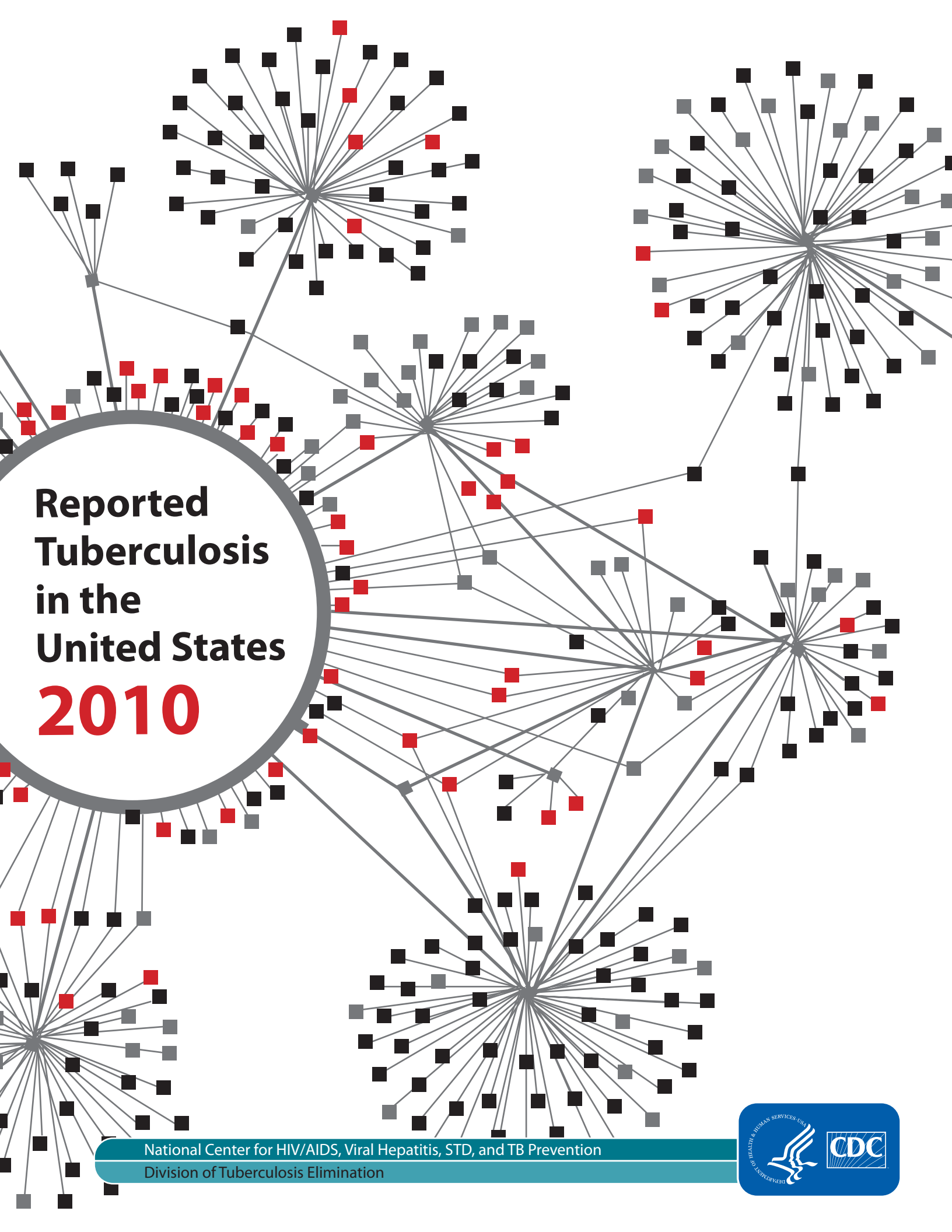

Reported Tuberculosis in the United States

2010

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Division of Tuberculosis Elimination

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Copies of *Reported Tuberculosis in the United States, 2010,* are available from the Division of Tuberculosis Elimination's online ordering system at http://www.cdc.gov/tb/.

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Reported Tuberculosis in the United States

2010

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Centers for Disease Control and Prevention

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

Division of Tuberculosis Elimination

October 2011

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Preface

Reported Tuberculosis in the United States, 2010 presents summary data for tuberculosis (TB) cases verified and counted in 2010. Reports of verified cases of tuberculosis (RVCT) 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, 2010 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 2010 data and Technical Notes provides information about how the data was collected and reported; these sections are included to help the reader interpret the data. The 2010 Report also includes a special supplement section on the United States Affiliated Pacific Islands (USAPI).

Morbidity Trend Tables, United States presents trends in the overall TB case counts and case rates by selected demographic and clinical characteristics. *Morbidity Tables, United States, 2010* presents overall case counts and case rates for the United States by selected demographic characteristics. *Morbidity Tables, Reporting Areas, United States, 2010* presents 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, 2010 and 2008* presents 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, 2010* provides 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 2010* presents an overview of USAPI TB programs and provides USAPI TB surveillance data highlights. *Surveillance Slide Set, 2010* 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 133 and 134). *National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information* is provided in Appendix C (page 143).

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 1993–2009). Atlanta: CDC: 1994–2010.

Reports from 2006 through 2010 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
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/statistical_information.html
KY	http://chfs.ky.gov/dph/epi/tb.htm
LA	http://www.dhh.louisiana.gov/offices/?ID=273
MA	http://www.mass.gov/dph/cdc/tb
MD	http://ideha.dhmh.maryland.gov/CTBCP/
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/stats.html
MO	http://health.mo.gov/living/healthcondiseases/communicable/tuberculosis/index.php
MT	http://www.dphhs.mt.gov/PHSD/epidemiology/commun-disease-epi-tuberculosis.shtml
MS	http://www.msdh.state.ms.us/msdhsite/_static/14,0,125.html
ND	http://www.ndhealth.gov/disease/tb/
NC	http://www.epi.state.nc.us/epi/tb
NE	http://www.dhhs.ne.gov/cod/Tuberculosis/tbindex.htm
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/ERD/HealthData/tb_data.shtml
NYC	http://www.nyc.gov/html/doh/html/tb/tb-reports.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

*Links to U.S. reporting area TB programs accessed as of September 2011. Includes responses from the reporting areas of New York City (NYC) and Puerto Rico (PR).

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Morbidity Tables, Cities and Metropolitan Statistical Areas, 2010

United States Affiliated Pacific Islands, 2010

Surveillance Slide Set, 2010

Appendices

Executive Commentary

Executive Commentary

Highlights of 2010 Report

Since 1953, in cooperation with state and local health departments, the Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination (DTBE) 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. The following are the highlights of the 2010 report:

1. Updated case counts for each year from 1993 through 2009.

2. Case counts: 11,182 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2010, representing a 3.1% decrease from 2009 (Table 1).
   - Nineteen states reported increased case counts from 2009 (Table 28).
   - California, Texas, New York, and Florida accounted for greater than 50% of the national case total (Table 28).
   - For the seventh consecutive year, Hispanics (29%) exceeded all other racial or ethnic groups with the largest percentage of total cases (Table 2).
   - Asians (28%) have surpassed non-Hispanic blacks or African-Americans[1] (24%) as the second largest racial or ethnic group since 2008.
   - Blacks or African-Americans born in the United States represented 40% of TB cases in U.S.-born persons and accounted for approximately 16% of the national case total (Table 17).
   - Asians born outside the United States represented 44% of TB cases in foreign-born persons and accounted for approximately 27% of the national case total (Table 18).

3. Case rates: In 2010, the TB case rate declined from 3.8 to 3.6 per 100,000 persons, representing a 3.8% decrease from 2009.
   - Thirteen states and DC reported rates above the national average (Table 20).
   - Thirty-seven states met the definition for low incidence, or ≤ 3.5 cases per 100,000 persons, an increase of three states from 2009 (Table 20).
   - The TB case rate was 1.6 per 100,000 for U.S.-born persons and 18.1 for foreign-born persons (Table 5).
   - Asians continued to have the highest case rate (22.4 per 100,000 persons) among all racial or ethnic groups (Table 2) though the case rate in Native Hawaiian or Other Pacific Islanders increased (20.8 per 100,000 persons).

4. Burden among the foreign-born: In 2010 the percentage of cases occurring in foreign-born persons was 60% of the national case total.
   - Foreign-born Hispanics and Asians together represented 80% of TB cases in foreign-born persons, and accounted for 48% of the national case total (Table 18).
   - In 32 states, ≥ 50% of TB cases occurred among foreign-born persons (Table 23).
   - In 14 states, ≥ 70% of TB cases occurred among foreign-born persons (Table 23).
   - In 9 states, ≥ 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, Philippines, India, Vietnam and China (Table 6).

