	(0.0)
Columbia, SC	16	7	(43.8)	9	(56.3)	0	(0.0)
Columbus, OH	56	19	(33.9)	37	(66.1)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	342	167	(48.8)	175	(51.2)	0	(0.0)
Dayton, OH	9	4	(44.4)	5	(55.6)	0	(0.0)
Denver-Aurora, CO	48	13	(27.1)	35	(72.9)	0	(0.0)
Des Moines-West Des Moines, IA	12	2	(16.7)	10	(83.3)	0	(0.0)
Detroit-Warren-Livonia, MI	55	16	(29.1)	38	(69.1)	1	(1.8)
Durham-Chapel Hill, NC	13	5	(38.5)	8	(61.5)	0	(0.0)
El Paso, TX	37	10	(27.0)	27	(73.0)	0	(0.0)
Fresno, CA	46	11	(23.9)	34	(73.9)	1	(2.2)
Grand Rapids-Wyoming, MI	21	4	(19.0)	17	(81.0)	0	(0.0)
Greensboro-High Point, NC	26	9	(34.6)	17	(65.4)	0	(0.0)
Greenville, SC	15	9	(60.0)	6	(40.0)	0	(0.0)
Harrisburg-Carlisle, PA	7	4	(57.1)	3	(42.9)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	21	9	(42.9)	12	(57.1)	0	(0.0)
Honolulu, HI	103	26	(25.2)	77	(74.8)	0	(0.0)
Houston-Sugar Land-Baytown, TX	397	181	(45.6)	216	(54.4)	0	(0.0)
Indianapolis-Carmel, IN	44	23	(52.3)	21	(47.7)	0	(0.0)
Jackson, MS	41	32	(78.0)	9	(22.0)	0	(0.0)
Jacksonville, FL	77	55	(71.4)	22	(28.6)	0	(0.0)
Kansas City, MO-KS	35	18	(51.4)	17	(48.6)	0	(0.0)
Knoxville, TN	2	0	(0.0)	2	(100.0)	0	(0.0)
Lakeland, FL	16	8	(50.0)	8	(50.0)	0	(0.0)
Lancaster, PA	5	3	(60.0)	2	(40.0)	0	(0.0)
Las Vegas-Paradise, NV	57	21	(36.8)	36	(63.2)	0	(0.0)
Little Rock-North Little Rock-Conway, AR	19	14	(73.7)	5	(26.3)	0	(0.0)
Los Angeles-Long Beach-Santa Ana, CA	923	176	(19.1)	737	(79.8)	10	(1.1)
Louisville-Jefferson County, KY-IN	27	21	(77.8)	6	(22.2)	0	(0.0)
Madison, WI	12	0	(0.0)	12	(100.0)	0	(0.0)
McAllen-Edinburg-Mission, TX	80	28	(35.0)	52	(65.0)	0	(0.0)
Memphis, TN-MS-AR	53	42	(79.2)	11	(20.8)	0	(0.0)
Miami-Fort Lauderdale-Pompano Beach, FL	292	89	(30.5)	203	(69.5)	0	(0.0)
Milwaukee-Waukesha-West Allis, WI	30	13	(43.3)	17	(56.7)	0	(0.0)
Minneapolis-St. Paul-Bloomington, MN-WI	103	10	(9.7)	93	(90.3)	0	(0.0)

Table 48. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons¹: Metropolitan Statistical Areas with ≥500,000 Population, 2011

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Modesto, CA	9	0	(0.0)	9	(100.0)	0	(0.0)
Nashville-Davidson-Murfreesboro-Franklin, TN	55	23	(41.8)	32	(58.2)	0	(0.0)
New Haven-Milford, CT	19	2	(10.5)	17	(89.5)	0	(0.0)
New Orleans-Metairie-Kenner, LA	61	38	(62.3)	23	(37.7)	0	(0.0)
New York-Northern New Jersey-Long Island, NY-NJ-PA	1092	237	(21.7)	854	(78.2)	1	(0.1)
Ogden-Clearfield, UT	4	1	(25.0)	3	(75.0)	0	(0.0)
Oklahoma City, OK	34	21	(61.8)	13	(38.2)	0	(0.0)
Omaha-Council Bluffs, NE-IA	12	6	(50.0)	6	(50.0)	0	(0.0)
Orlando-Kissimmee, FL	80	35	(43.8)	45	(56.3)	0	(0.0)
Oxnard-Thousand Oaks-Ventura, CA	35	8	(22.9)	26	(74.3)	1	(2.9)
Palm Bay-Melbourne-Titusville, FL	9	7	(77.8)	2	(22.2)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	196	61	(31.1)	135	(68.9)	0	(0.0)
Phoenix-Mesa-Scottsdale, AZ	171	43	(25.1)	128	(74.9)	0	(0.0)
Pittsburgh, PA	30	15	(50.0)	15	(50.0)	0	(0.0)
Portland-South Portland-Biddeford, ME	3	0	(0.0)	3	(100.0)	0	(0.0)
Portland-Vancouver-Beaverton, OR-WA	60	13	(21.7)	47	(78.3)	0	(0.0)
Poughkeepsie-Newburgh-Middletown, NY	12	4	(33.3)	8	(66.7)	0	(0.0)
Providence-New Bedford-Fall River, RI-MA	34	8	(23.5)	26	(76.5)	0	(0.0)
Provo-Orem, UT	4	1	(25.0)	3	(75.0)	0	(0.0)
Raleigh-Cary, NC	31	12	(38.7)	19	(61.3)	0	(0.0)
Richmond, VA	30	14	(46.7)	16	(53.3)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	121	35	(28.9)	85	(70.2)	1	(0.8)
Rochester, NY	26	16	(61.5)	10	(38.5)	0	(0.0)
Sacramento-Arden Arcade-Roseville, CA	85	28	(32.9)	55	(64.7)	2	(2.4)
St. Louis, MO-IL	49	28	(57.1)	21	(42.9)	0	(0.0)
Salt Lake City, UT	17	2	(11.8)	15	(88.2)	0	(0.0)
San Antonio, TX	104	59	(56.7)	45	(43.3)	0	(0.0)
San Diego-Carlsbad-San Marcos, CA	263	79	(30.0)	184	(70.0)	0	(0.0)
San Francisco-Oakland-Fremont, CA	372	67	(18.0)	305	(82.0)	0	(0.0)
San Jose-Sunnyvale-Santa Clara, CA	184	18	(9.8)	161	(87.5)	5	(2.7)
Sarasota-Bradenton-Venice, FL	24	9	(37.5)	15	(62.5)	0	(0.0)
Scranton-Wilkes-Barre, PA	9	5	(55.6)	4	(44.4)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	155	31	(20.0)	124	(80.0)	0	(0.0)
Springfield, MA	16	3	(18.8)	13	(81.3)	0	(0.0)
Stockton, CA	44	12	(27.3)	32	(72.7)	0	(0.0)
Syracuse, NY	8	1	(12.5)	7	(87.5)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	82	50	(61.0)	32	(39.0)	0	(0.0)
Toledo, OH	3	1	(33.3)	2	(66.7)	0	(0.0)
Tucson, AZ	28	12	(42.9)	16	(57.1)	0	(0.0)
Tulsa, OK	24	20	(83.3)	4	(16.7)	0	(0.0)
Virginia Beach-Norfolk-Newport News, VA-NC	20	15	(75.0)	5	(25.0)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	333	79	(23.7)	254	(76.3)	0	(0.0)
Wichita, KS	8	1	(12.5)	7	(87.5)	0	(0.0)
Worcester, MA	14	2	(14.3)	12	(85.7)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	3	2	(66.7)	1	(33.3)	0	(0.0)
Total - 102 Areas	8274	2671	(32.3)	5581	(67.5)	22	(0.3)
San Juan-Caguas-Guaynabo, PR	13	7	(53.8)	6	(46.2)	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 49. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥ 15 : Metropolitan Statistical Areas with $\geq 500,000$ Population, 2011

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Akron, OH	2	2	(100.0)	0	(0.0)
Albany-Schenectady-Troy, NY	13	13	(100.0)	0	(0.0)
Albuquerque, NM	14	14	(100.0)	2	(14.3)
Allentown-Bethlehem-Easton, PA-NJ	11	11	(100.0)	0	(0.0)
Atlanta-Sandy Springs-Marietta, GA	211	209	(99.1)	20	(9.5)
Augusta-Richmond County, GA-SC	26	26	(100.0)	1	(3.8)
Austin-Round Rock, TX	71	71	(100.0)	3	(4.2)
Bakersfield, CA	40	39	(97.5)	1	(2.5)
Baltimore-Towson, MD	91	90	(98.9)	3	(3.3)
Baton Rouge, LA	20	20	(100.0)	0	(0.0)
Birmingham-Hoover, AL	36	36	(100.0)	3	(8.3)
Boise City-Nampa, ID	5	5	(100.0)	0	(0.0)
Boston-Cambridge-Quincy, MA-NH	158	157	(99.4)	7	(4.4)
Bridgeport-Stamford-Norwalk, CT	33	33	(100.0)	0	(0.0)
Buffalo-Niagara Falls, NY	15	14	(93.3)	1	(6.7)
Cape Coral-Fort Myers, FL	26	26	(100.0)	3	(11.5)
Charleston-North Charleston, SC	21	21	(100.0)	2	(9.5)
Charlotte-Gastonia-Concord, NC-SC	53	53	(100.0)	4	(7.5)
Chattanooga, TN-GA	10	10	(100.0)	0	(0.0)
Chicago-Naperville-Joliet, IL	336	333	(99.1)	33	(9.8)
Cincinnati-Middleton, OH-KY-IN	19	16	(84.2)	0	(0.0)
Cleveland-Elyria-Mentor, OH	43	43	(100.0)	1	(2.3)
Colorado Springs, CO	7	7	(100.0)	0	(0.0)
Columbia, SC	16	16	(100.0)	0	(0.0)
Columbus, OH	56	56	(100.0)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	342	342	(100.0)	34	(9.9)
Dayton, OH	9	9	(100.0)	1	(11.1)
Denver-Aurora, CO	48	48	(100.0)	3	(6.3)
Des Moines-West Des Moines, IA	12	12	(100.0)	2	(16.7)
Detroit-Warren-Livonia, MI	55	54	(98.2)	0	(0.0)
Durham-Chapel Hill, NC	13	13	(100.0)	1	(7.7)
El Paso, TX	37	37	(100.0)	2	(5.4)
Fresno, CA	46	46	(100.0)	3	(6.5)
Grand Rapids-Wyoming, MI	21	20	(95.2)	0	(0.0)
Greensboro-High Point, NC	26	26	(100.0)	0	(0.0)
Greenville, SC	15	15	(100.0)	1	(6.7)
Harrisburg-Carlisle, PA	7	7	(100.0)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	21	19	(90.5)	0	(0.0)
Honolulu, HI	103	92	(89.3)	10	(9.7)
Houston-Sugar Land-Baytown, TX	397	397	(100.0)	10	(2.5)
Indianapolis-Carmel, IN	44	44	(100.0)	5	(11.4)
Jackson, MS	41	41	(100.0)	7	(17.1)
Jacksonville, FL	77	77	(100.0)	17	(22.1)
Kansas City, MO-KS	35	35	(100.0)	4	(11.4)
Knoxville, TN	2	2	(100.0)	1	(50.0)
Lakeland, FL	16	16	(100.0)	1	(6.3)
Lancaster, PA	5	5	(100.0)	0	(0.0)
Las Vegas-Paradise, NV	57	57	(100.0)	2	(3.5)
Little Rock-North Little Rock-Conway, AR	19	19	(100.0)	3	(15.8)
Los Angeles-Long Beach-Santa Ana, CA	923	916	(99.2)	58	(6.3)
Louisville-Jefferson County, KY-IN	27	27	(100.0)	6	(22.2)
Madison, WI	12	12	(100.0)	0	(0.0)
McAllen-Edinburg-Mission, TX	80	80	(100.0)	0	(0.0)
Memphis, TN-MS-AR	53	53	(100.0)	3	(5.7)
Miami-Fort Lauderdale-Pompano Beach, FL	292	292	(100.0)	20	(6.8)
Milwaukee-Waukesha-West Allis, WI	30	30	(100.0)	0	(0.0)
Minneapolis-St. Paul-Bloomington, MN-WI	103	103	(100.0)	2	(1.9)

Table 49. (Cont'd) Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15: Metropolitan Statistical Areas with ≥500,000 Population, 2011

Metropolitan Statistical Area	Total Cases	Cases with Information on Homeless Status		Cases Reported as Being Homeless ²	
		No.	(%)	No.	(%)
Modesto, CA	9	9	(100.0)	0	(0.0)
Nashville-Davidson-Murfreesboro-Franklin, TN	55	55	(100.0)	4	(7.3)
New Haven-Milford, CT	19	19	(100.0)	0	(0.0)
New Orleans-Metairie-Kenner, LA	61	61	(100.0)	4	(6.6)
New York-Northern New Jersey-Long Island, NY-NJ-PA	1092	1077	(98.6)	22	(2.0)
Ogden-Clearfield, UT	4	4	(100.0)	0	(0.0)
Oklahoma City, OK	34	33	(97.1)	4	(11.8)
Omaha-Council Bluffs, NE-IA	12	12	(100.0)	1	(8.3)
Orlando-Kissimmee, FL	80	79	(98.8)	5	(6.3)
Oxnard-Thousand Oaks-Ventura, CA	35	35	(100.0)	2	(5.7)
Palm Bay-Melbourne-Titusville, FL	9	9	(100.0)	1	(11.1)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	196	196	(100.0)	7	(3.6)
Phoenix-Mesa-Scottsdale, AZ	171	138	(80.7)	11	(6.4)
Pittsburgh, PA	30	30	(100.0)	0	(0.0)
Portland-South Portland-Biddeford, ME	3	3	(100.0)	1	(33.3)
Portland-Vancouver-Beaverton, OR-WA	60	60	(100.0)	4	(6.7)
Poughkeepsie-Newburgh-Middletown, NY	12	12	(100.0)	0	(0.0)
Providence-New Bedford-Fall River, RI-MA	34	34	(100.0)	2	(5.9)
Provo-Orem, UT	4	4	(100.0)	1	(25.0)
Raleigh-Cary, NC	31	30	(96.8)	2	(6.5)
Richmond, VA	30	30	(100.0)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	121	121	(100.0)	1	(0.8)
Rochester, NY	26	25	(96.2)	0	(0.0)
Sacramento-Arden Arcade-Roseville, CA	85	75	(88.2)	6	(7.1)
St. Louis, MO-IL	49	45	(91.8)	0	(0.0)
Salt Lake City, UT	17	17	(100.0)	1	(5.9)
San Antonio, TX	104	104	(100.0)	3	(2.9)
San Diego-Carlsbad-San Marcos, CA	263	263	(100.0)	15	(5.7)
San Francisco-Oakland-Fremont, CA	372	371	(99.7)	20	(5.4)
San Jose-Sunnyvale-Santa Clara, CA	184	181	(98.4)	4	(2.2)
Sarasota-Bradenton-Venice, FL	24	24	(100.0)	0	(0.0)
Scranton-Wilkes-Barre, PA	9	9	(100.0)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	155	155	(100.0)	5	(3.2)
Springfield, MA	16	16	(100.0)	1	(6.3)
Stockton, CA	44	43	(97.7)	7	(15.9)
Syracuse, NY	8	8	(100.0)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	82	81	(98.8)	11	(13.4)
Toledo, OH	3	2	(66.7)	0	(0.0)
Tucson, AZ	28	28	(100.0)	1	(3.6)
Tulsa, OK	24	23	(95.8)	3	(12.5)
Virginia Beach-Norfolk-Newport News, VA-NC	20	20	(100.0)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	333	333	(100.0)	11	(3.3)
Wichita, KS	8	8	(100.0)	0	(0.0)
Worcester, MA	14	14	(100.0)	1	(7.1)
Youngstown-Warren-Boardman, OH-PA	3	3	(100.0)	0	(0.0)
Total - 102 Areas	8274	8166	(98.7)	441	(5.3)
San Juan-Caguas-Guaynabo, PR	13	13	(100.0)	0	(0.0)

¹ Homeless within past 12 months of TB diagnosis.

² Percent of those with known status.

Note: See Technical Notes for definition of MSA.

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United States Affiliated Pacific Islands, 2011

Tuberculosis in the U.S.-affiliated Pacific Island Jurisdictions (USAPI), 2011

The US-affiliated Pacific Islands consist of six jurisdictions that cover an area within the Pacific Ocean that is larger than the continental United States. Three are U.S. flag territories: American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), and Guam. The other three — Federated States of Micronesia (FSM), Republic of the Marshall Islands (RMI), and Republic of Palau – are independent countries but are also freely associated with the United States. These independent countries have Compacts of Free Association with the United States; under these compacts, the countries are fully sovereign in domestic and foreign affairs, but give responsibility for their health, education, defense, and other essential operations to the United States. Through these agreements, citizens residing in these three countries are able to immigrate to the United States without the usual overseas screening for health conditions that is required of those permanently resettling from other foreign countries.

As a result of their affiliations with the United States, the USAPIs are among the recipients of U.S. federal government funding, including CDC cooperative agreement funding for domestic TB control program activities.

How do the USAPI TB programs differ from the 50 U.S. state programs?

- Geographically, the USAPI constitutes a total land area equivalent to two-thirds of Rhode Island (1,545 square miles). While there are 10 population centers, many Pacific Islanders live on surrounding islands, creating challenges for diagnosis and treatment of TB. Across these jurisdictions, basic infrastructure needs are not uniformly available; several of these jurisdictions are in close proximity to countries with higher rates of endemic TB.
- There is a consistent shortage of health care providers in all job classes, and continuing education opportunities are limited, often requiring staff to travel off-island for significant amounts of time. These challenges impact the delivery of health care.
- The region grapples with health problems common to developed countries (diabetes, obesity, cancer) as well as those common to developing countries; infant mortality rates in this region exceed the national average, in some areas as much as 5 times greater.
- While case counts in this region are similar to low-incidence states, the burden of disease is much greater when compared to U.S. areas with similar case counts. The burden of disease in the region far exceeds that of any metropolitan statistical area with a population of 500,000 or greater. The USAPI regional TB case rate (87.7/100,000) is almost 10 times greater than that of the State of Hawaii (8.9/100,000) and 26 times greater than the U.S. national rate (3.4/100,000).