5. Drug resistance: 1.2% of reported cases, compared to 1.1% in 2009, had primary multidrug resis-

[1]Hispanic and non-Hispanic are ethnicities. All races are non-Hispanic. The category "non-Hispanic blacks or African-Americans" includes U.S. - born and foreign-born persons unless otherwise specified.

tance, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin (Table 10).

Tuberculosis in the United States

In 2010, the number of TB cases reported (11,182) and case rate (3.6 cases per 100,000) both decreased; this represented declines of 3.1% and 3.8%, respectively, compared to 2009. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 58% (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 2010, 60% 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 2010 was approximately 11 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths decreased by 7%, from 590 deaths in 2008 to 547 deaths in 2009 after a small increase from 554 deaths in 2007 (Table 1).

Age

Since 1993, TB case rates have declined nearly annually for all age groups. In 2010, TB case rates declined for those aged 15–24 years of age; 25–44; and those greater than or equal to 65 years while case rates remained similar for children 0–14 years of age and those 45–64 years. The highest burden of disease continues to be among older adults. In 2010, adults aged 65 years and older had a case rate of 5.5 cases per 100,000, while children aged < 14 years had the lowest rate at 1.0 case 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 2010, Asians had the highest TB case rate at 22.4 cases per 100,000, which was a slight decrease from 23.3 in 2009. Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 20.8 cases per 100,000, which is an increase compared to 16.7 cases per 100,000 reported in 2009. Due 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 54% and 76% in the following racial and ethnic groups: among Hispanic or Latinos from 19.9 to 6.5 cases per 100,000; among non-Hispanic blacks or African-Americans from 28.5 to 7.0 cases per 100,000; among American Indian or Alaska Natives from 14.0 to 6.4 cases per 100, 000; and among non-Hispanic whites from 3.6 to 0.9 cases per 100,000. In 2010, 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 2010, the TB case rate for U.S.-born persons was 1.6 cases per 100,000 representing a 78% 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 2010, the TB case rate among foreign-born persons was 18.1 cases per 100,000 representing a 47% 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 2010, 39% of TB cases were among U.S-born persons compared to 69% in 1993 (Table 5). In 32 states, ≥ 50% of TB cases occurred among foreign-born persons. In 14 states (California, Colorado, Connecticut, Delaware, Iowa, Maine, Minnesota, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Rhode Island, and Utah), ≥ 70% of TB cases occurred among foreign-born persons (Table 23).

Country of Origin and World Region

From 2005 through 2009, the top five countries of origin of foreign-born persons with TB were Mexico, 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[2]. Of the 6,720 TB cases reported among foreign-born persons in 2010, 40% occurred among persons born in the Americas region, and 29% occurred among persons born in the Western Pacific region (Table 19). From 1993 to 2010, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 4.4% in 2010), the Southeast Asia region (6% in 1993 to 15% in 2010), and the African region (2% in 1993 and 8% in 2010) (Table 19).

Multidrug-Resistant Tuberculosis

From 1993, when the RVCT was expanded to include drug-susceptibility results, the proportion of patients with primary multidrug-resistant TB (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 MDR TB cases from 1.0% percent of the total number of reported TB cases in 2008, (89 absolute cases), to 1.1% of the total number of reported TB cases in 2009 (94 cases), to 1.2% in 2010 (88 cases). Since 1997, the percentage of U.S.-born patients with MDR TB has remained ≤ 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% (72 of 88) in 2010 (Table 10).

Extensively Drug-Resistant Tuberculosis

CDC has included an updated case count of extensively drug-resistant TB (XDR TB) cases from 1993 to 2010 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)[3,4]. One person was reported to have XDR TB during 2010, compared to no cases in 2009 and five cases in 2008.

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 87% in 2010, though this is slightly below the 89% observed in 2003. The proportion of patients who completed therapy within 1 year increased from 64% in 1993 to 85% in 2008 (the latest year for which complete outcome data are available). The proportion of persons receiving directly observed therapy at least for a portion of the treatment duration also increased from 36% in 1993 to 90% in 2008, the latest year for which complete outcome data are available (Table 12).

Summary

Both the absolute number of TB cases and the TB case rates in the United States continued to decrease in 2010. With 11,182 total cases representing a case rate of 3.6 cases per 100,000 persons, 2010 had the lowest number of reported TB cases since reporting began in 1953. After the unprecedented 11.4% decrease in reported tuberculosis cases in 2009[5], the rate of decline returned to the average observed from 2003 - 2008 with a 3.1% decrease in the number of reported cases and a 3.8% decrease in the TB case rate in 2010. Though the reasons for the unprecedented decline have not been completely elucidated, it does not appear that the 2009 decline was due to underreporting.

In response to the Institute of Medicine report Ending Neglect: The Elimination of Tuberculosis in the United States outlining recommendations for achieving domestic TB elimination, CDC has committed to: maintaining control of TB while adapting to a declining incidence of disease and changing systems of health care financing and management; accelerating the decline of TB through targeted testing and treatment of persons with latent TB infection; developing new tools for the diagnosis, treatment, and prevention of TB; reducing the global burden of TB by increasing the United States involvement in global TB control

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

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

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

[5]Centers for Disease Control and Prevention. Decrease in reported tuberculosis cases - United States, 2009. MMWR Morb Mortal Wkly Rep 2010;59:289-94.

activities; mobilizing and sustaining support for TB elimination by engaging policy and opinion leaders, healthcare providers, affected communities, and the public; and tracking progress toward the goal of TB elimination[6,7,8].

Because of continuing disparities between TB rates in U.S.-born whites compared with racial and ethnic minorities and persons born outside the United States, efforts should continue to focus on 1) awareness of TB in high-risk populations (persons of Hispanic ethnicity, Asian or African-American race; persons with human immunodeficiency virus; persons who are incarcerated; persons who experience homelessness; persons living in long-term care facilities, persons without stable employment; and persons with drug use or excess alcohol use), 2) education and TB awareness amidst declining TB incidence[9]; 3) diagnosis and treatment of TB and latent infection in foreign-born persons; and 4) sustained funding for TB control. Continued support for CDC's current TB elimination priorities[7] should increase progress towards the elimination goal of one TB case per 1,000,000 persons.

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

[7]Centers for Disease Control and Prevention. CDC's Response to Ending Neglect:The Elimination of Tuberculosis in the United States. Atlanta; 2002.

[8]CDC --- TB Strategic Planning. Centers for Disease Control and Prevention. (Accessed August 31, 2011, at http://www.cdc.gov/tb/about/strategicplan.htm.)

[9]Jereb JA. Progressing toward tuberculosis elimination in low-incidence areas of the United States. Recommendations of the Advisory Council for the Elimination of Tuberculosis. MMWR Recomm Rep 2002;51:1-14.

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 Caribbean[1]) report tuberculosis (TB) cases to CDC using a standard case report form, Report of Verified Case of Tuberculosis (RVCT), through 2010. TB cases are verified according to the *Tuberculosis Case Definition for Public Health Surveillance* in Appendix A. TB cases are reported and counted according to the *Recommendations for Reporting and Counting Tuberculosis Cases* in Appendix B.

TB Case Definition

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

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) 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 results from IGRA. 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

[1]Other 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.

[2]CDC. *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.

Class B or citizenship status, immigrants and refugees examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications should be reported and counted by the 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, June 2009.

Tabulation and Presentation of TB Data

This report presents summary data for TB cases reported to CDC in 2010. 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, and New York City.

Trend data are presented in Tables 1 through 14. 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 denominators used in calculating TB rates were based on official census and midyear (July 1) postcensal estimates from the U.S. Census Bureau. In Tables 1 and 20, the U.S. total populations for 2000 – 2010 were obtained from the Annual Estimates of the Population for the United States and the individual states, and for Puerto Rico (July 1, 2000 – July 1, 2010). 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 Tables 2 and 3, denominators for 2000 – 2010 were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States: April 1, 2000, – July 1, 2010.

To calculate rates for Table 4, denominators were obtained from the Annual Estimates of the Population by Sex and 5-Year Age Groups for the United States: April 1, 2000, to July 1, 2010. Denominators for computing 2010 rates in Table 16 were obtained from U.S. Census Bureau Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin: July 1, 2010. 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 1995–2010 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 (preliminary) was obtained from the National Center for Health Statistics, National Vital Statistics Report, Vol. 59, No. 4, March 16, 2011. The numbers of deaths for 2010 were not available at the time of this publication.