Table 1. Tuberculosis Cases and Case Rates for USAPIs, Hawaii, and the United States, 2010

Jurisdiction	Cases	Rate	Population
USAPI Regional Total	405	87.7	461,939
American Samoa	3	5.4	55,198
Northern Mariana Islands	27	51.8	52,167
Federated States of Micronesia	140	131	106,836
Guam	78	48.9	159,600
Marshall Islands	149	221.8	67,182
Palau	8	38.2	20,956
Hawaii ¹	123	8.9	1,374,810
United States ¹	10,528	3.4	311,591,917

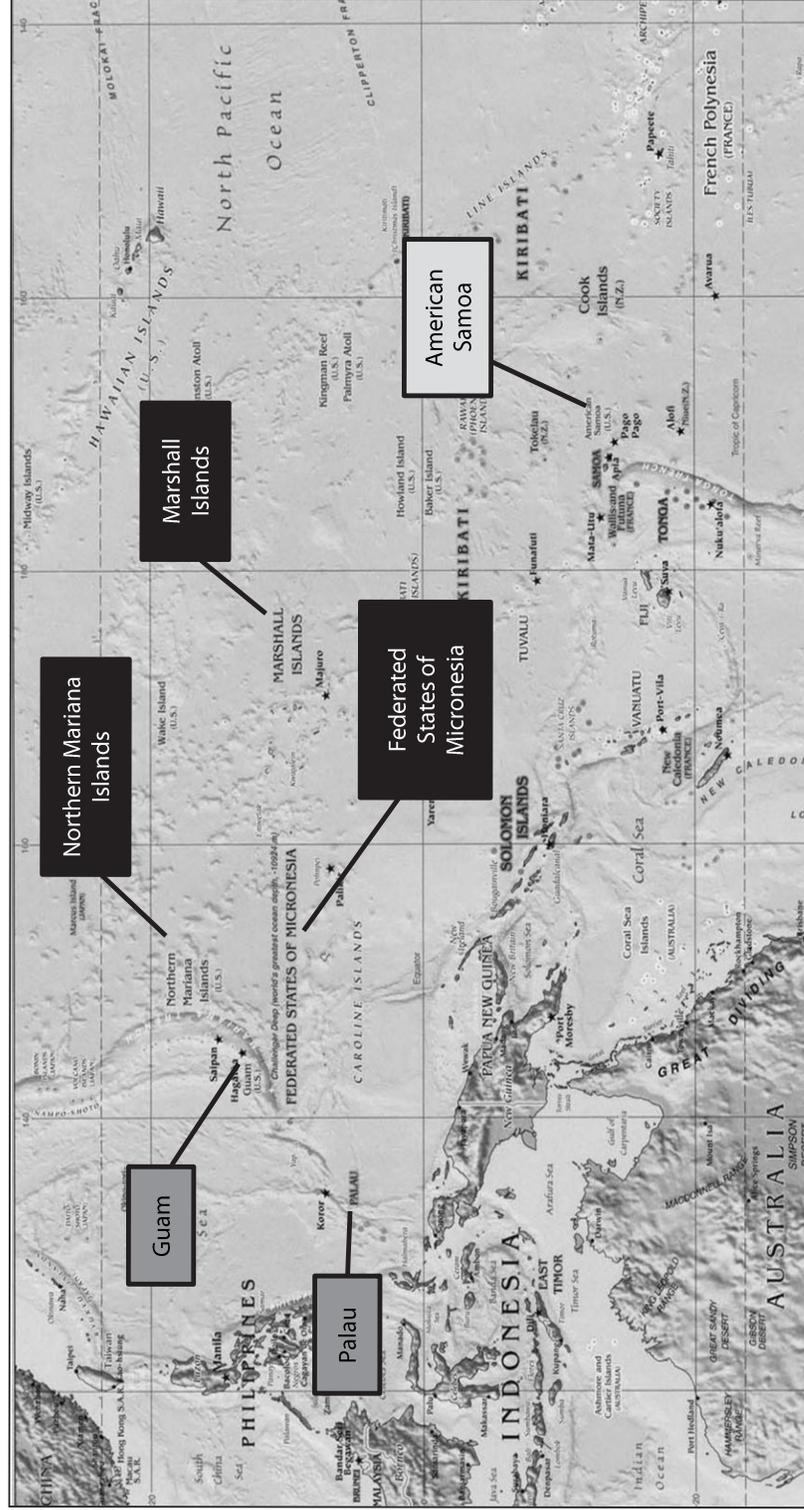
¹Not included in USAPI regional total.

USAPI TB Surveillance Data Highlights, 2011 (N=405)

- 94 (23%) age less than 15 years
- 99 (24%) age 25–44 years
- 221 (55%) male
- 84 (21%) not born in the USAPI jurisdictions or the United States
 - 50 (60%) of these emigrating from the Republic of the Philippines
- 272 (67%) diagnosed with pulmonary disease only
- 180 (44%) positive culture for *Mycobacterium tuberculosis*
- 2 (<1%) with MDR TB; no cases of XDR TB
- 137 (34%) were unemployed

The data reported here reflect cases reported to the CDC National TB Surveillance System using the Report of Verified Case of Tuberculosis (RVCT). Denominators for computing 2011 rates for the United States and Hawaii were obtained from Annual Estimates of the Population for the United States and States, and for Puerto Rico; for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/population/international/data/idb/informationGateway.php>) accessed August 10, 2012.

Map of U.S.-Affiliated Pacific Islands by TB Case Rates, 2011



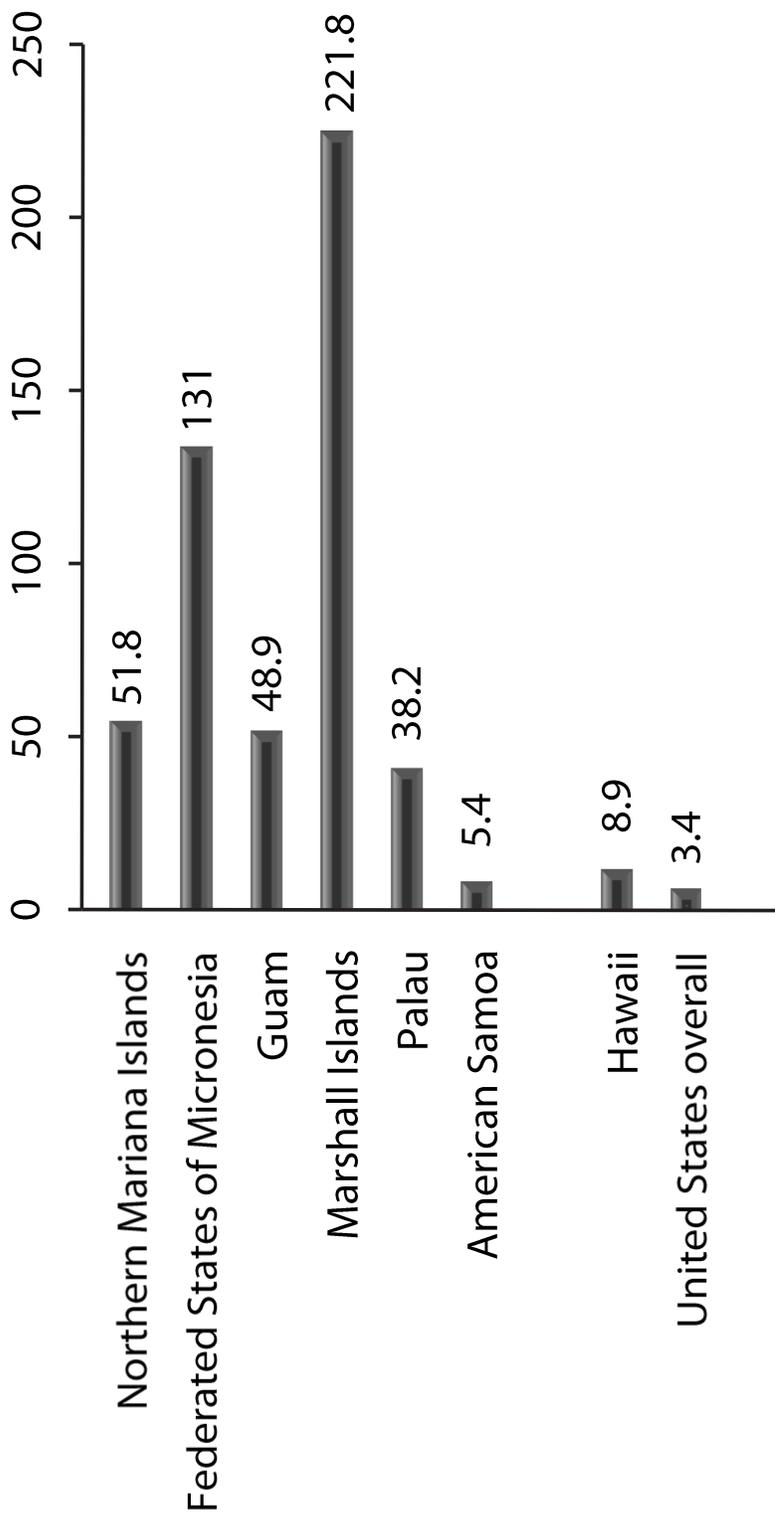
≤9.9

10-49.9

≥50

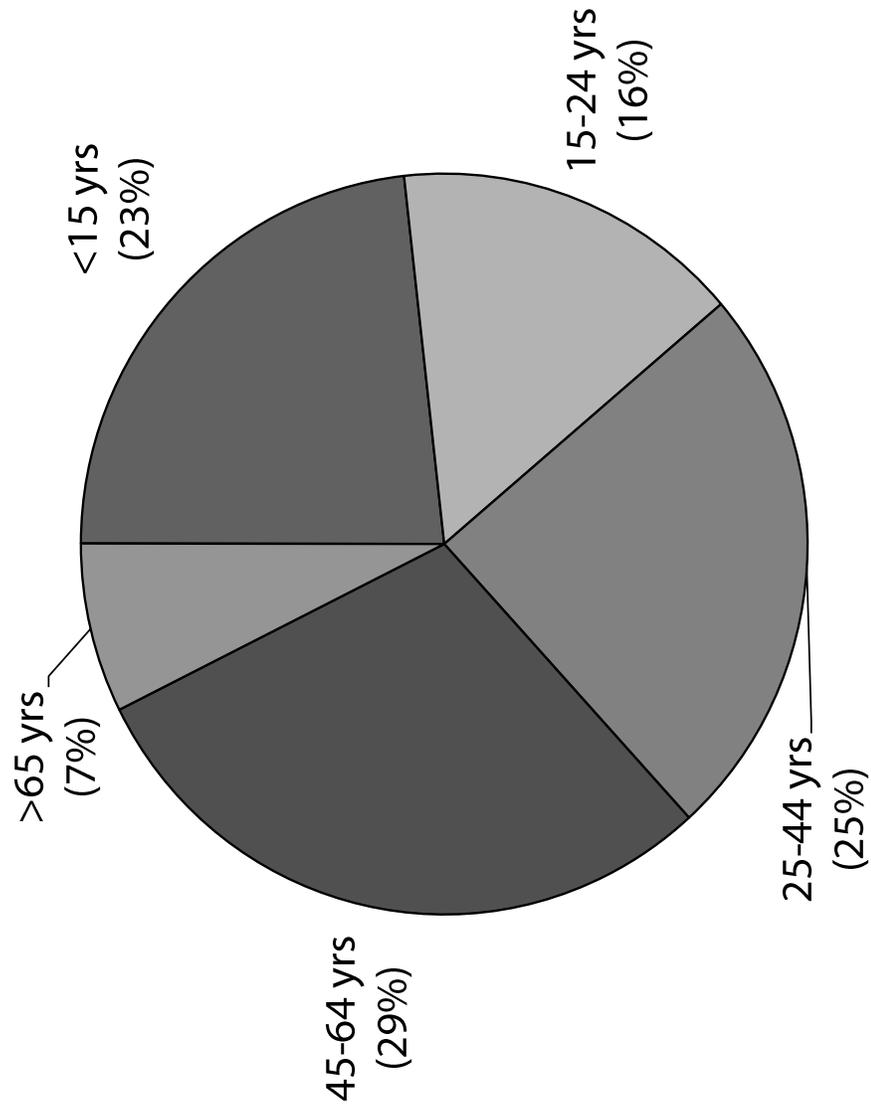
*Cases per 100,000

TB Case Rates,* U.S.-Affiliated Pacific Islands, 2011



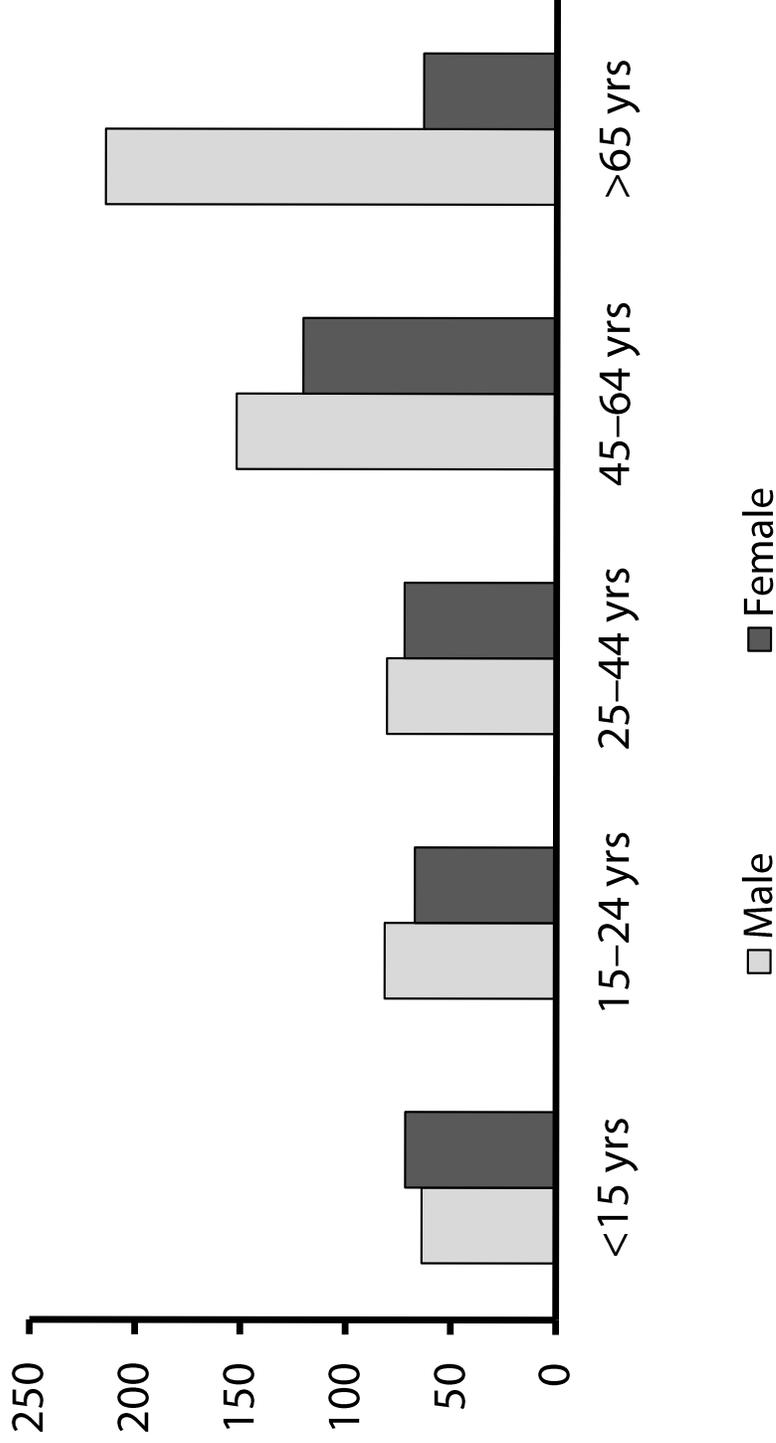
*Cases per 100,000

Reported TB Cases by Age Group, U.S.-Affiliated Pacific Islands, 2011



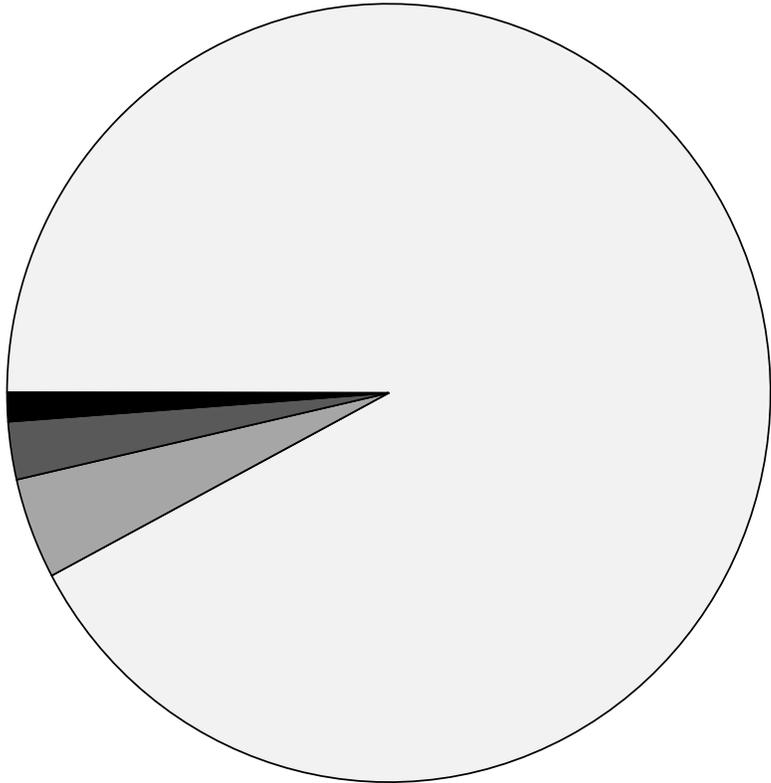
Note: Excludes missing or unknown

TB Case Rates* by Age Group and Sex, U.S.-Affiliated Pacific Islands, 2011



* Cases per 100,000

Anti-TB Drug Susceptibility, U.S.-Affiliated Pacific Islands, 2011



- Susceptible to first-line* anti-TB drugs (92.2%)
- Any INH resistance, not MDR (4.2%)
- Other** (2.4%)
- MDR (INH and RIF resistance) (1.2%)

*INH, RIF, PZA, EMB

**Other resistance (not MDR or INH resistant) or missing testing to at least one first-line drug

Note: Data reflect results for 2011 for 167 culture-positive isolates for which drug sensitivity testing results were available.

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Slide Narratives for US Affiliated Pacific Islands:

Slide 1 - USAPI. Map of U.S.-Affiliated Pacific Islands by TB Case Rates, 2011. This map of the Pacific region shows the case rates by jurisdiction.

Slide 2 - TB Case rates, U.S.-Affiliated Pacific Islands, 2011. This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2011. These case rates from 5.4 per 100,000 in American Samoa to 221.8 per 100,000 in the Republic of the Marshall Islands. The overall case rate for the United States (3.4 per 100,000) and for Hawaii (8.9 per 100,000) are also shown.