Completion of Tuberculosis Therapy
Tables 12, 41, 43, and 44 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 guidelines[3] in effect during the period covered, and the patient's initial drug susceptibility test results, age, and site of disease. The adequacy of the treatment regimen (e.g., the sufficiency of the duration of therapy, the appropriateness of the prescribed TB drugs) was not evaluated in this analysis. Acquired drug resistance from an inadequate duration of therapy was also not considered in this analysis.

In Table 41, the first column shows the total number of cases reported during 2008. 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, and did not have meningeal TB, regardless of age. In addition, TB cases under the age of 15 years were not eligible to complete therapy within 1 year if they had disseminated disease (disseminated disease is 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 41, each group under an indicated length of therapy has an initial column showing the number of cases in persons who were alive at diagnosis and prescribed an initial regimen of one or more drugs, and who did not die during therapy. This number was used as the denominator in COT rate calculations.

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

Rates of COT, regardless of duration, were calculated by dividing the number of patients reported as having completed therapy by the number of total eligible patients. Patients with an outcome other than completed therapy (i.e., moved, lost, refused treatment, and 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 <1 year and for COT, regardless of duration, only for the group with an indicated therapy of 1 year or less. Table 43 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, in this report, the isoniazid, rifampin, pyrazinamide (IRZ), ethambutol, streptomycin (E/S) column was removed from Tables 12 and 35.

Site of TB Disease
Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 8, 9, 26, 27, and 47). In publications prior to 1997, miliary disease was classified as extrapulmonary TB unless pulmonary disease was reported as the major site of TB disease. In 2009, miliary disease could not

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

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
Table 37 shows information on HIV status for persons with TB aged 25–44 years, the age group in which 71% of AIDS cases occur (CDC. HIV/AIDS Surveillance Report 2007; 15). The information on HIV status for TB cases reported in 2010 is incomplete. Reasons for incomplete reporting of HIV test results to the national TB surveillance system include concerns about confidentiality, which may limit the exchange of data between TB and HIV/AIDS programs; laws and regulations in certain states and local jurisdictions that have been interpreted as prohibiting the HIV/AIDS program from sharing the HIV status of TB patients with the TB program, or from reporting patients with TB and AIDS to the TB program; and reluctance by health care providers to report HIV test results to the TB surveillance program staff. In addition, health care providers may not offer HIV counseling, testing, and referral to some TB patients because of a lack of resources or of appropriately trained staff, or due to the perception that selected patients (e.g., foreign-born persons) are not at risk for HIV infection.

Data on the HIV-infection status of reported TB cases should be interpreted with caution. These data are not representative of all TB patients with HIV infection. Since testing is voluntary, some TB patients may decline HIV testing. 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 over represent or under represent the proportion of TB patients known to be HIV infected in a reporting area.

Primary Occupation for the Past Year
Table 38, except for ten states, 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. "Multiple Occupation" was removed and the "Retired" and "Not Seeking Employment" categories were added.

Reason Therapy Stopped
Tables 14 and 42 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.

Metropolitan Statistical Areas
Tables 46 through 50 present data by metropolitan statistical areas (MSAs) with an estimated 2009 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). On June 6, 2003, the OMB announced new MSA definitions based on Census 2000 data and the information has been updated annually. Some MSA's added or dropped counties and some MSA's 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 20 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 46) 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 MSA's total numbers may be underreported due 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, 1953–2010

	Tuberculosis Cases				Tuberculosis Deaths			
			Percent Change				Percent Change	
Year	Number	Rate	Number	Rate	Number[1]	Rate[1]	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	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	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	25,107	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	15,945	5.6	-2.2	-3.2	764	0.3	-1.6	0.0
2002	15,055	5.2	-5.6	-6.5	784	0.3	2.6	0.0
2003	14,835	5.1	-1.5	-2.3	711	0.2	-10.2	-33.3
2004	14,499	4.9	-2.3	-3.2	662	0.2	-6.9	0.0
2005	14,068	4.8	-3.0	-3.9	648	0.2	-2.1	0.0
2006	13,732	4.6	-2.4	-3.3	644	0.2	-0.6	0.0
2007	13,286	4.4	-3.2	-4.2	554	0.2	-14.0	0.0
2008	12905	4.2	-2.9	-3.8	590	0.2	6.5	0.0
2009	11537	3.8	-10.6	-11.3	547	0.2	-7.3	0.0
2010	11182	3.6	-3.1	-3.8	…	…	…	…

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

[2] 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 2010 tuberculosis case counts and rates updated as of July 21, 2011, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc) (accessed August 30, 2011) 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 August 30, 2011). Percentage change results reported to one decimal. Ellipses indicate data not available. Case data after 1974 are not comparable to prior years due to changes in the surveillance case definition that became effective in 1975. 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, 1993–2010

Year	Total Cases	Hispanic or Latino[1]			Non-Hispanic																						
					Multiple Race[2]			American Indian or Alaska Native			Asian[3]			Asian or Pacific Islander[4]			Black or African American			Native Hawaiian or Other Pacific Islander[5]			White			Unknown or Missing[6]	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	5140	(20)	19.9	…	…	…	272	(1)	14.0	…	…	…	3455	(14)	41.2	8948	(36)	28.5	…	…	…	6903	(27)	(3.6)	389	(2)
1994	24205	5018	(21)	18.6	…	…	…	327	(1)	16.4	…	…	…	3639	(15)	41.5	8383	(35)	26.2	…	…	…	6572	(27)	(3.4)	266	(1)
1995	22727	4834	(21)	17.2	…	…	…	320	(1)	15.7	…	…	…	3840	(17)	41.8	7554	(33)	23.2	…	…	…	5972	(26)	(3.1)	207	(1)
1996	21210	4492	(21)	15.2	…	…	…	287	(1)	13.7	…	…	…	3666	(17)	38.1	7097	(33)	21.5	…	…	…	5487	(26)	(2.8)	181	(1)
1997	19751	4218	(21)	13.7	…	…	…	264	(1)	12.3	…	…	…	3683	(19)	36.6	6604	(33)	19.7	…	…	…	4824	(24)	(2.5)	158	(1)
1998	18287	4090	(22)	12.6	…	…	…	254	(1)	11.5	…	…	…	3516	(19)	33.5	5823	(32)	17.0	…	…	…	4475	(24)	(2.3)	129	(1)
1999	17500	3864	(22)	11.4	…	…	…	242	(1)	10.7	…	…	…	3519	(20)	32.1	5550	(32)	16.0	…	…	…	4227	(24)	(2.1)	98	(1)
2000	16309	3803	(23)	10.7	…	…	…	232	(1)	11.0	…	…	…	3392	(21)	31.3	5149	(32)	15.0	…	…	…	3638	(22)	(1.9)	95	(1)
2001	15945	4009	(25)	10.8	…	…	…	226	(1)	10.6	…	…	…	3499	(22)	31.2	4782	(30)	13.7	…	…	…	3346	(21)	(1.7)	83	(1)
2002	15055	3973	(26)	10.3	…	…	…	185	(1)	8.6	…	…	…	3323	(22)	28.6	4467	(30)	12.7	…	…	…	3042	(20)	(1.5)	65	(0)
2003	14835	4105	(28)	10.3	37	(0)	1.0	179	(1)	8.2	3460	(23)	29.9	…	…	…	4159	(28)	11.7	64	(0)	16.2	2792	(19)	(1.4)	39	(0)
2004	14499	4181	(29)	10.2	34	(0)	0.9	157	(1)	7.1	3336	(23)	28.0	…	…	…	4069	(28)	11.4	63	(0)	15.6	2631	(18)	(1.3)	28	(0)
2005	14068	4045	(29)	9.5	45	(0)	1.1	152	(1)	6.8	3205	(23)	26.1	…	…	…	3958	(28)	10.9	54	(0)	13.1	2568	(18)	(1.3)	41	(0)
2006	13732	4049	(29)	9.2	39	(0)	0.9	163	(1)	7.2	3298	(24)	26.1	…	…	…	3732	(27)	10.2	52	(0)	12.3	2387	(17)	(1.2)	12	(0)
2007	13286	3875	(29)	8.5	24	(0)	0.6	133	(1)	5.8	3445	(26)	26.5	…	…	…	3477	(26)	9.4	95	(1)	22.1	2210	(17)	(1.1)	27	(0)
2008	12905	3804	(29)	8.1	42	(0)	0.9	139	(1)	6.0	3399	(26)	25.5	…	…	…	3278	(25)	8.8	70	(1)	15.9	2144	(17)	(1.1)	29	(0)
2009	11537	3380	(29)	7.0	37	(0)	0.8	101	(1)	4.3	3207	(28)	23.4	…	…	…	2873	(25)	7.6	75	(1)	16.7	1828	(16)	(0.9)	36	(0)
2010	11182	3236	(29)	6.5	29	(0)	0.6	153	(1)	6.4	3143	(28)	22.4	…	…	…	2652	(24)	7.0	95	(1)	20.8	1771	(16)	(0.9)	103	(1)

[1]Persons of Hispanic or Latino ethnicity may be of any race or multiple race.
[2]Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.
[3]Asian race first reported in 2003.
[4]Asian or Pacific Islander race reported 1993–2002.
[5]Native Hawaiian or Other Pacific Islander race first reported in 2003.
[6]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/nchs/nvss/bridged_race.htm) (accessed August 30, 2011). Denominators for computing 2000–2010 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, 2010 (http://www.census.gov/popest/national/asrh/files/NC-EST2009-ALLDATA-R-File22.csv) (accessed August 30, 2011).
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 July 21, 2011.
Ellipses indicate data not available.
See Technical Notes (page 9).
See Surveillance Slide #8.
Zero % (0) denotes <0.5%.