Slide 2 - USAPI. Reported TB Cases by Age Group, U.S.-Affiliated Pacific Islands, 2011. This pie chart shows the age distribution of persons reported with TB in the U.S. Pacific Islands in 2011. Twenty three percent were children under 15 years of age and 16% were among 15 to 24 year-olds, whereas 25% were among 25 to 44 years of age, 29% were among 45 to 64 year-olds, and 7% were among those at least 65 years old.

Slide 3 - USAPI. TB Case Rates by Age Group and Sex, U.S.-Affiliated Pacific Islands, 2011. This slide graphs the rates in 2011 of persons reported with TB in the U.S. Pacific Islands in 2011 by age group and sex. Children under 15 years old had a rate of approximately 48 per 100,000 for females and approximately 45 per 100,000 for males. In those between the ages of 25-44 years old females accounted for 47 per 100,000 and males were approximately 52 per 100,000.

Slide 4 - USAPI. Anti-TB Drug Susceptibility, U.S.- Affiliated Pacific Islands, 2011. This pie chart shows the level of drug susceptibility for culture positive cases for in the U.S. Pacific Islands in 2011. Data were available for 92.2% of culture-positive cases for which drug susceptibility testing was available for 2011. Any isoniazid resistance that was not multi-drug resistance was 4.2%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), was 1.2%. Other resistance (Not MDR or INH resistant) or missing testing to at least one first-line drug was 2.4%.

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Surveillance Slide Set

2011

Surveillance Slide #1

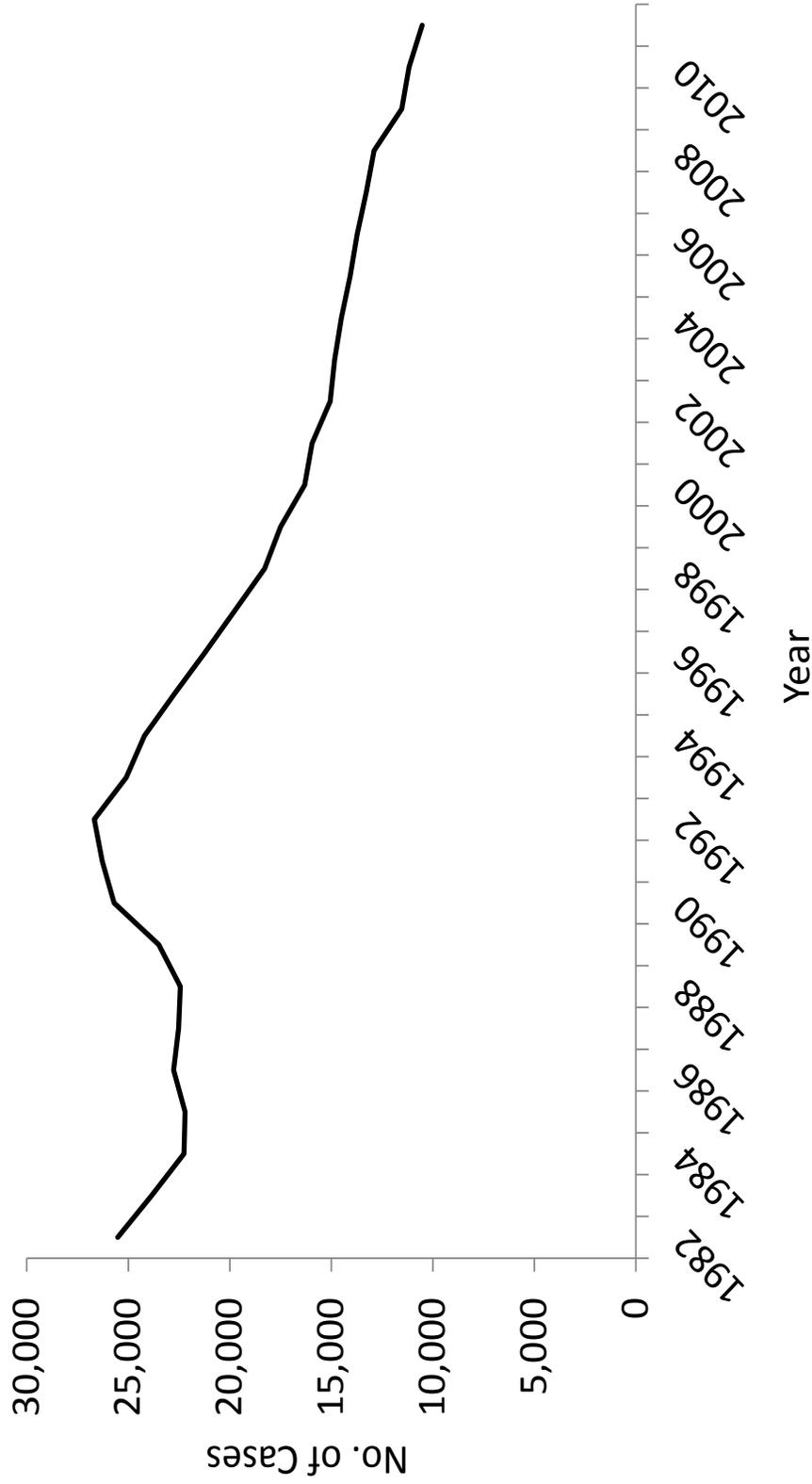
Tuberculosis in the United States

National Tuberculosis Surveillance System

Highlights from 2011

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

Reported TB Cases United States, 1982–2011*



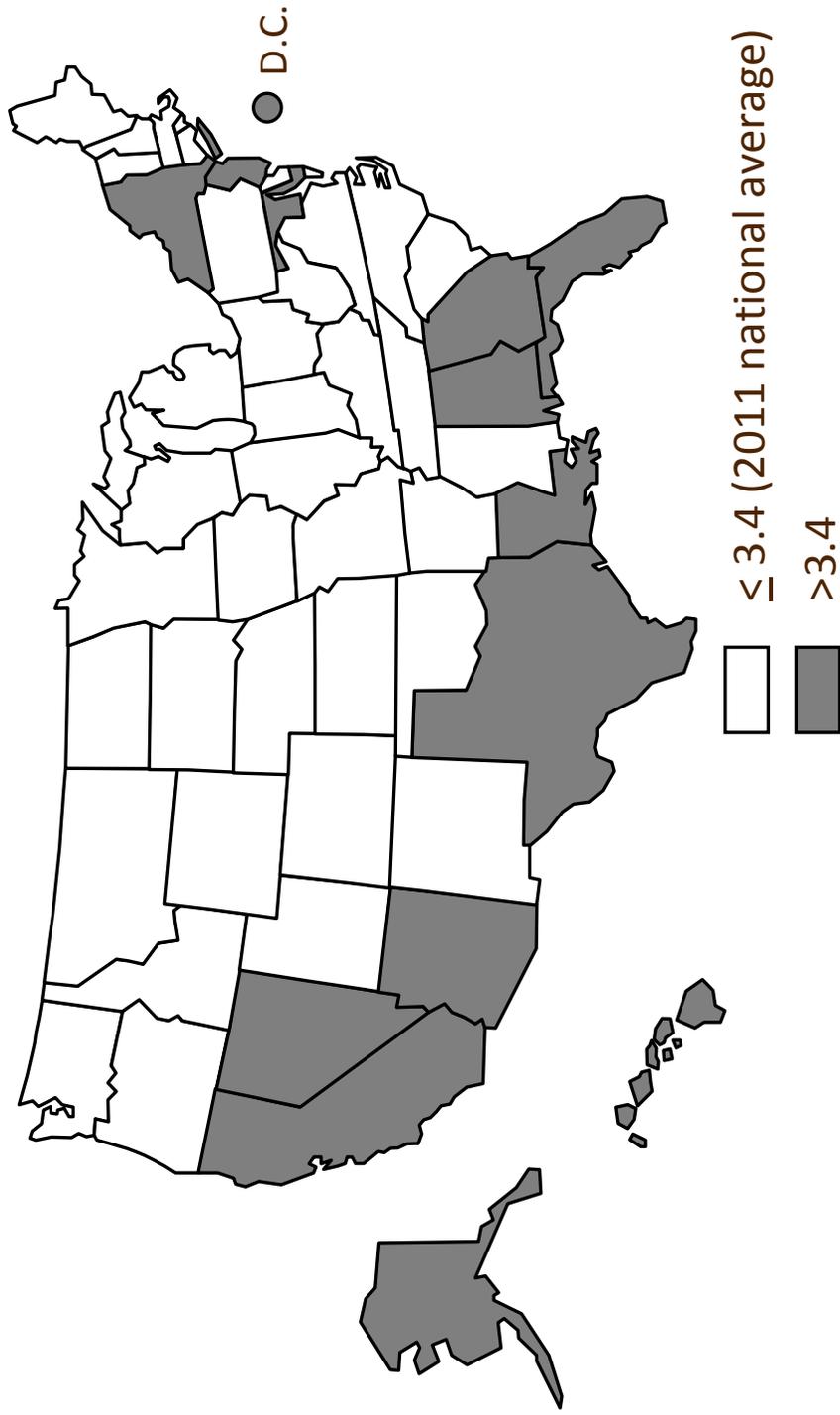
* Updated as of June 25, 2012.

TB Morbidity United States, 2006–2011

Year	No.	Rate*
2006	13,727	4.6
2007	13,278	4.4
2008	12,895	4.2
2009	11,528	3.8
2010	11,171	3.6
2011	10,528	3.4

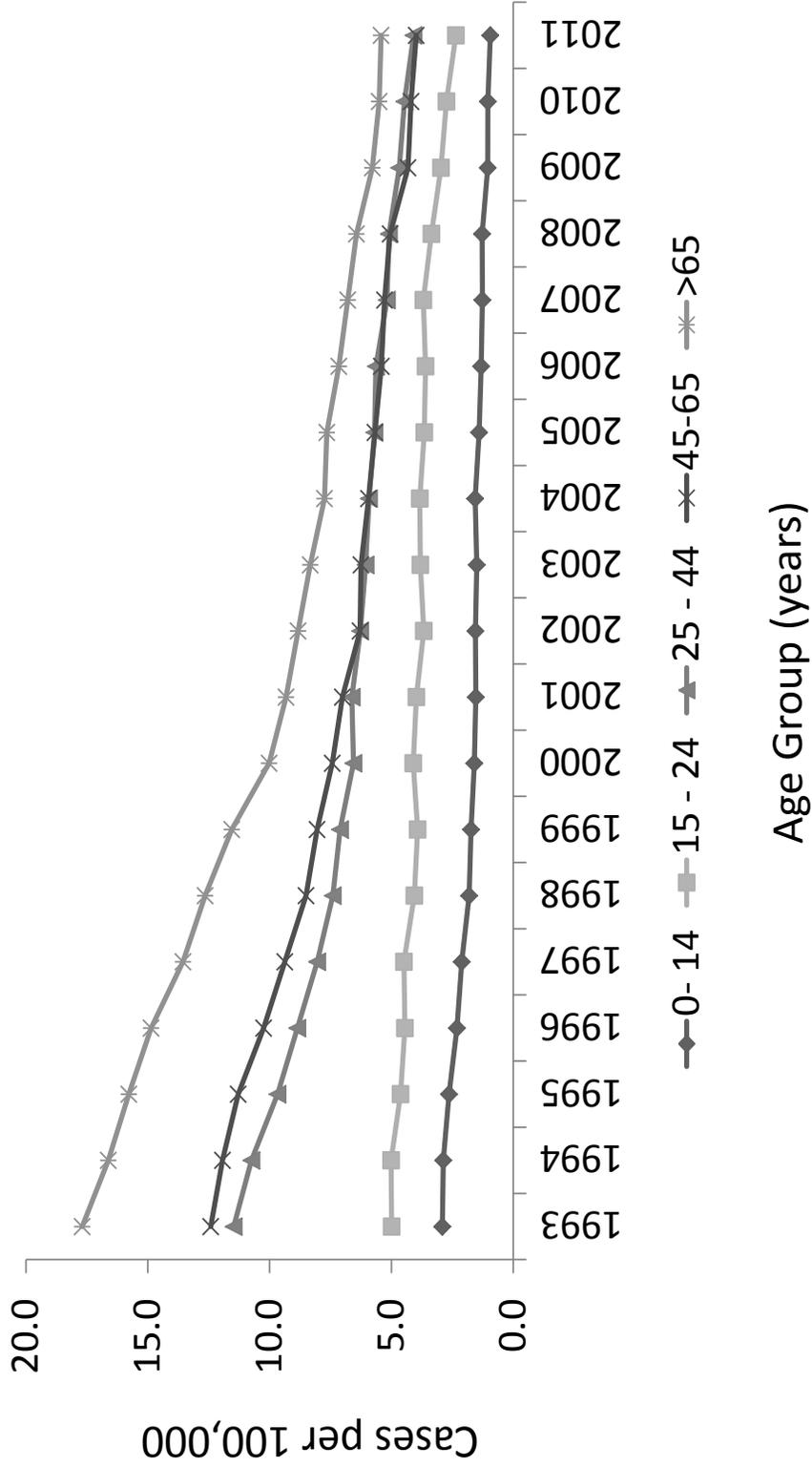
* Cases per 100,000. Updated as of June 25, 2012.

TB Case Rates,* United States, 2011



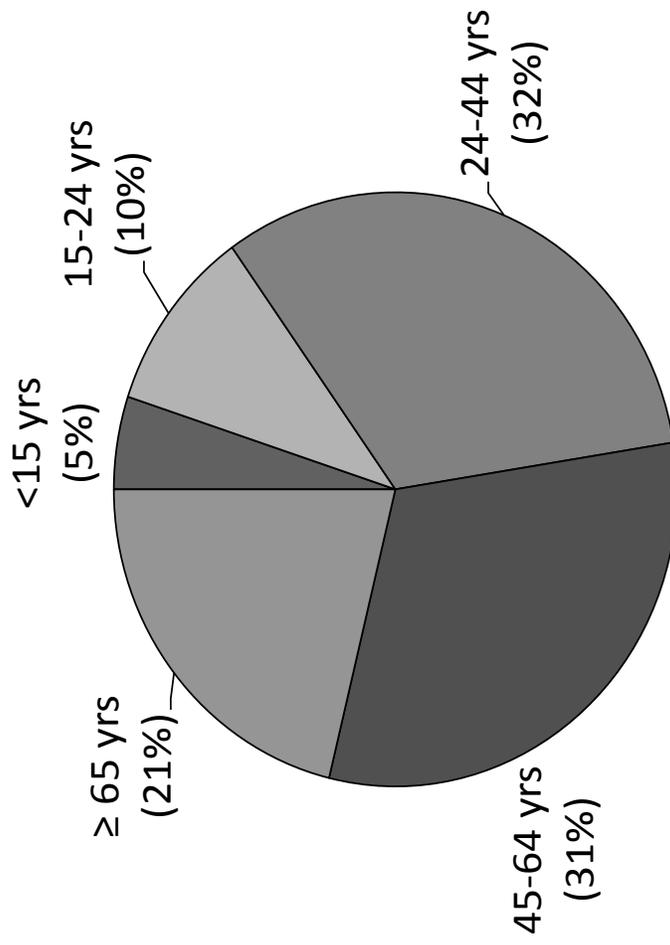
*Cases per 100,000.

TB Case Rates* by Age Group United States, 1993–2011

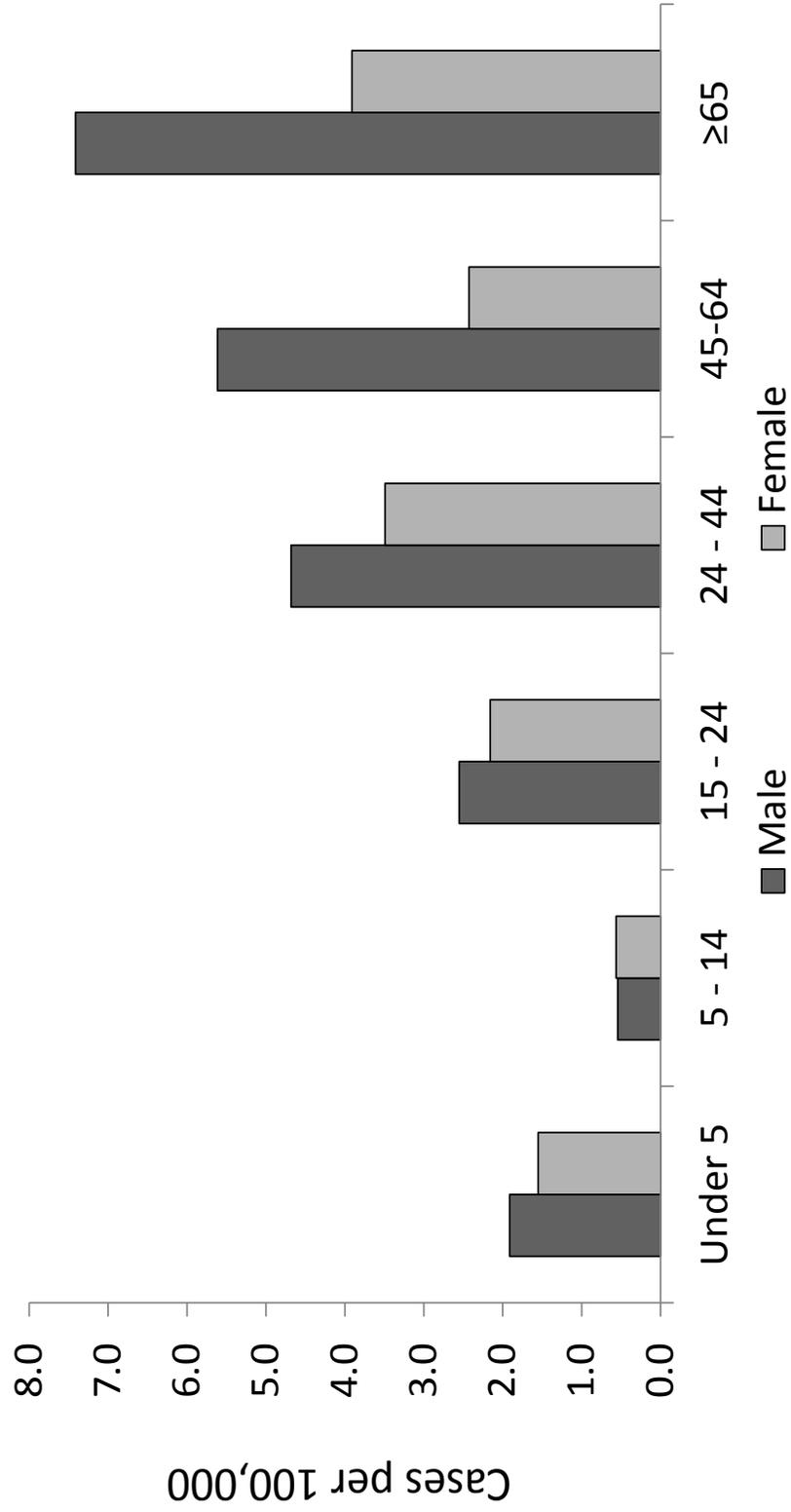


* Updated as of June 25, 2012.

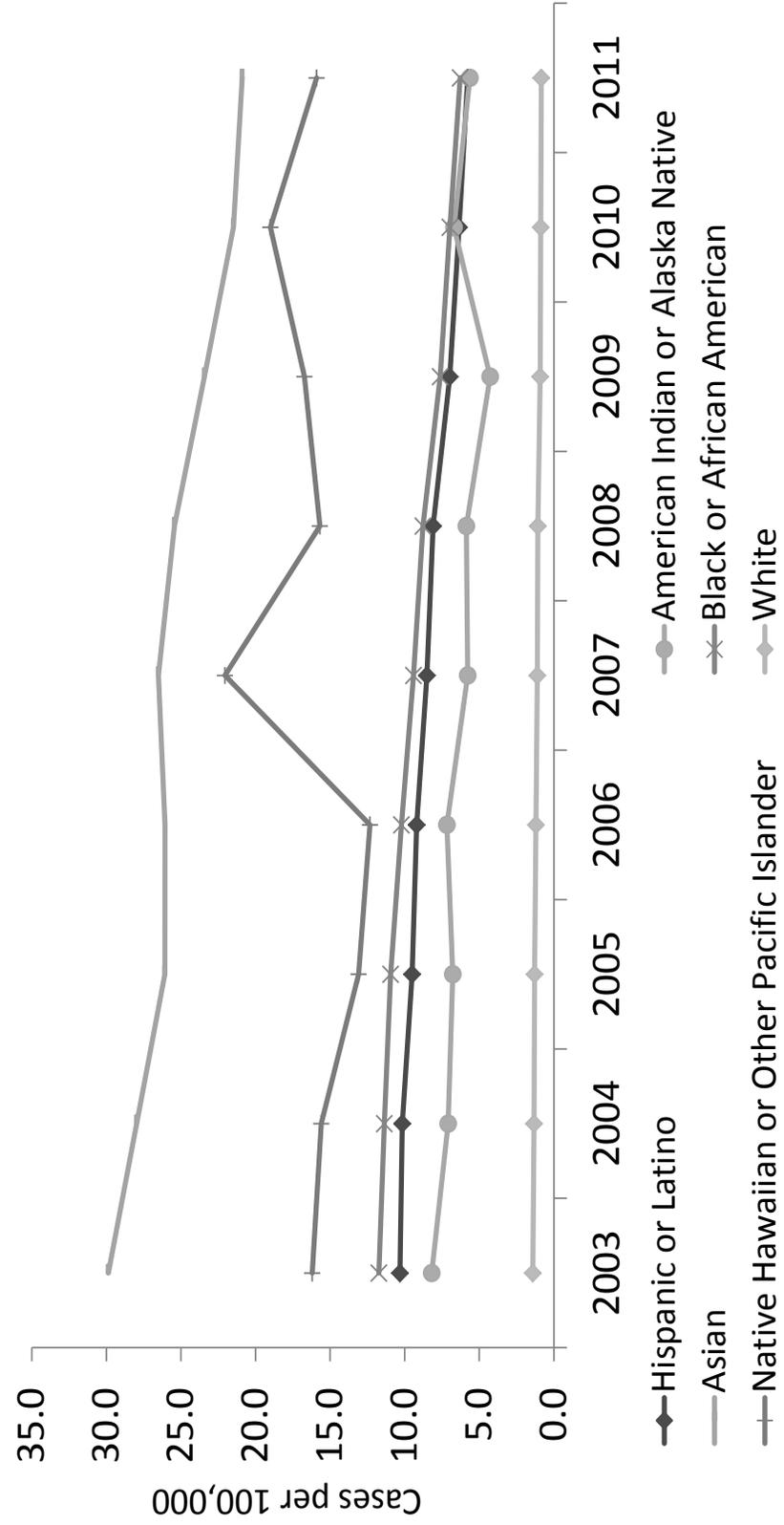
Reported TB Cases by Age Group, United States, 2011



TB Case Rates by Age Group and Sex, United States, 2011

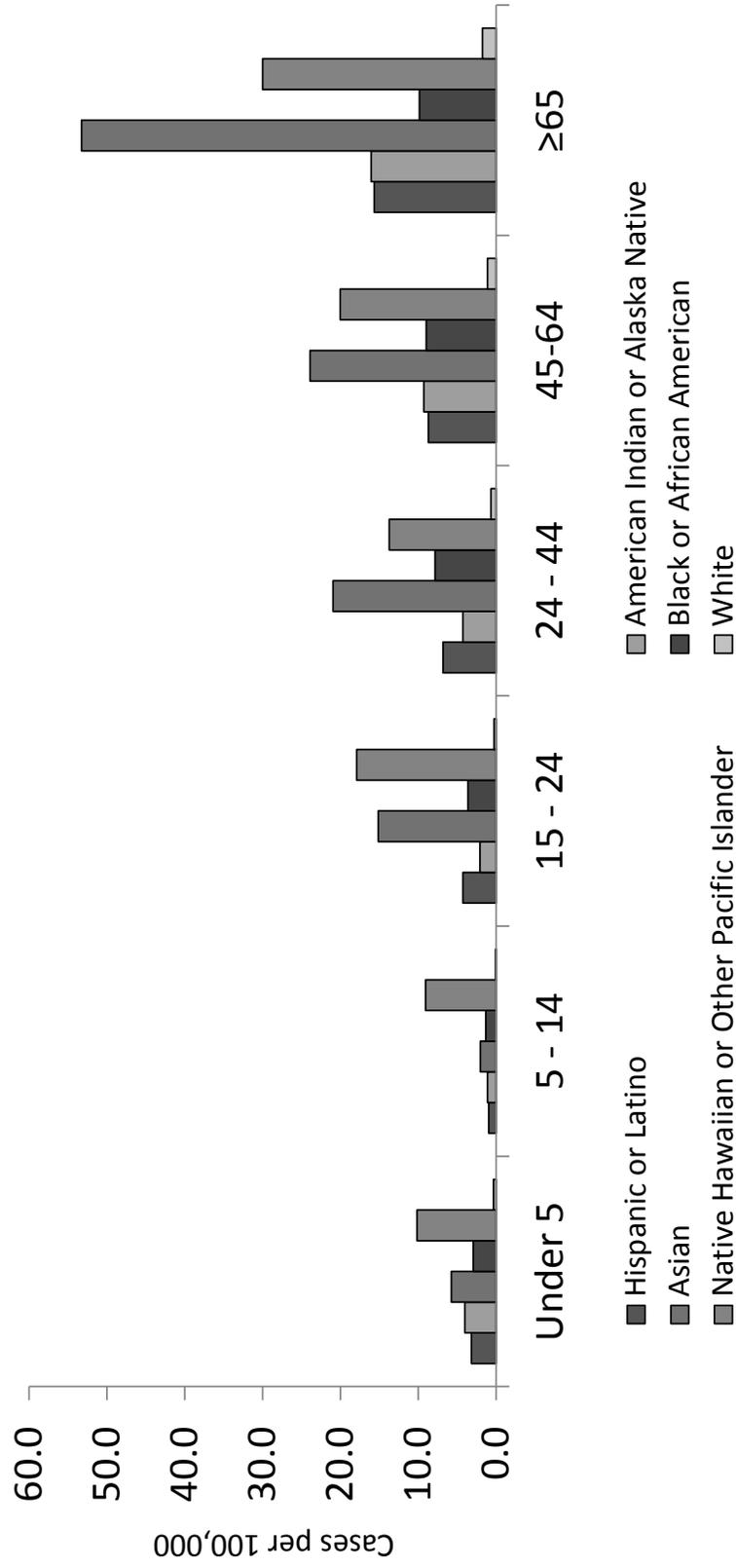


TB Case Rates by Race/Ethnicity* United States, 2003–2011**



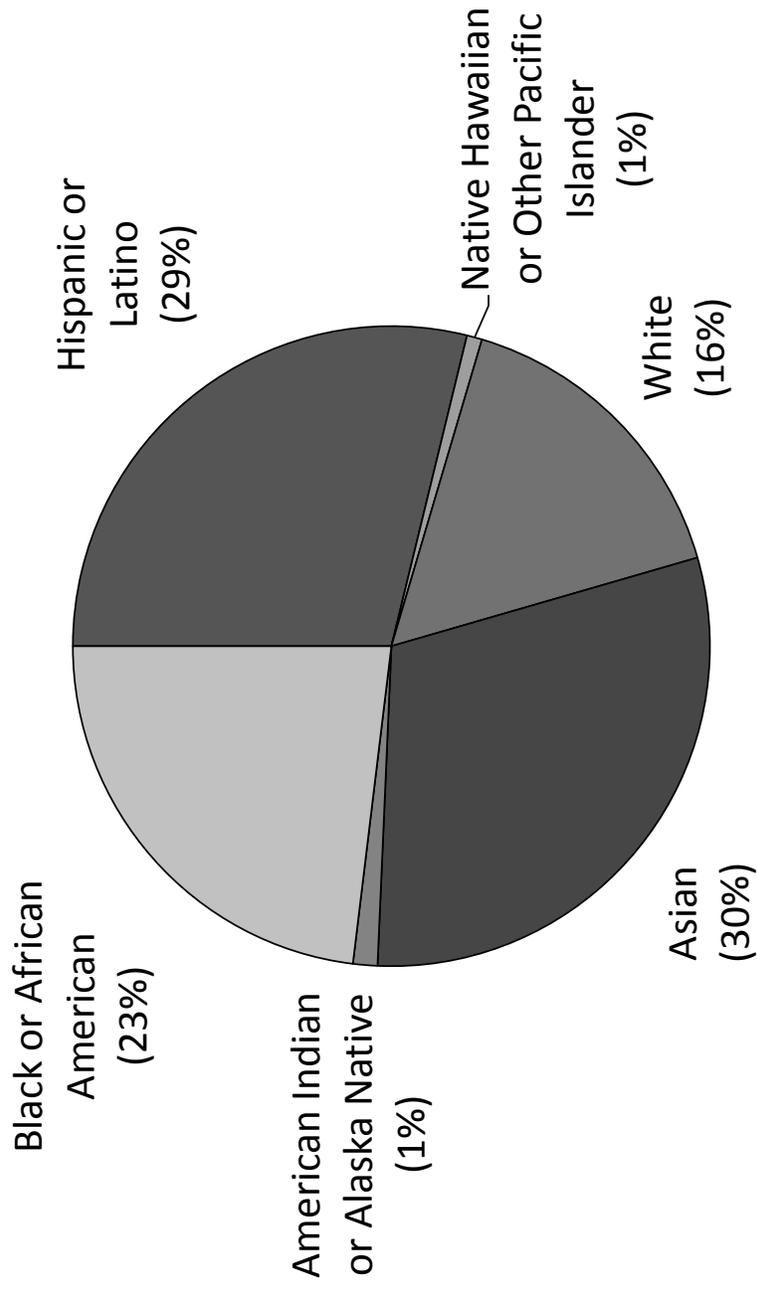
*All races are non-Hispanic.
** Updated as of June 25, 2012.

TB Case Rates by Age Group and Race/Ethnicity* United States, 2011



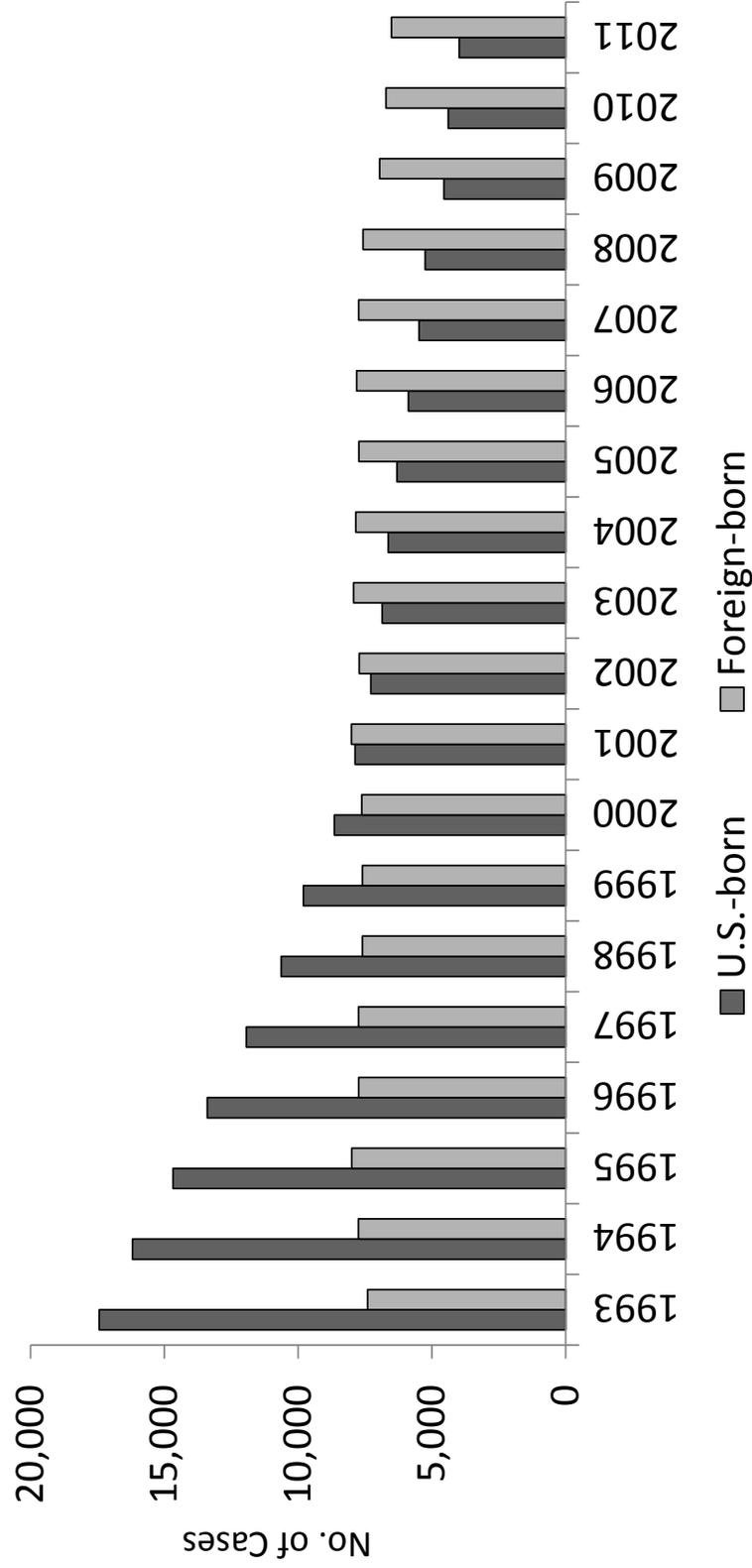
* All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

Reported TB Cases by Race/Ethnicity* United States, 2011



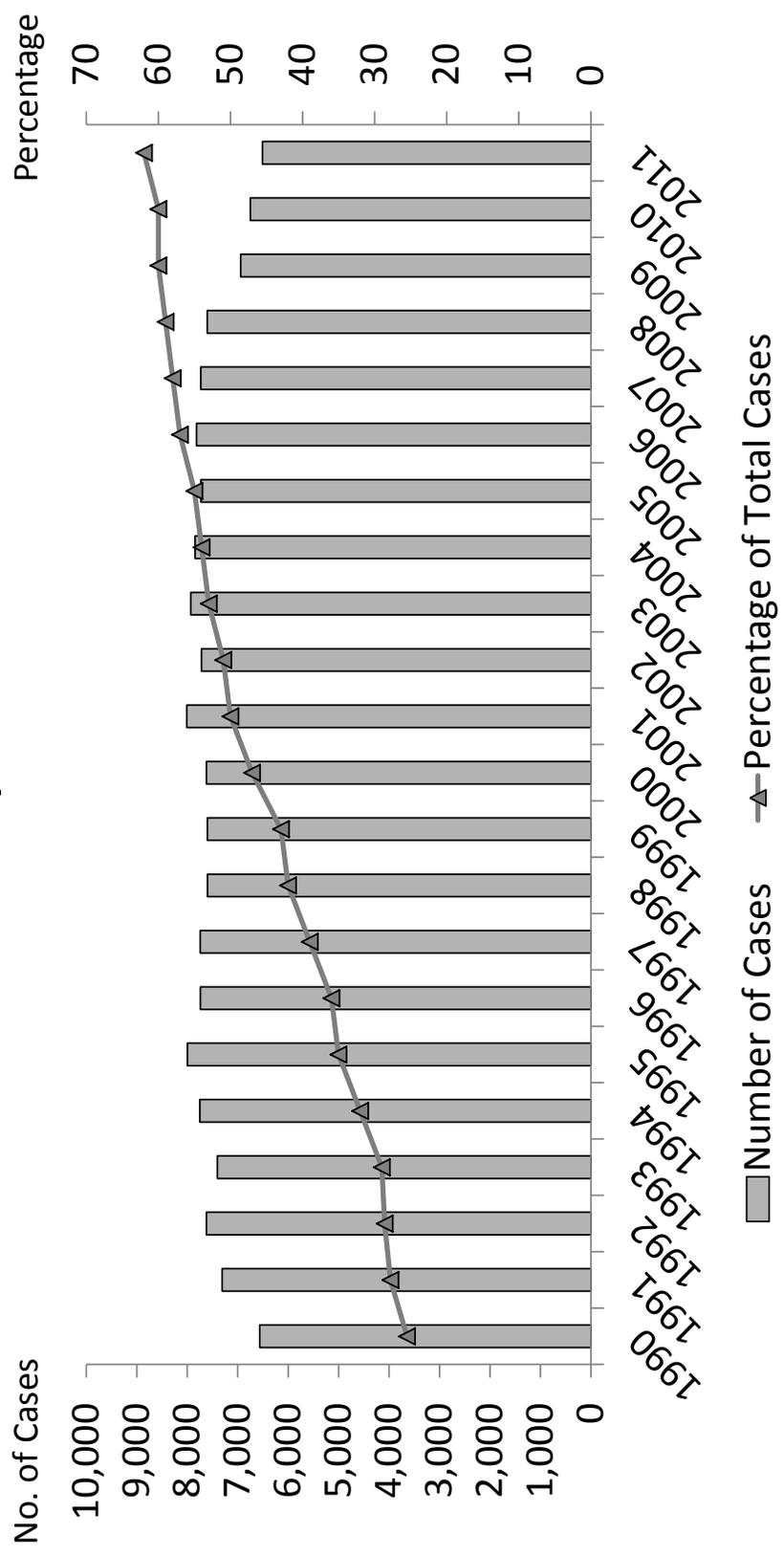
*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