Table 3. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Race Only: United States, 1993–2010

Year	Total Cases	Multiple Race[1]			American Indian or Alaska Native			Asian[2]			Asian or Pacific Islander[3]			Black or African American			Native Hawaiian or Other Pacific Islander[4]			White			Unknown or Missing[5]	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	…	…	…	276	(1)	12.1	…	…	…	3484	(14)	39.5	9140	(36)	28.0	…	…	…	11920	(47)	5.5	287	(1)
1994	24205	…	…	…	336	(1)	14.2	…	…	…	3658	(15)	39.8	8621	(36)	25.9	…	…	…	11347	(47)	5.2	243	(1)
1995	22727	…	…	…	328	(1)	13.4	…	…	…	3863	(17)	40.2	7759	(34)	22.9	…	…	…	10566	(46)	4.8	211	(1)
1996	21210	…	…	…	293	(1)	11.6	…	…	…	3689	(17)	36.8	7291	(34)	21.2	…	…	…	9758	(46)	4.4	179	(1)
1997	19751	…	…	…	277	(1)	10.5	…	…	…	3710	(19)	35.5	6790	(34)	19.4	…	…	…	8813	(45)	3.9	161	(1)
1998	18287	…	…	…	263	(1)	9.6	…	…	…	3543	(19)	32.5	5962	(33)	16.7	…	…	…	8381	(46)	3.7	138	(1)
1999	17500	…	…	…	253	(1)	8.9	…	…	…	3539	(20)	31.2	5661	(32)	15.6	…	…	…	7929	(45)	3.5	118	(1)
2000	16309	…	…	…	241	(1)	9.0	…	…	…	3417	(21)	30.6	5270	(32)	14.7	…	…	…	7284	(45)	3.2	97	(1)
2001	15945	…	…	…	236	(1)	8.7	…	…	…	3527	(22)	30.5	4882	(31)	13.5	…	…	…	7208	(45)	3.1	92	(1)
2002	15055	…	…	…	204	(1)	7.4	…	…	…	3339	(22)	27.9	4552	(30)	12.4	…	…	…	6894	(46)	3.0	66	(0)
2003	14835	49	(0)	1.1	189	(1)	6.7	3507	(24)	29.6	…	…	…	4248	(29)	11.5	66	(0)	13.1	6749	(45)	2.9	27	(0)
2004	14499	43	(0)	1.0	165	(1)	5.7	3367	(23)	27.6	…	…	…	4183	(29)	11.2	65	(0)	12.6	6646	(46)	2.8	30	(0)
2005	14068	52	(0)	1.1	170	(1)	5.8	3249	(23)	25.8	…	…	…	4074	(29)	10.8	56	(0)	10.6	6439	(46)	2.7	28	(0)
2006	13732	43	(0)	0.9	193	(1)	6.5	3323	(24)	25.7	…	…	…	3853	(28)	10.1	59	(0)	10.9	6236	(45)	2.6	25	(0)
2007	13286	29	(0)	0.6	174	(1)	5.7	3457	(26)	26.0	…	…	…	3619	(27)	9.3	98	(1)	17.7	5868	(44)	2.4	41	(0)
2008	12905	47	(0)	0.9	167	(1)	5.4	3420	(27)	25.0	…	…	…	3406	(26)	8.7	78	(1)	13.8	5741	(44)	2.4	46	(0)
2009	11537	43	(0)	0.8	131	(1)	4.2	3231	(28)	23.1	…	…	…	2945	(26)	7.4	78	(1)	13.5	5033	(44)	2.1	76	(1)
2010	11182	32	(0)	0.6	187	(2)	5.8	3187	(29)	22.2	…	…	…	2726	(24)	6.8	98	(1)	16.6	4803	(43)	2.0	149	(1)

[1]Indicates two or more races reported for a person. Category first reported in 2003.
[2]Asian race first reported in 2003.
[3]Asian or Pacific Islander race reported 1993–2002.
[4]Native Hawaiian or Other Pacific Islander race first reported in 2003.
[5]The higher count for unknown or missing race for 2002 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 updatedusing Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc) (accessed August 30, 2011) Denominators for computing 2000–2010 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, 2010 (http://www.census.gov/popest/national/asrh/files/NC-EST2009-ALLDATA-R-File22.csv) (accessed August 30, 2011).
Data for all years updated through July 21, 2011.
Ellipses indicate data not available.
See Technical Notes (page 9).
See Surveillance Slide #10.
Zero % (0) denotes <0.5%.

Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2010

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	25107	1661	(7)	2.9	1821	(7)	5.0	9590	(38)	11.5	6197	(25)	12.4	5821	(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	15945	929	(6)	1.5	1597	(10)	4.0	5610	(35)	6.6	4515	(28)	7.0	3293	(21)	9.3	1	(0)
2002	15055	944	(6)	1.6	1498	(10)	3.7	5288	(35)	6.3	4182	(28)	6.3	3142	(21)	8.8	1	(0)
2003	14835	911	(6)	1.5	1573	(11)	3.8	5074	(34)	6.1	4283	(29)	6.3	2994	(20)	8.3	0	(0)
2004	14499	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	13732	803	(6)	1.3	1532	(11)	3.6	4691	(34)	5.6	4041	(29)	5.4	2664	(19)	7.2	1	(0)
2007	13286	776	(6)	1.3	1580	(12)	3.7	4316	(32)	5.2	4040	(30)	5.3	2574	(19)	6.8	0	(0)
2008	12905	786	(6)	1.3	1443	(11)	3.4	4243	(33)	5.1	3936	(30)	5.1	2497	(19)	6.4	0	(0)
2009	11537	647	(6)	1.0	1278	(11)	3.0	3887	(34)	4.7	3429	(30)	4.3	2288	(20)	5.8	8	(0)
2010	11182	637	(6)	1.0	1200	(11)	2.8	3672	(33)	4.4	3439	(31)	4.3	2230	(20)	5.5	4	(0)

[1]Includes unknown and missing.

Note: Previously published rates for 1993–1999 have been updatedusing Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc) (accessed August 30, 2011) Denominators for computing 2000–2010 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, 2010 (http://www.census.gov/popest/national/asrh/files/NC-EST2009-ALLDATA-R-File22.csv) (accessed August 30, 2011).

Data for all years updated through July 21, 2011.

See Technical Notes (page 9).

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, 1993–2010

Year	Total Cases	U.S.-born Persons			Foreign-born Persons[1]			Unknown or Missing	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	17438	(69)	7.4	7403	(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	15945	7872	(49)	3.2	8010	(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	6309	(45)	2.5	7730	(55)	22.4	29	(0)
2006	13732	5881	(43)	2.3	7815	(57)	22.0	36	(0)
2007	13286	5482	(41)	2.1	7739	(58)	20.7	65	(0)
2008	12905	5254	(41)	2.0	7573	(59)	20.3	78	(1)
2009	11537	4575	(40)	1.7	6927	(60)	18.9	35	(0)
2010	11182	4393	(39)	1.6	6720	(60)	18.1	69	(1)

[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: 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/fbtab001.txt (accessed August 30, 2011). Denominators for computing the 1995–2010 rates are based on the U.S. Census Bureau, Current Population Survey (March Supplement).

Data for all years updated through July 21, 2011.

See Technical Notes (page 9).

Zero % (0) denotes <0.5%.