Number of TB Cases in U.S.-born vs. Foreign-born Persons United States, 1993–2011*



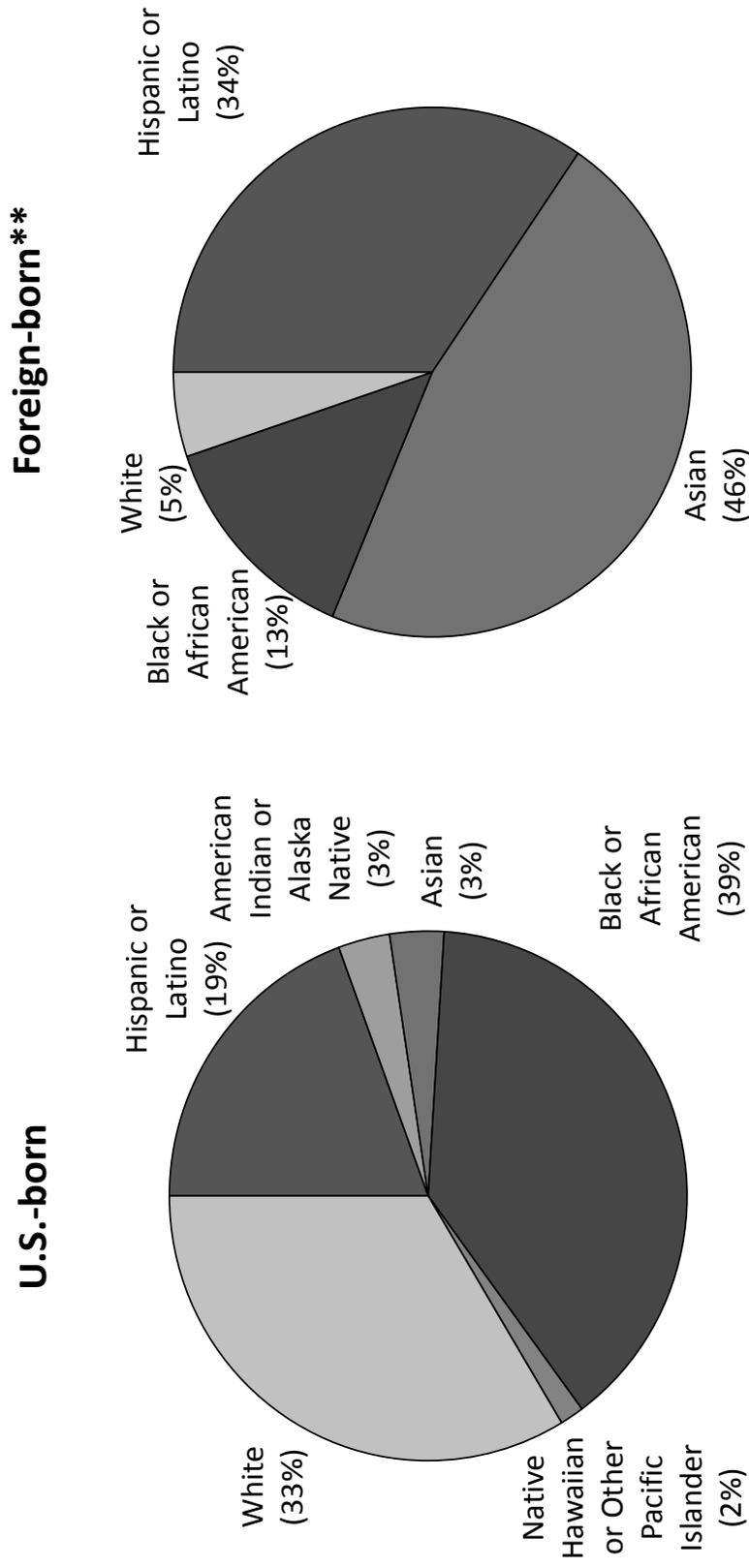
* Updated as of June 25, 2012.

Trends in TB Cases in Foreign-born Persons United States, 1990 – 2011*



*Updated as of June 25, 2012.

Reported TB Cases by Origin and Race/Ethnicity,* United States, 2011

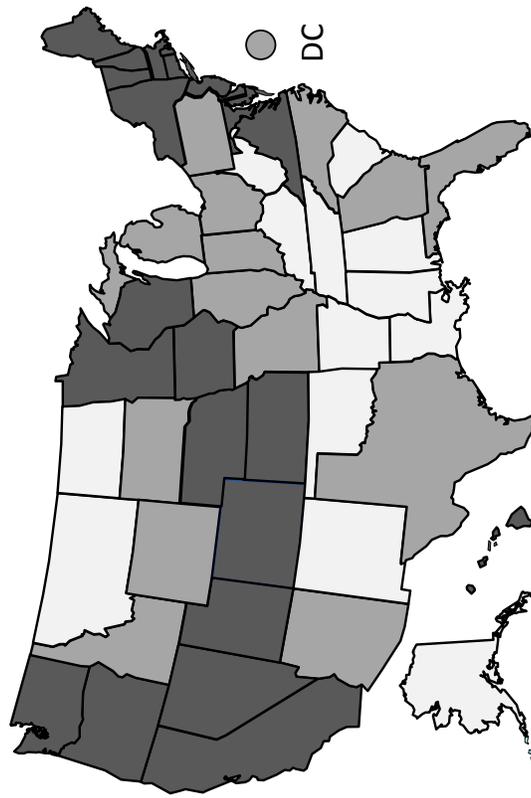


* All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

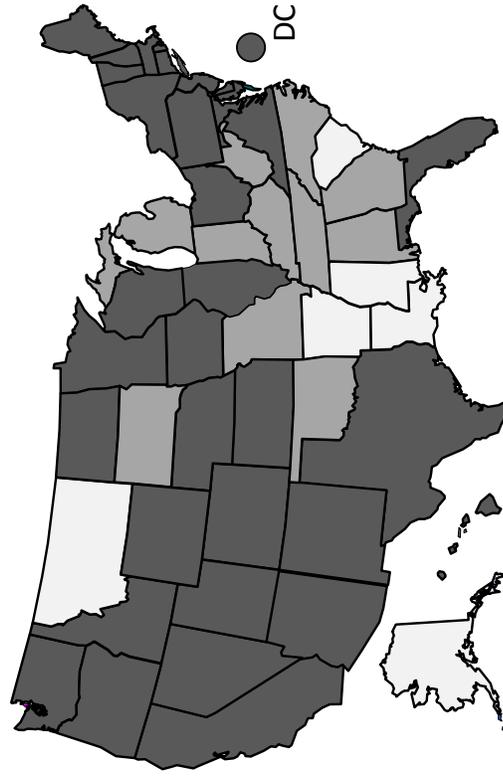
** American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

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

2001

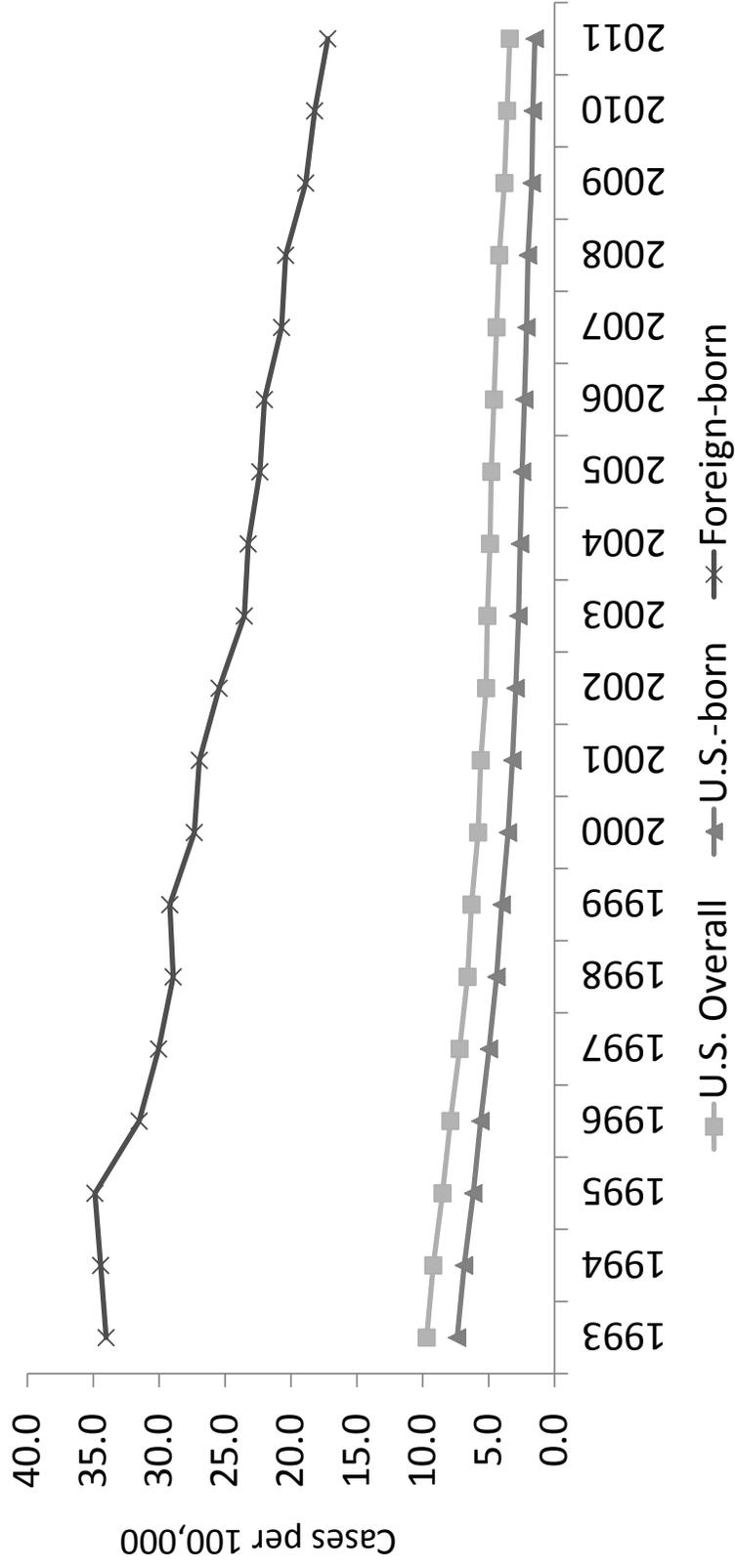


2011



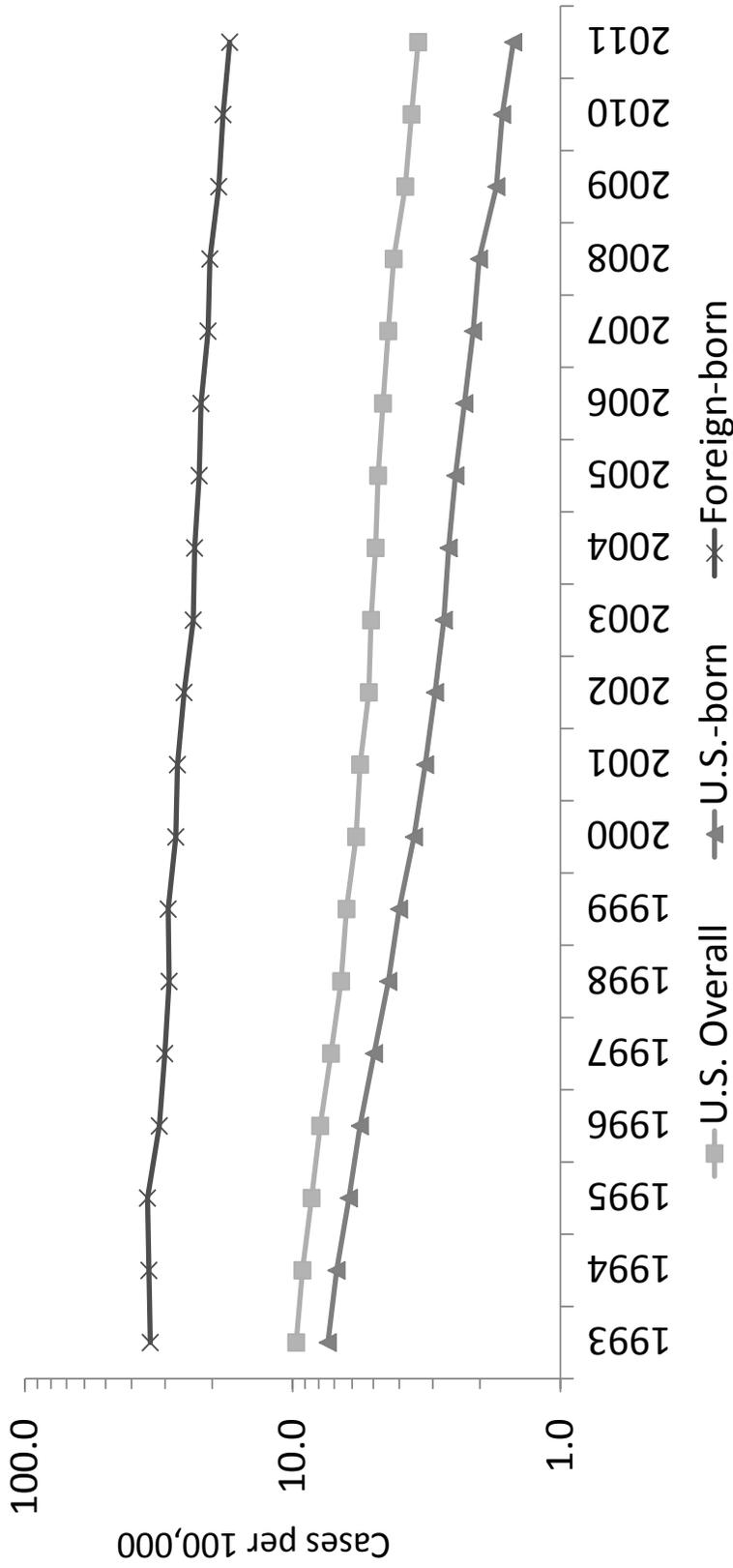
*Updated as of June 25, 2012.

TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2011*



*Updated as of June 25, 2012.

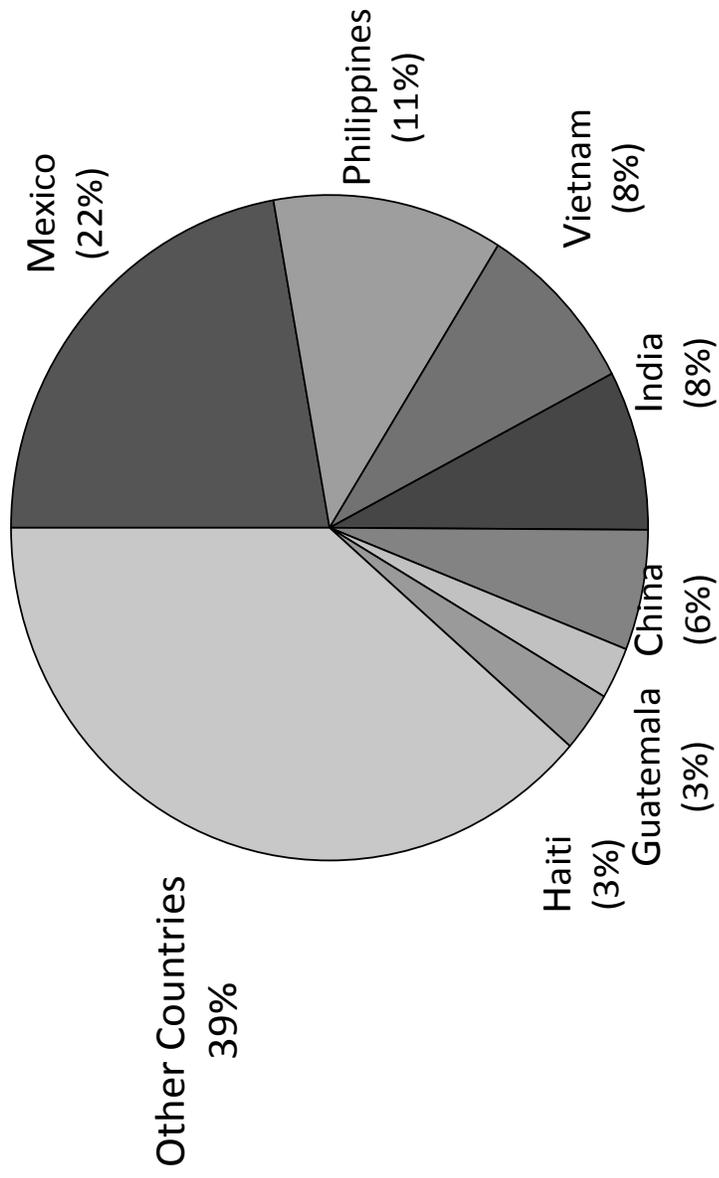
TB Case Rates in U.S.-born vs. Foreign-born Persons, United States*, 1993 – 2011**



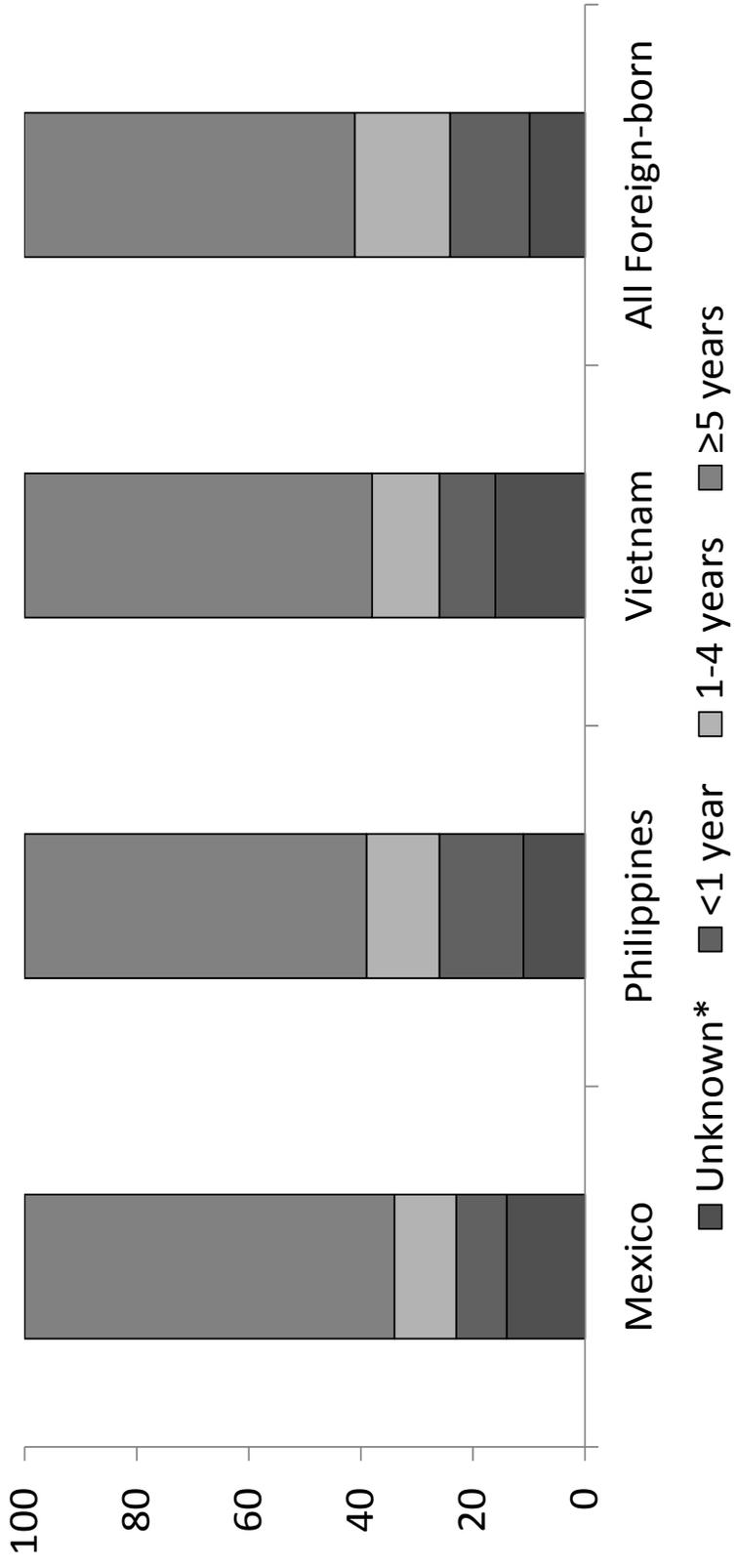
*Includes the same data as slide 15, but rates presented on a logarithmic scale.

**Updated as of June 25, 2012.

Countries of Birth of Foreign-born Persons Reported with TB, United States, 2011

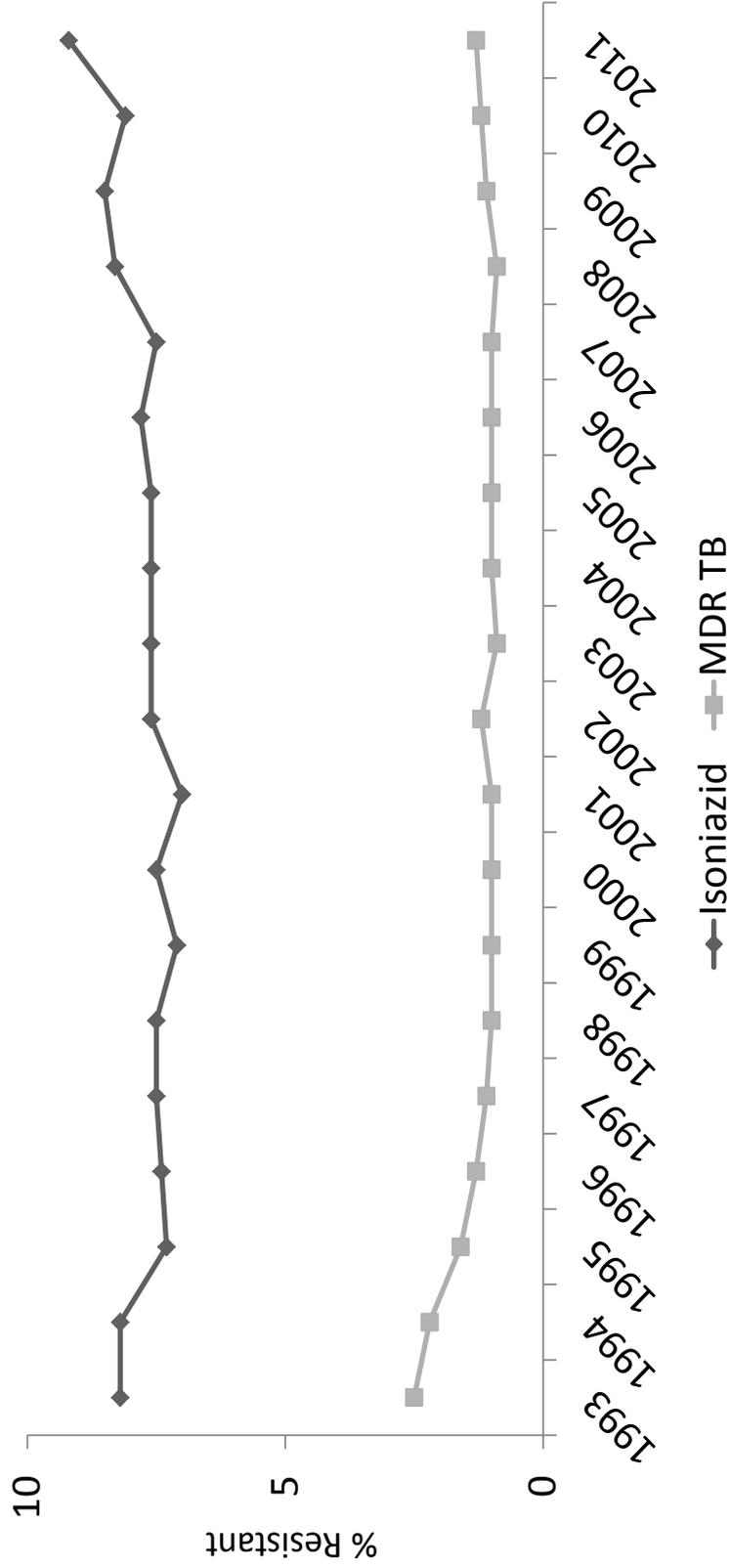


Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2011



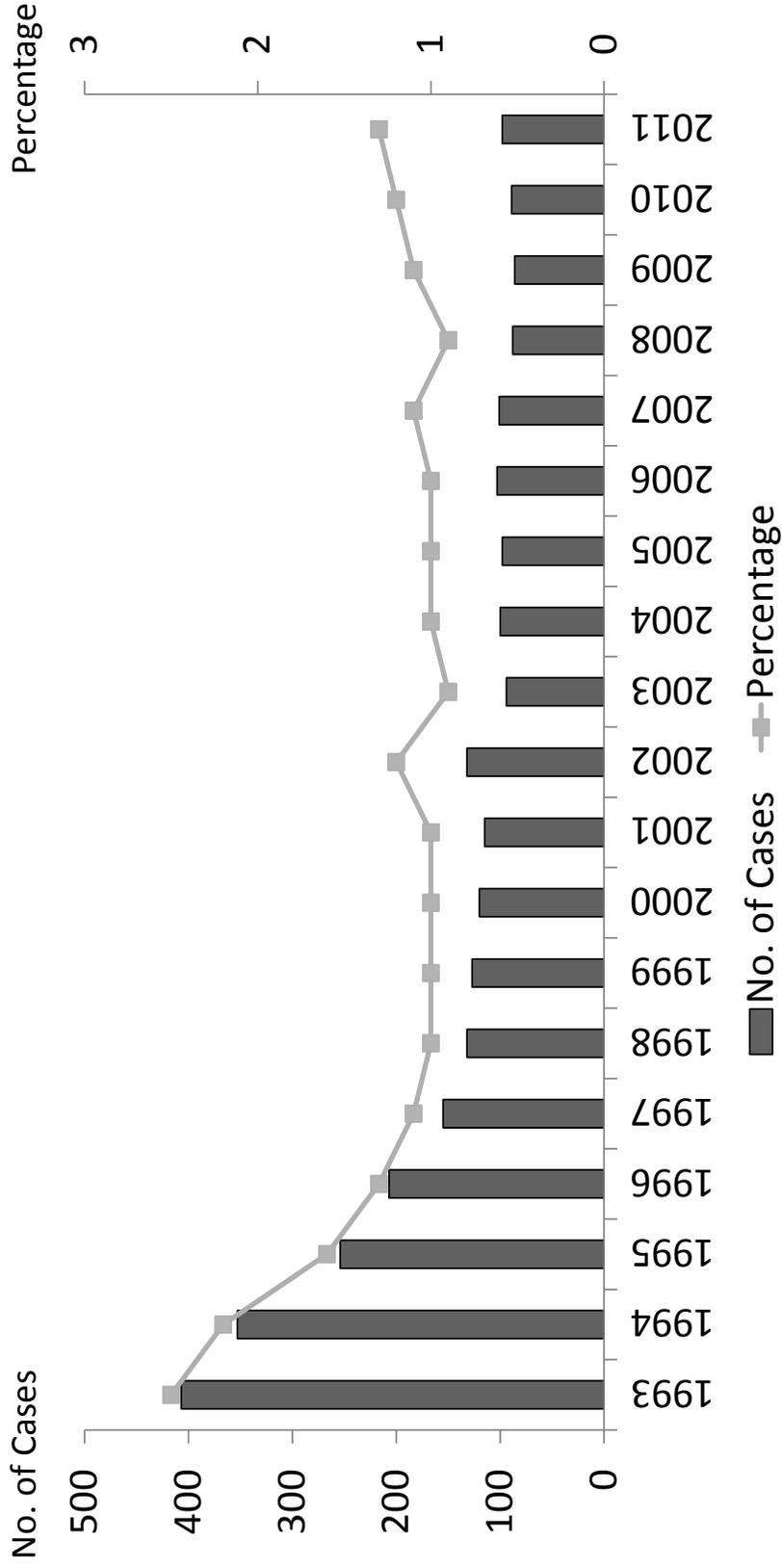
* Foreign-born TB patients for whom information on length of residence in the U.S. prior to diagnosis is unknown or missing

Primary Anti-TB Drug Resistance United States, 1993 – 2011*



*Updated as of June 25, 2012.
 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

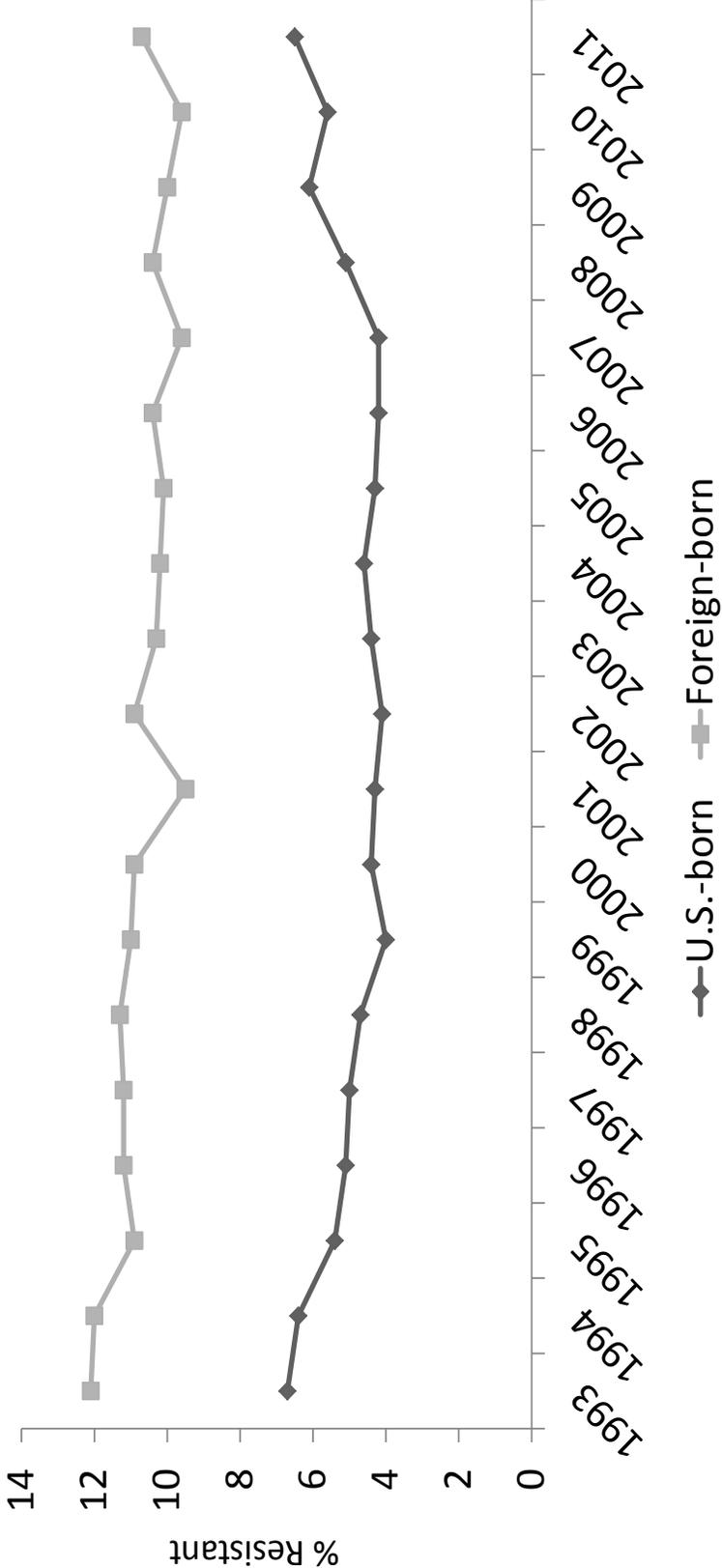
Primary MDR TB United States, 1993 – 2011*



* Updated as of June 25, 2012.
 Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

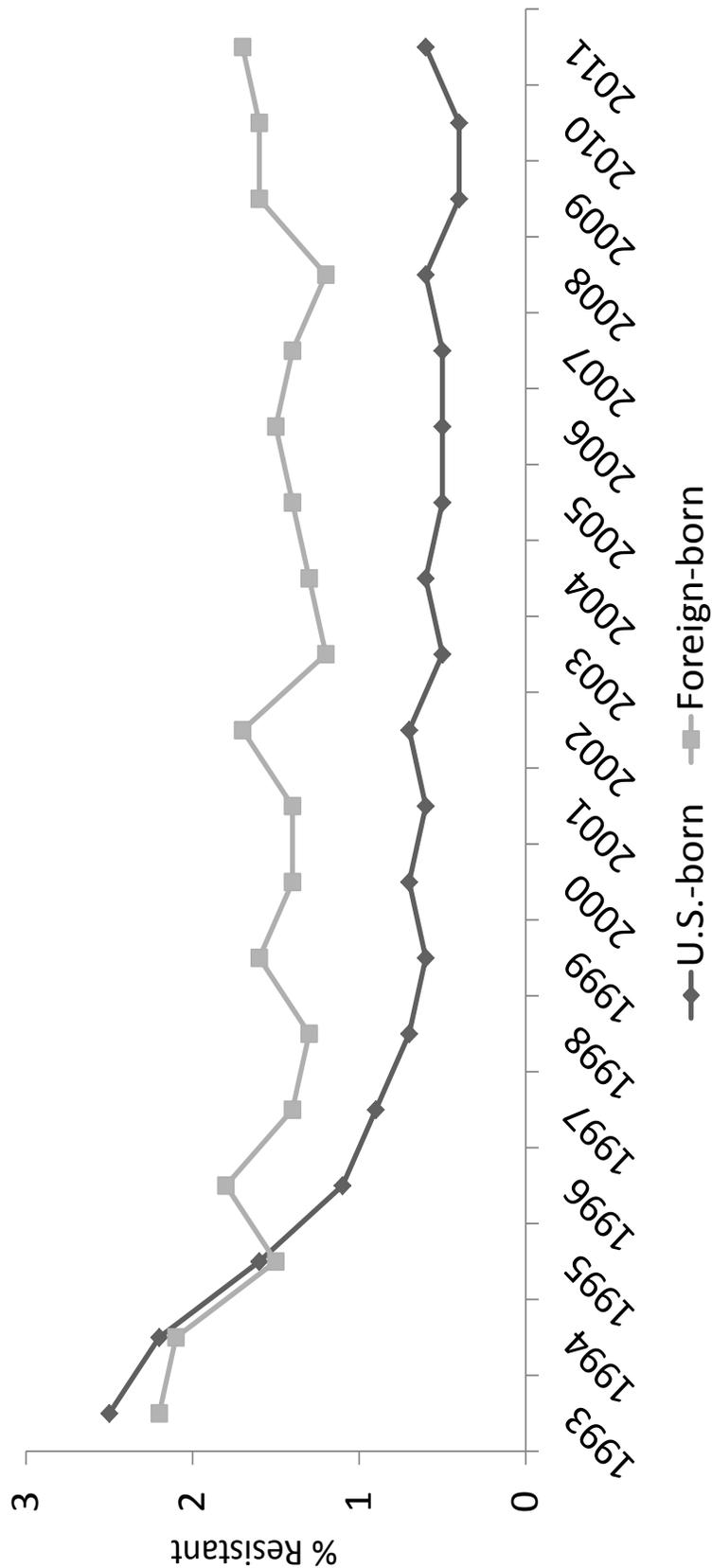
Surveillance Slide #21

Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons United States, 1993 – 2011*



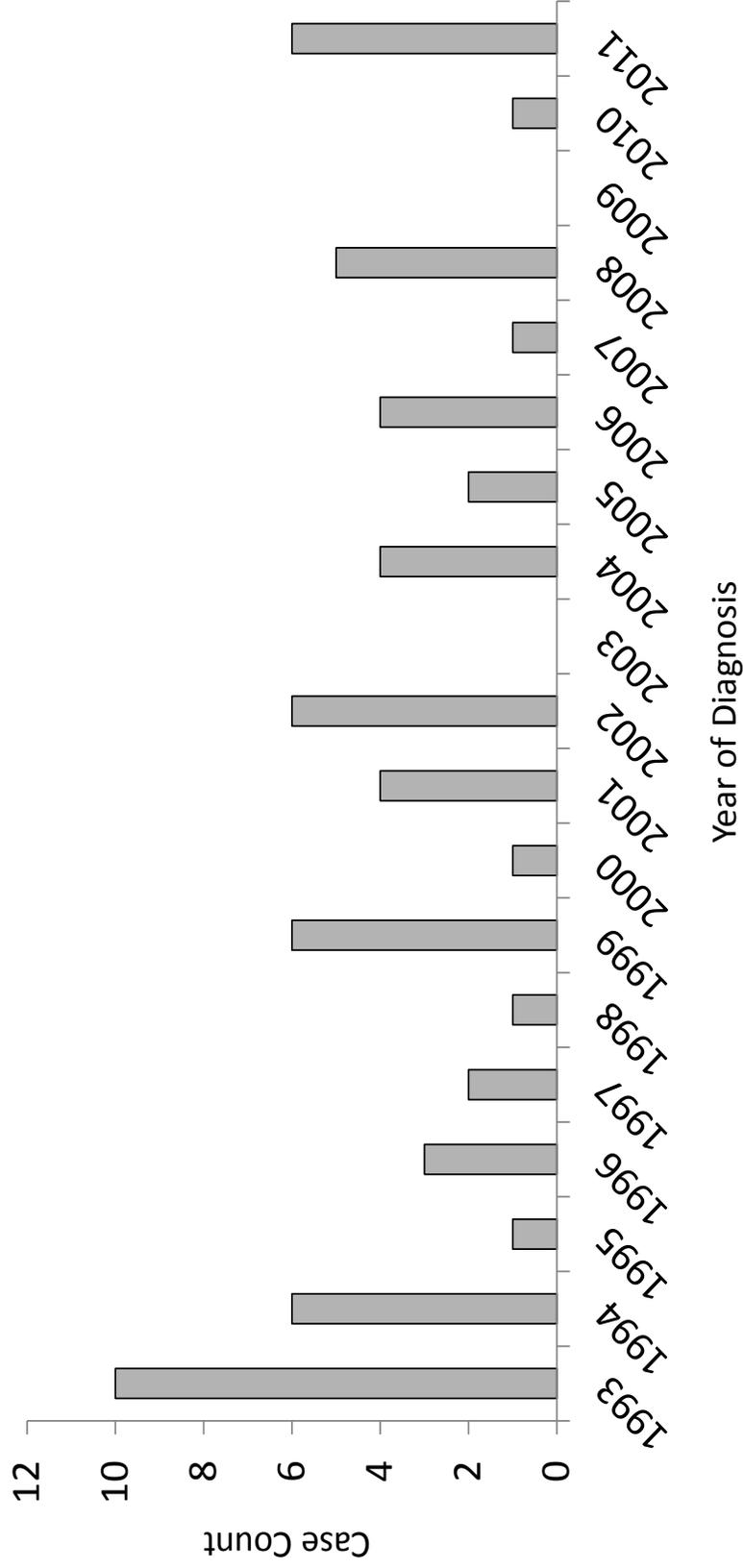
*Updated as of June 25, 2012.
Note: Based on initial isolates from persons with no prior history of TB.

Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2011*



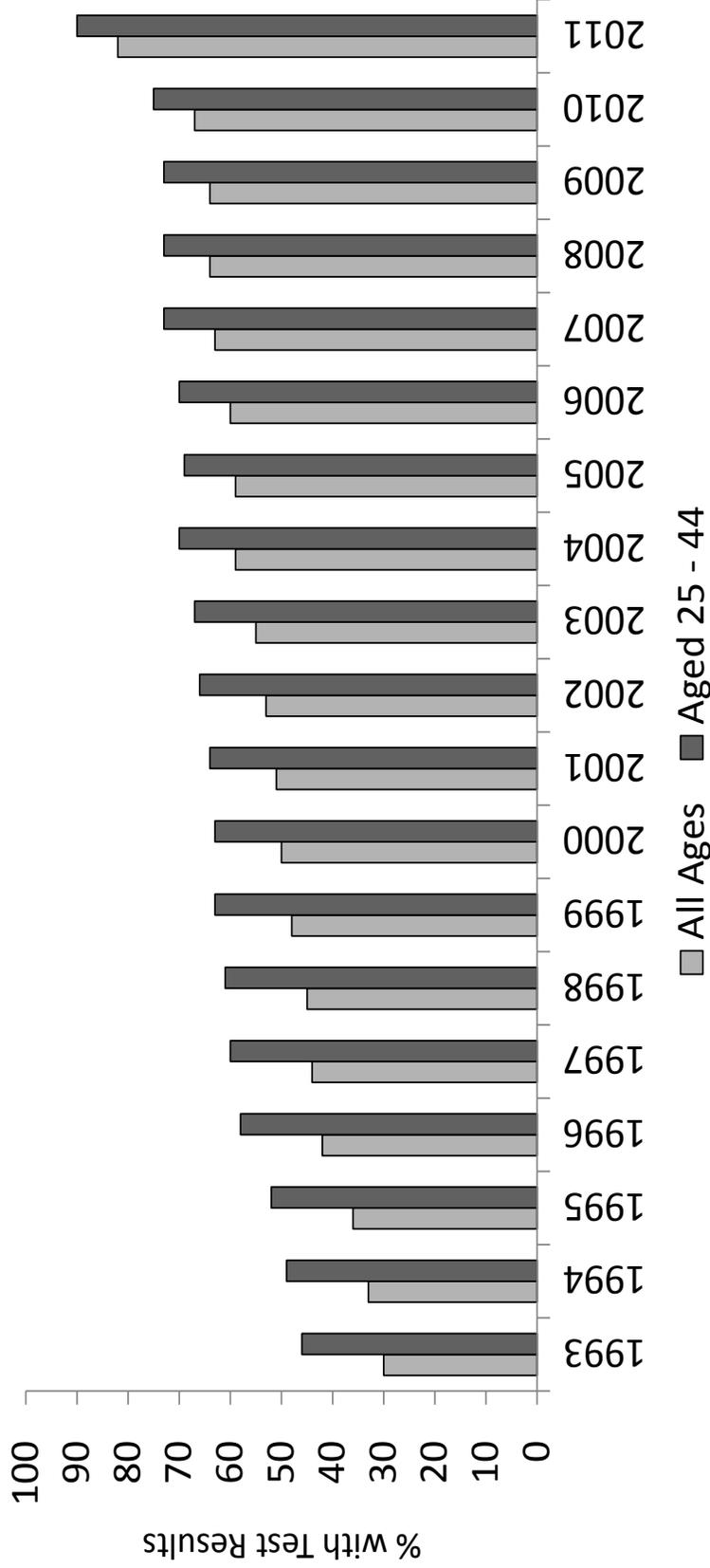
* Updated as of June 25, 2012.
 Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

XDR TB Case Count Defined on Initial DST* by Year, 1993 – 2011**



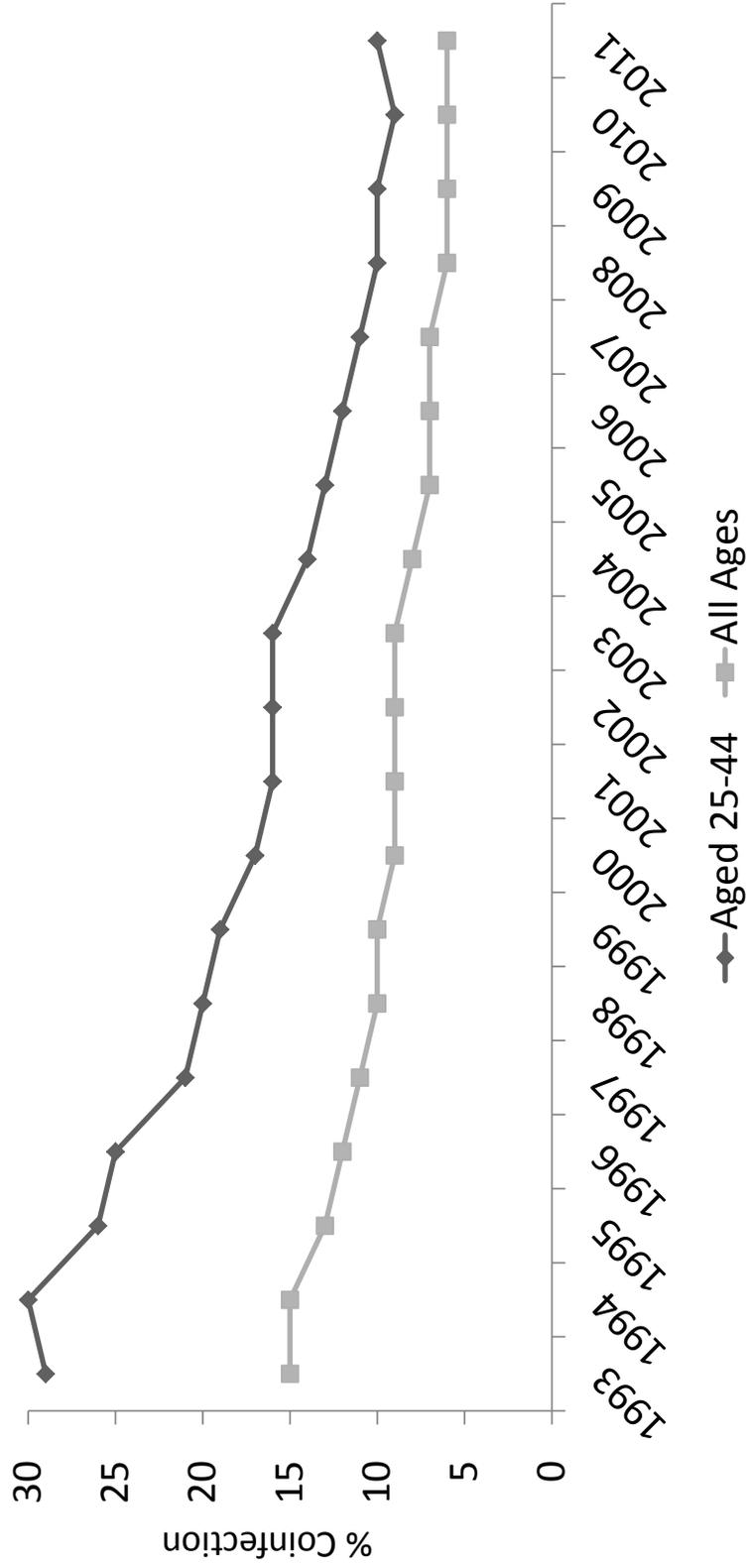
* Drug susceptibility test
 ** Updated as of June 25, 2012.
 Note: Extensively drug-resistant TB (XDR TB) is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs

Reporting of HIV Test Results in Persons with TB by Age Group United States, 1993 – 2011*



*Updated as of June 25, 2012.
 Note: Includes TB patients with positive, negative, or indeterminate HIV test results. HIV test results not reported from California after 2004. HIV test results not reported from Rhode Island for years 1993-1997. HIV test results not reported from Vermont after 2007.

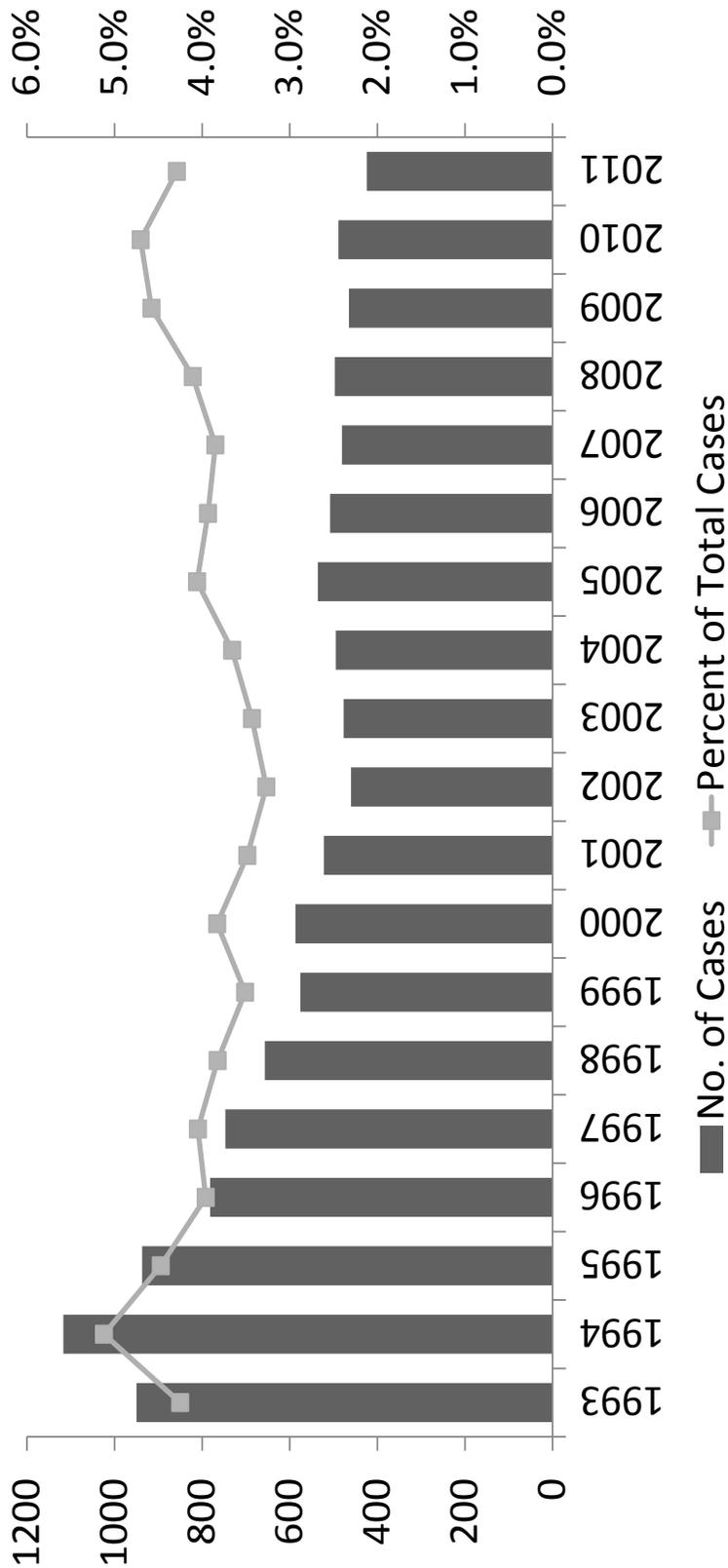
Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2011*



*Updated as of June 25, 2012

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

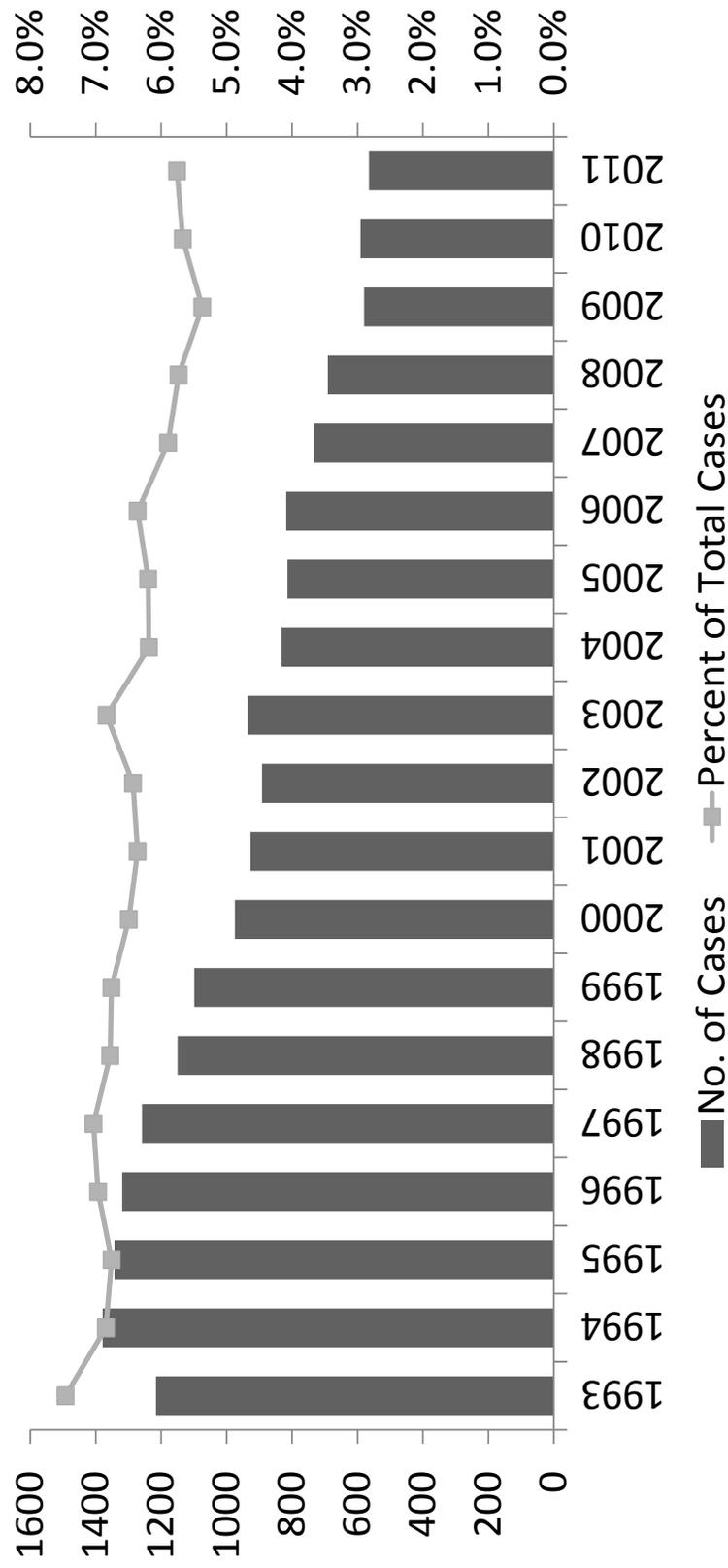
TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993-2011*