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

Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons[1] by the Top 30 Countries[2] of Origin of Birth: United States, 2005–2010

	Year									
	2010		2009		2008		2007		2006	
Country of Origin	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Total Cases	**6720**	**(100)**	**6927**	**(100)**	**7573**	**(100)**	**7739**	**(100)**	**7815**	**(100)**
Mexico	1,541	(23)	1,599	(23)	1,762	(23)	1,844	(24)	1,931	(25)
Philippines	740	(11)	805	(12)	858	(11)	950	(12)	861	(11)
India	578	(9)	541	(8)	594	(8)	624	(8)	549	(7)
Vietnam	532	(8)	532	(8)	580	(8)	572	(7)	628	(8)
China	364	(5)	343	(5)	402	(5)	386	(5)	373	(5)
Guatemala	198	(3)	213	(3)	252	(3)	248	(3)	230	(3)
Haiti	195	(3)	205	(3)	236	(3)	175	(2)	210	(3)
Ethiopia	162	(2)	172	(2)	183	(2)	178	(2)	203	(3)
Honduras	142	(2)	150	(2)	193	(3)	181	(2)	164	(2)
Somalia	126	(2)	113	(2)	151	(2)	178	(2)	196	(3)
Koreea, Republic of	104	(2)	158	(2)	139	(2)	155	(2)	204	(3)
El Salvador	116	(2)	119	(2)	148	(2)	158	(2)	144	(2)
Peru	111	(2)	94	(1)	144	(2)	139	(2)	160	(2)
Ecuador	84	(1)	98	(1)	114	(2)	116	(2)	117	(2)
Dominican Republic	84	(1)	71	(1)	88	(1)	89	(1)	110	(1)
Cambodia	67	(1)	99	(1)	77	(1)	94	(1)	99	(1)
Burma	109	(2)	103	(1)	101	(1)	65	(1)	41	(1)
Pakistan	74	(1)	84	(1)	87	(1)	79	(1)	79	(1)
Kenya	62	(1)	74	(1)	82	(1)	70	(1)	74	(1)
Laos	67	(1)	60	(1)	69	(1)	78	(1)	59	(1)
Nepal	63	(1)	74	(1)	70	(1)	51	(1)	45	(1)
Thailand	47	(1)	57	(1)	62	(1)	46	(1)	55	(1)
Bangladesh	58	(1)	46	(1)	54	(1)	56	(1)	41	(1)
Columbia	43	(1)	41	(1)	43	(1)	56	(1)	45	(1)
Nigeria	43	(1)	47	(1)	49	(1)	43	(1)	39	(1)
Indonesia	57	(1)	34	(0)	29	(0)	52	(1)	44	(1)
Liberia	36	(1)	33	(0)	28	(0)	46	(1)	52	(1)
Cuba	33	(0)	35	(1)	42	(1)	41	(1)	42	(1)
Russia	19	(0)	30	(0)	29	(0)	40	(1)	47	(1)
Taiwan	27	(0)	26	(0)	32	(0)	38	(0)	38	(0)
All Others[3]	838	(12)	871	(13)	875	(12)	891	(12)	935	(12)

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

[3] Includes Not Specified for Country of Origin.

Note: Zero (0) denotes <0.5%.

Data for all years updated through July 21, 2011.

Table 7. Tuberculosis Cases and Percentages Among Adult[1] Foreign-born Persons[2] by Country of Origin and Years in the United States Before TB Diagnosis, Top 30 Countries: United States, 2010 and 2000

2010											2000								
	No. of Years in U.S.[4]										No. of Years in U.S.[4]								
Country of Origin[3]	Total Cases	<1 Year		1–4 Years		≥5 Years		Unknown		Country of Origin[3]	Total Cases	<1 Year		1–4 Years		≥5 Years		Unknown	
	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)		No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Mexico	1522	150	(10)	222	(15)	933	(61)	217	(14)	Mexico	1722	346	(20)	339	(20)	838	(49)	199	(12)
Philippines	730	103	(14)	112	(15)	437	(60)	78	(11)	Philippines	848	179	(21)	99	(12)	458	(54)	112	(13)
India	571	95	(17)	149	(26)	266	(47)	61	(11)	Vietnam	662	74	(11)	99	(15)	382	(58)	107	(16)
Vietnam	527	57	(11)	63	(12)	316	(60)	91	(17)	India	565	137	(24)	176	(31)	178	(32)	74	(13)
China	358	52	(15)	55	(15)	233	(65)	18	(5)	China	401	57	(14)	62	(15)	214	(53)	68	(17)
Guatemala	197	32	(16)	64	(32)	89	(45)	12	(6)	Haiti	294	51	(17)	43	(15)	138	(47)	62	(21)
Haiti	177	52	(29)	24	(14)	82	(46)	19	(11)	Korea, Republic of	211	26	(12)	31	(15)	105	(50)	49	(23)
Ethiopia	144	34	(24)	52	(36)	52	(36)	6	(4)	Somalia	142	61	(43)	56	(39)	15	(11)	10	(7)
Honduras	142	30	(21)	37	(26)	60	(42)	15	(11)	Ecuador	137	37	(27)	45	(33)	41	(30)	14	(10)
Somalia	119	28	(24)	28	(24)	56	(47)	7	(6)	Ethiopia	133	47	(35)	46	(35)	25	(19)	15	(11)
El Salvador	116	13	(11)	30	(26)	63	(54)	10	(9)	Honduras	128	22	(17)	43	(34)	50	(39)	13	(10)
Peru	109	14	(13)	24	(22)	63	(58)	8	(7)	Peru	128	32	(25)	42	(33)	43	(34)	11	(9)
Korea, Republic of	103	3	(3)	4	(4)	77	(75)	19	(18)	Guatemala	123	27	(22)	34	(28)	47	(38)	15	(12)
Burma	102	52	(51)	23	(23)	19	(19)	8	(8)	El Salvador	114	19	(17)	21	(18)	61	(54)	13	(11)
Ecuador	83	5	(6)	28	(34)	45	(54)	5	(6)	Cambodia	99	4	(4)	9	(9)	62	(63)	24	(24)
Dominican Republic	82	13	(16)	16	(20)	49	(60)	4	(5)	Dominican Republic	91	10	(11)	21	(23)	42	(46)	18	(20)
Pakistan	72	9	(13)	10	(14)	40	(56)	13	(18)	Pakistan	86	16	(19)	27	(31)	30	(35)	13	(15)
Cambodia	67	4	(6)	6	(9)	51	(76)	6	(9)	Laos	82	0	(0)	6	(7)	62	(76)	14	(17)
Laos	66	3	(5)	3	(5)	55	(83)	5	(8)	Cuba	69	4	(6)	2	(3)	49	(71)	14	(20)
Kenya	60	9	(15)	24	(40)	19	(32)	8	(13)	Columbia	58	10	(17)	9	(16)	32	(55)	7	(12)
Nepal	59	20	(34)	25	(42)	13	(22)	1	(2)	Kenya	47	16	(34)	22	(47)	6	(13)	3	(6)
Bangladesh	57	15	(26)	18	(32)	21	(37)	3	(5)	Russia	47	14	(30)	14	(30)	13	(28)	6	(13)
Indonesia	57	8	(14)	18	(32)	26	(46)	5	(9)	Indonesia	46	19	(41)	14	(30)	7	(15)	6	(13)
Colombia	43	2	(5)	2	(5)	34	(79)	5	(12)	Taiwan	41	1	(2)	9	(22)	27	(66)	4	(10)
Thailand	43	12	(28)	9	(21)	17	(40)	5	(12)	Hong Kong	36	5	(14)	2	(6)	21	(58)	8	(22)
Nigeria	41	13	(32)	19	(46)	6	(15)	3	(7)	Nigeria	36	8	(22)	15	(42)	10	(28)	3	(8)
Bhutan	35	30	(86)	3	(9)	0	(0)	2	(6)	Thailand	36	8	(22)	6	(17)	18	(50)	4	(11)
Cuba	33	2	(6)	5	(15)	18	(55)	8	(24)	Liberia	34	12	(35)	8	(24)	6	(18)	8	(24)
Liberia	32	7	(22)	9	(28)	12	(38)	4	(13)	Poland	33	1	(3)	2	(6)	25	(76)	5	(15)
Jamaica	30	2	(7)	3	(10)	23	(77)	2	(7)	Bosnia/Hercegovina	32	14	(44)	14	(44)	1	(3)	3	(9)
All Others[5]	791	124	(16)	123	(16)	458	(58)	87	(11)	All Others[5]	883	204	(23)	199	(23)	321	(36)	159	(18)
Total	**6568**	**993**	(15)	**1208**	(18)	**3633**	(55)	**735**	(11)	**Total**	**7364**	**1461**	(20)	**1515**	(21)	**3327**	(45)	**1061**	(14)

[1]Includes persons ≥15 years of age.
[2]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.
[3]Ranked by total case count.
[4]Among foreign-born persons, the number of years since arrival in the United States before diagnosis with tuberculosis.
[5]Includes Not Specified for Country of Origin.
Note: Data for all years updated through July 21, 2011.
See Surveillance Slide #18

Table 8. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2010

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	25107	20307	(81)	0	(0)	185	(1)	3092	(12)	1523	(6)	21158	(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)	2606	(12)	1319	(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	15945	12750	(80)	0	(0)	123	(1)	1886	(12)	1186	(7)	12724	(80)	3217	(20)
2002	15055	11974	(80)	0	(0)	104	(1)	1822	(12)	1155	(8)	11901	(79)	3148	(21)
2003	14835	11683	(79)	0	(0)	116	(1)	1783	(12)	1253	(8)	11805	(80)	3020	(20)
2004	14499	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	13732	10746	(78)	0	(0)	94	(1)	1625	(12)	1267	(9)	10848	(79)	2867	(21)
2007	13286	10425	(78)	0	(0)	70	(1)	1493	(11)	1298	(10)	10567	(80)	2680	(20)
2008	12905	10029	(78)	17	(0)	63	(0)	1434	(11)	1362	(11)	10261	(80)	2629	(20)
2009	11537	8885	(77)	53	(0)	77	(1)	1624	(14)	898	(8)	9012	(78)	2506	(22)
2010	11182	8413	(75)	136	(1)	72	(1)	1877	(17)	684	(6)	8709	(78)	2438	(22)

[1]Based on the public health surveillance case definition for tuberculosis; see Appendix A (page 121).
[2] Nucleic Acid Amplification test
[3]Includes cases among persons with both pulmonary and extrapulmonary disease and cases of miliary TB.
[4]Includes cases among persons with extrapulmonary TB disease only.
[5]Excludes missing and unknowns.
Note: See Technical Notes (page 9).
Data for all years updated through July 21, 2011.

Table 9. Pulmonary Tuberculosis Cases and Percentages by Sputum Smear and Sputum Culture Results: United States, 1993–2010

Year	Total Pulmonary Cases[1]	Sputum Smear Result						Sputum Culture Result					
		Positive		Negative		Not Done or Unknown		Positive		Negative		Not Done or Unknown	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	21158	9429	(45)	7915	(37)	3814	(18)	14878	(70)	2814	(13)	3466	(16)
1994	20318	8964	(44)	7914	(39)	3440	(17)	14210	(70)	2807	(14)	3301	(16)
1995	18887	8093	(43)	7713	(41)	3081	(16)	13282	(70)	2626	(14)	2979	(16)
1996	17387	7454	(43)	7352	(42)	2581	(15)	12270	(71)	2559	(15)	2558	(15)
1997	16239	6935	(43)	6916	(43)	2388	(15)	11568	(71)	2259	(14)	2412	(15)
1998	14801	6624	(45)	6038	(41)	2139	(14)	10486	(71)	2138	(14)	2177	(15)
1999	14066	6275	(45)	5661	(40)	2130	(15)	9820	(70)	2096	(15)	2150	(15)
2000	13086	5884	(45)	5346	(41)	1856	(14)	9251	(71)	1948	(15)	1887	(14)
2001	12724	5651	(44)	5322	(42)	1751	(14)	8904	(70)	2010	(16)	1810	(14)
2002	11901	5439	(46)	4791	(40)	1671	(14)	8330	(70)	1839	(15)	1732	(15)
2003	11805	5370	(45)	4881	(41)	1554	(13)	8207	(70)	1981	(17)	1617	(14)
2004	11523	5288	(46)	4901	(43)	1334	(12)	8049	(70)	2064	(18)	1410	(12)
2005	11126	5138	(46)	4745	(43)	1243	(11)	7703	(69)	2091	(19)	1332	(12)
2006	10848	5137	(47)	4577	(42)	1134	(10)	7685	(71)	1961	(18)	1202	(11)
2007	10567	4886	(46)	4529	(43)	1152	(11)	7377	(70)	1985	(19)	1205	(11)
2008	10261	4684	(46)	4423	(43)	1154	(11)	7104	(69)	2006	(20)	1151	(11)
2009	9012	3965	(44)	3946	(44)	1101	(12)	6163	(68)	1747	(19)	1102	(12)
2010	8709	3720	(43)	3896	(45)	1093	(13)	5738	(66)	1806	(21)	1165	(13)

[1]Includes cases among persons with both pulmonary and extrapulmonary disease and cases of miliary TB.
Note: See Technical Notes (page 9).
Data for all years updated through July 21, 2011.

Table 10. Tuberculosis Cases and Percentages, by Resistance to INH or Multidrug Resistance[1] in Persons with No Previous History of TB, by Origin of Birth: United States, 1993–2010

Year	Resistance to Isoniazid[2]						Resistance to Isoniazid and Rifampin[2]					
	Total Cases[3,4]		U.S.-born		Foreign-born[5,6]		Total Cases[3,4]		U.S.-born		Foreign-born[5,6]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	1399	(8.4)	805	(6.8)	579	(12.4)	407	(2.5)	301	(2.5)	103	(2.2)
1994	1360	(8.3)	712	(6.5)	635	(12.0)	353	(2.2)	238	(2.2)	110	(2.1)
1995	1175	(7.3)	556	(5.4)	618	(10.9)	254	(1.6)	169	(1.6)	85	(1.5)
1996	1138	(7.4)	498	(5.2)	639	(11.3)	207	(1.3)	105	(1.1)	101	(1.8)
1997	1079	(7.5)	436	(5.0)	640	(11.2)	155	(1.1)	76	(0.9)	79	(1.4)
1998	1013	(7.5)	367	(4.8)	644	(11.3)	132	(1.0)	55	(0.7)	76	(1.3)
1999	899	(7.1)	283	(4.0)	614	(11.0)	127	(1.0)	39	(0.6)	88	(1.6)
2000	890	(7.5)	269	(4.4)	618	(10.9)	120	(1.0)	40	(0.7)	80	(1.4)
2001	802	(7.0)	243	(4.3)	558	(9.5)	115	(1.0)	34	(0.6)	81	(1.4)
2002	826	(7.6)	206	(4.1)	619	(10.8)	132	(1.2)	35	(0.7)	97	(1.7)
2003	824	(7.7)	216	(4.4)	605	(10.3)	94	(0.9)	24	(0.5)	70	(1.2)
2004	801	(7.6)	214	(4.6)	587	(10.2)	100	(1.0)	26	(0.6)	74	(1.3)
2005	765	(7.6)	188	(4.3)	571	(10.1)	98	(1.0)	20	(0.5)	77	(1.4)
2006	772	(7.8)	171	(4.1)	599	(10.4)	102	(1.0)	18	(0.4)	84	(1.5)
2007	720	(7.5)	166	(4.3)	550	(9.6)	104	(1.1)	19	(0.5)	85	(1.5)
2008	770	(8.3)	185	(5.1)	580	(10.3)	86	(0.9)	20	(0.5)	66	(1.2)
2009	699	(8.5)	189	(6.1)	510	(10.1)	94	(1.1)	11	(0.4)	83	(1.6)
2010	598	7.9	162	(5.6)	431	(9.2)	88	(1.2)	14	(0.5)	72	(1.5)

[1]Resistance to at least isoniazid and rifampin.

[2]Isolates may be resistant to other drugs.

[3]All cases were culture positive, and initial drug susceptibility testing done.

[4]Includes persons of unknown country of birth.

[5]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.

[6]Includes Not Specified for Country of Origin.

Note: Data for all years updated through July 21, 2011. Percentages are of total cases for given year with no previous history of TB, culture positive, and initial drug susceptibility testing done (total cases not shown). More than 95% of all persons in each group had drug-susceptibility test results reported for an initial isolate. See Surveillance Slides #19 through #22.