* Updated as of June 25, 2012

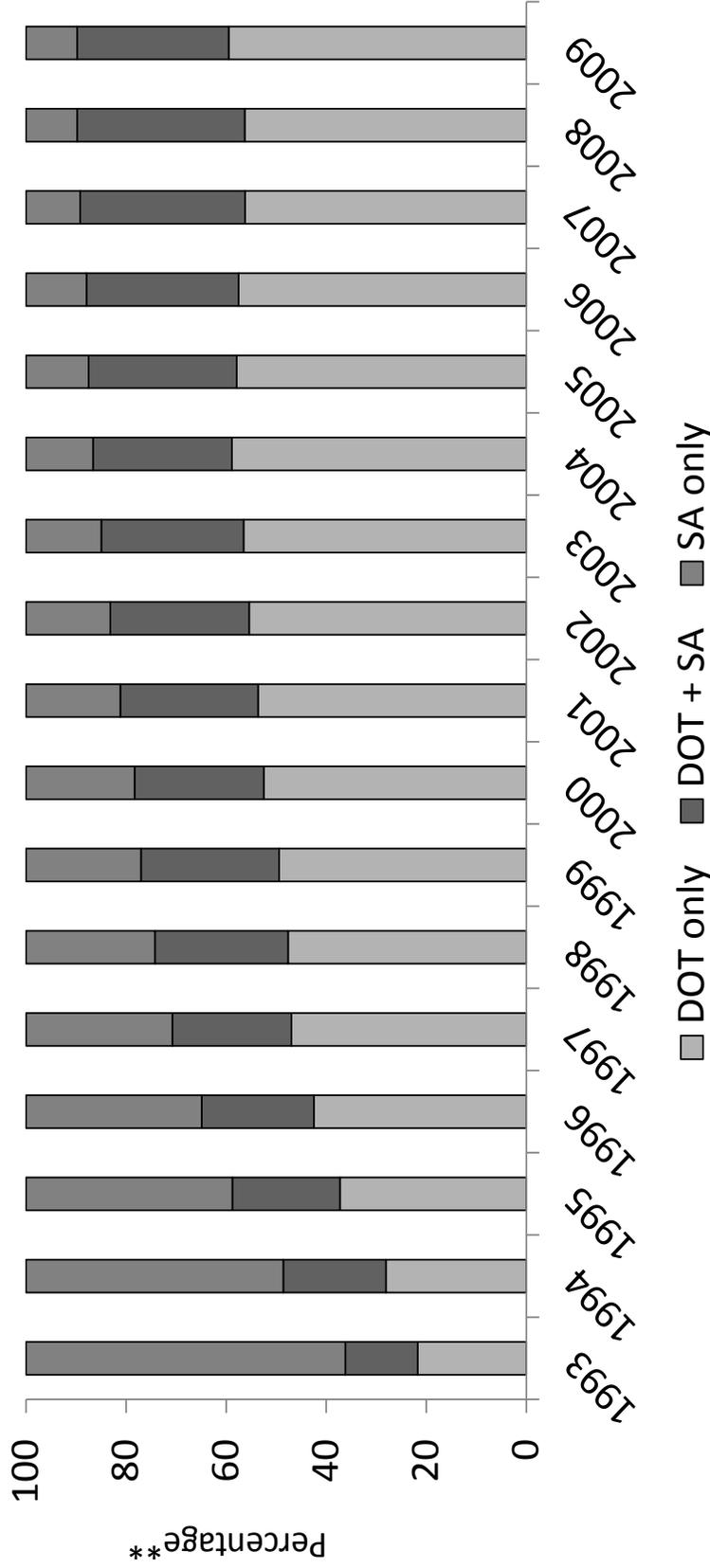
Note: Resident of correctional facility at time of TB diagnosis

**TB Cases Reported as Homeless in the
12 Months Prior to Diagnosis,
Age ≥15, United States, 1993-2011***



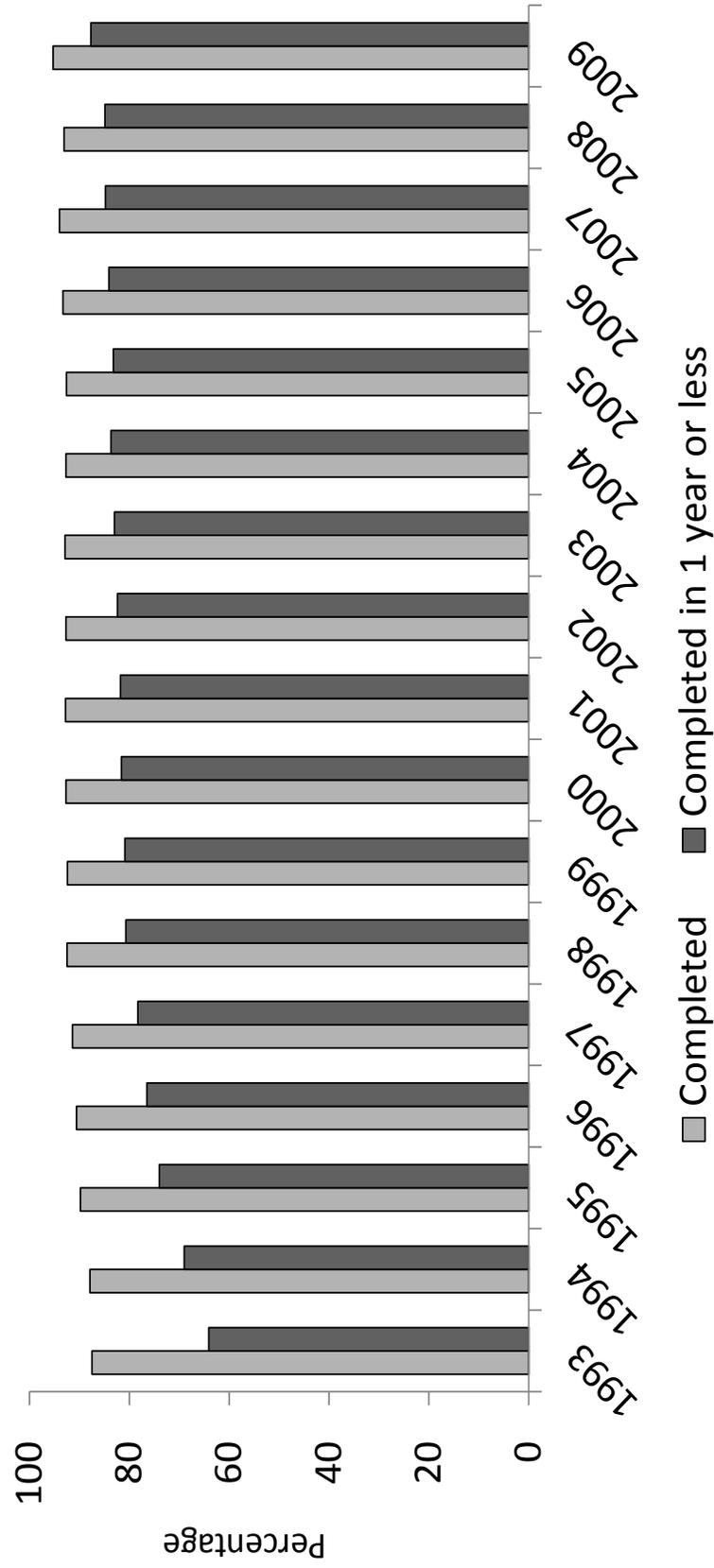
* Updated as of June 25, 2012
 Note: Homeless within past 12 months of TB diagnosis

Mode of Treatment Administration in Persons Reported with TB United States, 1993 – 2009*



*Updated as of June 25, 2012. Data available through 2009 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 – 2009*



* Updated as of June 25, 2012. Data available through 2009 only.
 Note: Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningial disease, or pediatric patient (aged <15) with military disease or positive blood culture.

Tuberculosis in the United States

National Tuberculosis Surveillance System Highlights from 2011

Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2011. 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 2011. 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 25, 2012. All case counts and rates for years 1993–2011 have been updated.

Slide 2. Reported TB Cases, United States, 1982–2011. 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 2011 marked the nineteenth 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 2011, a total of 10,528 cases were reported from the 50 states and the District of Columbia (DC). This represents a decline of 5.8% from 2010 and approximately 60.5% from 1992.

Slide 3. TB Morbidity, United States, 2005–2011. 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 13,727 in 2006 to 10,528 in 2011, and the TB rate decreased from 4.6 in 2006 to 3.4 in 2011.

Slide 4. TB Case Rates, United States, 2011. This map shows TB rates for 2011. Thirty-seven states reported a rate less than 3.4 TB cases per 100,000, the 2011 national average. Thirteen states and DC reported a rate above 3.4 TB cases per 100,000; these accounted for 67% of the national total in 2011 and have experienced substantial overall decreases in cases and rates from 1992 through 2011.

Slide 5. TB Case Rates by Age Group, United States, 1993–2011. This slide shows the last 19 years' declining trend in TB rates by age group. Starting in 2011, case rates in all age groups have declined by more than 50%: persons 65 years and older (from 17.7 per 100,000 in 1993 to 5.4 in 2011); adults aged 45 to 64 years (from 12.4 to 4.0); adults aged 25 to 44 years (from 11.5 to 4.1); those 15 to 24 years of age (from 5.0 to 2.4); and in children under 15 years of age (from 2.9 to 0.9)

Slide 6. Reported TB Cases by Age Group, United States, 2011. This pie chart shows the age distribution of persons reported with TB in 2011. Five percent were children under 15 years of age, 10% were age 15 to 24, 32% were age 25 to 44, 31% were age 45 to 64, and 21% were at least 65 years old.

Slide 7. TB Case Rates by Age Group and Sex, United States, 2011. This slide graphs the TB rates in 2011 by age group and sex. It shows that rates tended to increase with age, ranging from a low of less than 1 per 100,000 in children aged 5 - 14 to a high of 7.4 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 8. TB Case Rates by Race/Ethnicity, United States, 2003–2011. This slide shows the declining trend in TB rates by race/ethnicity during the last 9 years. Asians had the highest TB rates, which declined from 29.9 per 100,000 in 2003 to 20.9 in 2011, and had a percent decline over the time period of 30%. Rates also declined in the following racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 11.7 in 2003 to 6.3 in 2011 (-46%); among Hispanics, from 10.3 to 5.8 (-44%); among American Indians and Alaska Natives, from 8.2 to 5.6 (-32%); and among non-Hispanic whites, from 1.4 to 0.8 (-43%). Rates decreased among Native Hawaiian or Other Pacific Islanders after two years of increase since 2008, from 16.2 in 2008 to 15.9 in 2011 (-2%).

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 9. TB Case Rates by Age Group and Race/Ethnicity, United States, 2011. This slide presents TB rates in 2011 by age group and race/ethnicity. After infancy (age under 5), risk typically increased with age across all racial and ethnic groups. Rates were consistently higher in minority racial and ethnic groups than in non-Hispanic whites. Rates were the highest in Asians and Native Hawaiians and Other Pacific Islanders, particularly in adult age groups. The impact of foreign birth is a consideration in interpreting rate variations by race/ethnicity. For example, 96% of cases in the Asian group occurred in foreign-born persons, compared with 74% of cases in Hispanics and 36% of cases in non-Hispanic blacks or African-Americans. Persons reporting two or more races totaled less than 1% of all cases.

Slide 10. Reported TB Cases by Race/Ethnicity, United States, 2011. In 2011, 84% of all reported TB cases occurred in racial and ethnic minorities (29% in Hispanics, 30% in Asians, 23% in non-Hispanic blacks or African-Americans, 1% in American Indians or Alaska Natives, and 1% in Native Hawaiians or Other Pacific Islanders), whereas 16% of cases occurred in non-Hispanic whites. Persons reporting two or more races totaled less than 1% of all cases. This is the first year that Asians have constituted the single largest percentage of TB cases among all racial/ethnic groups; Hispanics had previously held the largest TB percentage for seven years. Non-Hispanic blacks or African Americans have remained the third largest racial/ethnic group for four years now.

Slide 11. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2011. This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2011. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 62% in 2011. Overall, the number of cases in foreign-born persons remained virtually level, with approximately 7,000–8,000 cases each year before 2009, until 2009 when the number dropped to 6,854. That decreasing trend continued in 2011 with the number of foreign-born cases dropping to 6,510. The number in U.S.-born persons decreased from more than 17,000 in 1993 to 3,981 in 2011.

Slide 12. Trends in TB Cases in Foreign-born Persons, United States, 1991–2011. This slide shows trends in the past 20 years of TB cases in foreign-born persons in the United States from 1991 through 2011. The percentage of TB cases accounted for by foreign-born persons increased from 28% in 1990 to 62% in 2011.

Slide 13. Reported TB Cases by Origin and Race/Ethnicity, United States, 2011. Among U.S.-born persons with TB in 2011, 39% were non-Hispanic black or African-American, 33% were non-Hispanic white, 19% were Hispanic or Latino, 3% were Asian, 3% were American Indian or Alaska Native, and 2% were Native Hawaiian or Other Pacific Islander. Among the foreign-born, 46% were Asian, 34% were Hispanic or Latino, 13% were non-Hispanic black or African-American, and 5% were non-Hispanic white. Cases among American Indians or Alaska Natives and among Native Hawaiians or Other Pacific Islanders constituted less than 1%, respectively, of the cases among the foreign-born and are not shown. Persons reporting two or more races totaled less than 1% of all cases.

Slide 14. Percentage of TB Cases Among Foreign-born Persons, United States, 2001 and 2011. The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 2001 and 2011 in these side-by-side maps. The number of states with less than 25% of their TB cases among the foreign-born decreased from 13 states in 2001 to 6 states in 2011. The number of states with at least 25-49% of cases among the foreign-born decreased from 14 states in 2001 to 11 states in 2011. However, the number of states that had 50% or more of their cases among the foreign-born increased from 23 states in 2001 to 34 states in 2011.

Slide 15. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2011. TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2011, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 1.5, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 17.2.

Slide 16. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2011. This is the same as Slide 15, but the rates are presented on a logarithmic scale to better illustrate the trend in TB rates among the U.S.-

born and foreign-born. The lines show a greater rate of decline among the U.S.-born compared with the foreign-born during this period.

Slide 17. Countries of Birth of Foreign-born Persons Reported with TB, United States, 2011. This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2011, 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 2011 the seven top countries accounted for 61% of the total cases, with Mexico accounting for 22%; the Philippines, 11.6%; Vietnam, 8.4%; India, 7.7%; China, 5.8%; Haiti, 2.9%; and Guatemala, 2.5%. 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 18. Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2011. The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2011 is shown in these stacked bars. Overall, 14% had been in the United States for less than 1 year, 17% between 1 and 4 years, and 59% 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, 9% 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 the Philippines, 15% had been in the United States for less than 1 year, 13% between 1 and 4 years, and 61% for at least 5 years. Among persons born in Vietnam, 10% had been in the United States for less than 1 year, 12% between 1 and 4 years, and 62% for at least 5 years.

Slide 19. Primary Anti-TB Drug Resistance, United States, 1993–2011. Primary drug resistance is shown for the past 19 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 remained between 7.0% and 8.6% between 1993 and 2010, however in 2011, this increased to 9.2%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), decreased from 2.5% in 1993 to 1.1% in 1997, and remained at approximately 1.0% until 2009 and 2010 when it increased to 1.1% and 1.2%, respectively. In 2011, it increased again to 1.3%.

Slide 20. Primary MDR TB, United States, 1993–2011. 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 2011. The number of primary MDR TB cases, represented by bars, steadily declined from 407 in 1993 to 115 in 2001. Since then, the total number of primary MDR TB cases has fluctuated from 86 to 132 cases, with 98 cases reported for 2011. Primary MDR TB, shown by the line, decreased from 2.5% in 1993 to approximately 1.1% in 1997, and has fluctuated around 1.0% since then. In 2011, the percentage increased to 1.3%.

Slide 21. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2011. 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 was approximately two times higher among foreign-born persons than among U.S.-born persons. In foreign-born persons, the percentage declined from 12.4% in 1993 to 10.7% in 2011. In U.S.-born persons, the percentage decreased from 6.8% in 1993 to 4.2% in 2007, but has increased since then to 6.5% in 2011.

Slide 22. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2011. This graph highlights primary MDR TB in U.S.-born versus foreign-born persons. The percentage with primary MDR TB has declined among both groups since 1993, although the decline in the U.S.-born has been greater. As a result, the proportion of primary MDR TB cases in the US that are attributed to foreign-born persons increased from approximately 25% in 1993 to 83% in 2011 (not shown on slide). Among the U.S.-born, the percentage with primary MDR TB remained between 0.4% and 0.7% from 1999 through 2010 and was 0.6% in 2011. The percentage among foreign-born persons has fluctuated year by year, while averaging approximately 1.5% from 1999 through 2010. In 2011, the percentage of primary MDR TB among foreign-born persons was 1.7%

Slide 23. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2011. This graph shows the annual number of counted XDR TB cases as defined on initial

DST from 1993-2011, reported as of June 25, 2012 ; 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. Six cases of XDR TB were reported in 2011. 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 24. Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993–2011. This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2011. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 82% in 2011. Among adults aged 25–44 years, the percentage increased from 46% in 1993 to 90% in 2011. California began reporting HIV test results to CDC in 2011; this accounts for the substantial percentage increase for that year.

Slide 25. Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2011. This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2011. 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. 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 reported with TB decreased from 15% to 6% overall and from 29% to 10% in persons aged 25 to 44 years during this period.

Slide 26. TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993-2011. 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 1,117 cases in 1994 to 424 cases in 2011. Between the years 2000 and 2010, the number of cases residing in a correctional facility has fluctuated between 587 (in 2000) to as low as 460 (in 2002). The first year to drop below this range was 2011, to 424 cases. Of total cases, the percentage of cases residing in a correctional facility has ranged from 5.1% in 1994 to 3.3% in 2002. The 1990s saw a decreasing trend in percentage until 2002. Since 2002, the trend has showed an increase; in 2010 the percentage of total cases was 4.7%. In 2011, this percentage decreased to 4.3%, only the second decrease since 2002.

Slide 27. TB Cases by Homeless Status, Age ≥15, United States, 1993-2011. This graph shows the number of TB cases reported to be homeless within twelve months prior to their TB diagnosis from 1993 through 2011. Cases must have been above 14 years of age. The number of homeless cases has decreased from a high of 1379 cases in 1994 to 565 in 2011 and parallels the overall decline in cases during this time. This category has seen a continuous decrease in cases since 1994; the years 2003, 2006, and 2010 have been exceptions with a small increase in cases. Of total cases, 6.8% were homeless in 1994 and percentages have ranged between 7.5% in 1993 and 5.4% in 2009. Since 2009 there has been a small increase in 2010 (5.7%) and in 2011 (5.8%).

Slide 28. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2009. 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 59.5% in 2009, 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) remained the same in 2009 as it was in 2008. In 2009, 89.8% of patients received at least some portion of their treatment as DOT.

Slide 29. Completion of TB Therapy, United States, 1993–2009. The reporting areas began providing information on completion of therapy in 1993 through the individual TB case report form. The calculations exclude persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture. Overall completion of therapy had remained at approximately 92-93% from 1998 through 2008, but increased to 95% in 2009. Completion in 1 year or less increased from 64% in 1993 to 88% in 2009, the latest year with available data. 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.

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Appendices

Appendix A

Tuberculosis Case Definition for Public Health Surveillance¹ (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 Counting Reported 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.

**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.*

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.

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. The reporting area with count authority 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 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.

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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: LTBIdrugerevents@cdc.gov).

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