Table 11. Tuberculosis Cases and Percentages, by Resistance to INH or Multidrug Resistance[1] in Persons with Previous History of TB, by Origin of Birth: United States, 1993–2010

Year	Resistance to Isoniazid[2]						Resistance to Isoniazid and Rifampin[2]					
	Total Cases[3,4]		U.S.-born		Foreign-born[5,6]		Total Cases[3,4]		U.S.-born		Foreign-born[5,6]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	164	(16.6)	85	(12.7)	76	(25.0)	76	(7.7)	30	(4.5)	46	(15.3)
1994	176	(17.0)	81	(11.7)	94	(27.9)	74	(7.2)	35	(5.1)	38	(11.3)
1995	168	(17.5)	77	(13.0)	91	(25.1)	70	(7.3)	28	(4.7)	42	(11.6)
1996	142	(16.5)	68	(12.2)	74	(24.4)	43	(5.0)	21	(3.8)	22	(7.3)
1997	109	(14.7)	35	(7.7)	74	(25.9)	44	(5.9)	12	(2.6)	32	(11.2)
1998	98	(13.0)	38	(7.8)	60	(22.8)	23	(3.1)	6	(1.2)	17	(6.5)
1999	82	(12.3)	25	(6.5)	55	(19.4)	28	(4.2)	6	(1.6)	22	(7.8)
2000	84	(13.3)	22	(6.1)	62	(22.8)	26	(4.1)	2	(0.6)	24	(8.8)
2001	87	(13.8)	28	(8.6)	59	(19.5)	33	(5.2)	7	(2.2)	26	(8.6)
2002	80	(14.1)	23	(7.6)	57	(21.6)	26	(4.6)	3	(1.0)	23	(8.7)
2003	65	(12.4)	16	(6.3)	49	(18.1)	21	(4.0)	2	(0.8)	19	(7.0)
2004	64	(11.9)	15	(5.5)	49	(18.6)	27	(5.0)	4	(1.5)	23	(8.7)
2005	70	(13.8)	18	(7.5)	52	(19.5)	22	(4.4)	1	(0.4)	21	(7.9)
2006	67	(13.6)	9	(4.4)	57	(19.7)	20	(4.0)	1	(0.5)	19	(6.6)
2007	70	(14.1)	14	(6.8)	56	(19.4)	18	(3.6)	3	(1.5)	15	(5.2)
2008	57	(13.3)	13	(7.8)	44	(17.1)	20	(4.7)	4	(2.4)	16	(6.2)
2009	52	(15.5)	6	(5.2)	46	(20.9)	19	(5.7)	1	(0.9)	18	(8.2)
2010	60	(17.4)	12	(9.9)	48	(21.6)	17	(4.9)	2	(1.7)	15	(6.8)

[1]Resistance to at least isoniazid and rifampin

[2]Isolates may be resistant to other drugs.

[3]All cases were culture positive, and initial drug susceptibility testing done.

[4]Includes persons of unknown country of birth.

[5]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.

[6] Includes Not Specified for Country of Origin.

Note: Data for all years updated through July 21, 2011. Percentages are of total cases for given year with previous history of TB, culture positive, and initial drug susceptibility testing done (total cases not shown). More than 95% of all persons in each group had drug-susceptibility test results reported for an initial isolate.

Table 12. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2010

Year	Initial Drug Regimen[1,2]			Directly Observed Therapy[3]		Therapy ≤1 Year Indicated[4]	
					Both DOT and Self-		
	I R	IRZ	IRZE	DOT Only	Administered	COT ≤1 Year	COT
1993	(12.9)	(31.2)	(40.3)	(21.7)	(14.4)	(64.0)	(87.4)
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)	(92.7)
2005	(1.3)	(5.5)	(83.7)	(57.9)	(29.6)	(83.2)	(92.5)
2006	(1.2)	(4.8)	(83.2)	(57.5)	(30.4)	(83.9)	(93.0)
2007	(1.1)	(4.6)	(83.5)	(56.3)	(32.9)	(84.5)	(93.6)
2008	(1.0)	(3.5)	(84.1)	(56.5)	(33.4)	(84.6)	(92.7)
2009	(1.0)	(3.1)	(84.6)	…	…	…	…
2010	(0.8)	(2.9)	(84.2)	…	…	…	…

[1]Includes persons alive at diagnosis.
[2]I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol. Excludes cases with no information on initial drug regimen; 1.00% received no initial drug therapy, 0.14% were started on one drug, and 10.96% 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.
Note: Data for all years updated through July 21, 2011.
See Technical Notes for description of COT calculation (page 9).
See Surveillance Slides #26 and #27.

Table 13. Tuberculosis Cases and Percentages in Persons with HIV Test Results[1] and with HIV Coinfection by Age Group: United States, 1993–2010

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	3279	(70)	558	(12)	8278	(60)	962	(7)
2007	3153	(73)	489	(11)	8322	(63)	882	(7)
2008	3109	(73)	414	(10)	8234	(64)	823	(6)
2009	2795	(72)	400	(10)	7231	(63)	715	(6)
2010	2698	(73)	320	(9)	7286	(65)	622	(6)

[1]Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS. In California, the number of patients testing negative, indeterminate, refusing testing, not offered testing, test performed but status unknown, unknown, or missing HIV data is not reported to CDC. California has not reported AIDS test results since 2004. Rhode Island did not report HIV test results for years 1993–1997. HIV test results for Vermont are not included for years 2007 - 2010.
Note: Data for all years updated through July 21, 2011.
See Surveillance Slides #24 and #25.

Table 14. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2008

Year	Total Cases[1]	Completed Therapy		Adverse Event		Moved		Lost		Refused		Died[2]		Unknown[3]	
	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	23756	18049	(76.0)	0	(0.0)	1120	(4.7)	1088	(4.6)	223	(0.9)	3053	(12.9)	223	(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	15409	13242	(85.9)	0	(0.0)	378	(2.5)	402	(2.6)	99	(0.6)	1121	(7.3)	167	(1.1)
2002	14564	12482	(85.7)	0	(0.0)	336	(2.3)	412	(2.8)	87	(0.6)	1080	(7.4)	167	(1.1)
2003	14379	12418	(86.4)	0	(0.0)	313	(2.2)	389	(2.7)	84	(0.6)	994	(6.9)	181	(1.3)
2004	14081	12119	(86.1)	0	(0.0)	337	(2.4)	370	(2.6)	82	(0.6)	975	(6.9)	198	(1.4)
2005	13681	11732	(85.8)	0	(0.0)	323	(2.4)	338	(2.5)	90	(0.7)	985	(7.2)	213	(1.6)
2006	13316	11503	(86.4)	0	(0.0)	309	(2.3)	352	(2.6)	79	(0.6)	937	(7.0)	136	(1.0)
2007	12896	11289	(87.5)	0	(0.0)	265	(2.1)	325	(2.5)	73	(0.6)	815	(6.3)	129	(1.0)
2008	12542	10813	(86.2)	5	(0.0)	284	(2.3)	315	(2.5)	78	(0.6)	837	(6.7)	210	(1.7)

[1]Includes all cases in persons reported as alive at diagnosis and taking one or more TB drugs.
[2]Died = died of any cause (not only TB).
[3]Includes cases in persons reporting reason therapy stopped = Other, Missing, or Unknown.
Note: Data for all years are updated through July 21, 2011.
Data complete through 2008 only. See Technical Notes (page 9) for details.

Morbidity Tables
United States, 2010

Table 15. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2010

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	**11,182**	**365**	**272**	**1,200**	**3,672**	**3,439**	**2,230**	**4**
Male	6,835	196	136	651	2,190	2,305	1,354	3
Female	4,296	166	133	542	1,467	1,118	870	0
Unknown	51	3	3	7	15	16	6	1
Hispanic or Latino[1]	3,236	181	102	430	1,283	781	459	0
Male	2,064	103	56	259	851	529	266	0
Female	1,159	77	45	170	425	249	193	0
Unknown	13	1	1	1	7	3	0	0
Non-Hispanic								
American Indian or Alaska Native	153	8	5	14	37	57	32	0
Male	90	3	1	6	23	40	17	0
Female	60	4	4	7	14	16	15	0
Unknown	3	1	0	1	0	1	0	0
Asian	3,143	39	60	345	1,047	925	726	1
Male	1,786	19	26	180	538	566	456	1
Female	1,344	20	33	163	506	354	268	0
Unknown	13	0	1	2	3	5	2	0
Black or African American	2,652	93	81	283	881	891	423	0
Male	1,639	54	42	148	537	609	249	0
Female	1,002	38	39	132	341	279	173	0
Unknown	11	1	0	3	3	3	1	0
Native Hawaiian or Other Pacific Islander	95	12	2	27	30	20	4	0
Male	42	4	1	14	12	9	2	0
Female	52	8	1	13	17	11	2	0
Unknown	1	0	0	0	1	0	0	0
White	1,771	29	17	93	354	718	559	1
Male	1,145	11	9	41	209	521	354	0
Female	617	18	7	52	144	193	203	0
Unknown	9	0	1	0	1	4	2	1
Multiple Race[2]	29	2	2	2	12	7	4	0
Male	16	2	1	1	4	6	2	0
Female	13	0	1	1	8	1	2	0
Unknown	0	0	0	0	0	0	0	0
Unknown	103	1	3	6	28	40	23	2
Male	53	0	0	2	16	25	8	2
Female	49	1	3	4	12	15	14	0
Unknown	1	0	0	0	0	0	1	0

[1]Persons of Hispanic or Latino ethnicity may be of any race or multiple race.
[2]Indicates two or more races reported for a person. Category first reported 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) 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 (page 9).
See Surveillance Slide #10.

Table 16. Tuberculosis Case Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2010

Race/Ethnicity and Sex	Age Group						
	All Ages	Under 5	5–14	15–24	25–44	45 –64	≥65
Total Rate	**3.6**	**1.7**	**0.7**	**2.8**	**4.4**	**4.3**	**5.5**
Male	4.5	1.8	0.7	2.9	5.2	5.8	7.9
Female	2.7	1.6	0.7	2.6	3.6	2.7	3.8
Hispanic or Latino[1]	6.5	3.2	1.1	5.3	8.3	9.1	15.8
Male	8.0	3.6	1.2	6.1	10.1	12.2	21.2
Female	4.8	2.8	1.0	4.4	6.0	5.9	11.7
Non-Hispanic							
American Indian or Alaska Native	6.4	4.1	1.4	3.5	5.6	10.1	15.3
Male	7.6	3.0	0.6	2.9	7.0	14.8	18.3
Female	5.0	4.1	2.3	3.5	4.3	5.4	12.8
Asian	22.4	4.0	3.4	19.9	22.2	27.0	51.9
Male	26.4	3.8	2.9	20.4	23.6	35.3	75.7
Female	18.5	4.2	3.8	19.2	20.8	19.4	33.7
Black or African American	7.0	3.1	1.4	4.4	8.2	9.9	12.5
Male	9.0	3.6	1.5	4.6	10.4	14.9	19.1
Female	5.0	2.6	1.4	4.2	6.1	5.7	8.4
Native Hawaiian or Other Pacific Islander	20.8	31.8	2.9	37.7	21.1	19.7	11.2
Male	18.3	20.7	2.8	38.3	16.6	17.9	12.3
Female	22.9	43.5	3.0	37.0	24.2	21.5	10.3
White	0.9	0.3	0.1	0.4	0.7	1.2	1.7
Male	1.2	0.2	0.1	0.3	0.8	1.8	2.6
Female	0.6	0.3	0.1	0.4	0.6	0.7	1.1
Multiple Race[2]	0.6	0.3	0.2	0.2	1.2	1.0	1.5
Male	0.7	0.5	0.2	0.2	0.8	1.9	1.8
Female	0.5	0.0	0.2	0.2	1.5	0.3	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. Category first reported in 2003.
Note: Denominators for computing 2000–2010 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, 2010 (http://www.census.gov/popest/national/asrh/files/NC-EST2009-ALLDATA-R-File22.csv) (accessed August 30, 2011).
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 (page 9).
See Surveillance Slide #7.

Table 17. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2010

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	**4,393**	**325**	**159**	**376**	**1,005**	**1,542**	**985**	**1**
Male	2,814	173	85	192	628	1,113	623	0
Female	1,553	149	72	180	371	422	359	0
Unknown	26	3	2	4	6	7	3	1
Hispanic or Latino[1]	808	175	82	124	185	152	90	0
Male	474	98	47	60	107	104	58	0
Female	329	76	34	64	75	48	32	0
Unknown	5	1	1	0	3	0	0	0
Non-Hispanic								
American Indian or Alaska Native	142	8	5	12	33	53	31	0
Male	82	3	1	5	21	36	16	0
Female	57	4	4	6	12	16	15	0
Unknown	3	1	0	1	0	1	0	0
Asian	149	28	20	35	34	17	15	0
Male	77	14	7	19	20	11	6	0
Female	71	14	13	15	14	6	9	0
Unknown	1	0	0	1	0	0	0	0
Black or African American	1,754	76	37	127	467	684	363	0
Male	1,170	43	23	77	309	494	224	0
Female	576	32	14	48	157	187	138	0
Unknown	8	1	0	2	1	3	1	0
Native Hawaiian or Other Pacific Islander	79	11	2	24	24	15	3	0
Male	34	3	1	11	10	7	2	0
Female	44	8	1	13	13	8	1	0
Unknown	1	0	0	0	1	0	0	0
White	1,423	25	11	51	253	610	472	1
Male	956	10	5	19	157	451	314	0
Female	459	15	5	32	95	156	156	0
Unknown	8	0	1	0	1	3	2	1
Multiple Race[2]	14	2	2	1	4	3	2	0
Male	9	2	1	0	2	3	1	0
Female	5	0	1	1	2	0	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	24	0	0	2	5	8	9	0
Male	12	0	0	1	2	7	2	0
Female	12	0	0	1	3	1	7	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. Category first reported 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) 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 (page 9).
See Surveillance Slide #13.

Table 18. Tuberculosis Cases in Foreign-born Persons[1] by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2010

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	**6,720**	**40**	**111**	**820**	**2,647**	**1,865**	**1,236**	**1**
Male	3,977	23	50	457	1,552	1,168	726	1
Female	2,719	17	60	360	1,087	688	507	0
Unknown	24	0	1	3	8	9	3	0
Hispanic or Latino[2]	2,415	6	20	305	1,092	624	368	0
Male	1,580	5	9	198	740	421	207	0
Female	827	1	11	106	348	200	161	0
Unknown	8	0	0	1	4	3	0	0
Non-Hispanic								
American Indian or Alaska Native	4	0	0	1	2	0	1	0
Male	3	0	0	1	1	0	1	0
Female	1	0	0	0	1	0	0	0
Unknown	0	0	0	0	0	0	0	0
Asian	2,965	11	39	309	1,006	896	703	1
Male	1,695	5	19	161	517	546	446	1
Female	1,259	6	19	147	487	345	255	0
Unknown	11	0	1	1	2	5	2	0
Black or African American	892	17	43	156	411	205	60	0
Male	465	11	18	71	226	114	25	0
Female	424	6	25	84	183	91	35	0
Unknown	3	0	0	1	2	0	0	0
Native Hawaiian or Other Pacific Islander	14	1	0	2	5	5	1	0
Male	6	1	0	2	1	2	0	0
Female	8	0	0	0	4	3	1	0
Unknown	0	0	0	0	0	0	0	0
White	343	4	6	42	100	104	87	0
Male	185	1	4	22	51	67	40	0
Female	157	3	2	20	49	36	47	0
Unknown	1	0	0	0	0	1	0	0
Multiple Race[3]	15	0	0	1	8	4	2	0
Male	7	0	0	1	2	3	1	0
Female	8	0	0	0	6	1	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	72	1	3	4	23	27	14	0
Male	36	0	0	1	14	15	6	0
Female	35	1	3	3	9	12	7	0
Unknown	1	0	0	0	0	0	1	0

[1]Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.
[2]Persons of Hispanic or Latino ethnicity may be of any race or multiple race.
[3]Indicates two or more races reported for a person. Category first reported 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) 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 (page 9).
See Surveillance Slide #13.

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Table 19. Tuberculosis Cases Among Foreign-born Persons[1] by Country of Origin[2]: United States, 2010

African Region
Total Cases = 507

Algeria	4	Ethiopia	162	Niger	1
Angola	1	Gabon	1	Nigeria	43
Benin	0	Gambia	6	Rwanda	1
Botswana	2	Ghana	13	Sao Tome and Principe	0
Burkina Faso	1	Guinea	8	Senegal	13
Burundi	5	Guinea-Bissau	1	Seychelles	0
Cameroon	17	Kenya	62	Sierra Leone	12
Cape Verde	10	Lesotho	0	South Africa	10
Central African Republic	4	Liberia	36	Swaziland	0
Chad	2	Madagascar	0	Tanzania, UR	11
Comoros	0	Malawi	2	Togo	2
Congo, Republic of	19	Mali	5	Uganda	7
Côte d'Ivoire	6	Mauritania	1	Zambia	6
DR Congo	0	Mauritius	0	Zimbabwe	8
Equatorial Guinea	0	Mozambique	6		
Eritrea	17	Namibia	2		

Americas Region
Total Cases = 2,703

Anguilla	0	Cuba	33	Panama	6
Antigua and Barbuda	0	Dominica	1	Paraguay	0
Argentina	11	Dominican Republic	84	Peru	111
Bahamas	1	Ecuador	84	St. Kitts and Nevis	1
Barbados	1	El Salvador	116	St. Lucia	0
Belize	6	Grenada	1	St. Vincent & Grenadines	0
Bermuda	0	Guatemala	198	Suriname	0
Bolivia	11	Guyana	22	Trinidad and Tobago	8
Brazil	21	Haiti	195	Turks and Caicos Islands	0
British Virgin Islands	0	Honduras	142	Uruguay	1
Canada	9	Jamaica	30	Venezuela	7
Cayman Islands	0	Mexico	1541		
Chile	0	Montserrat	0		
Colombia	43	Netherland Antilles	0		
Costa Rica	1	Nicaragua	18		

Eastern Mediterranean Region
Total Cases = 298

Afghanistan	21	Lebanon	1	Sudan	19
Bahrain	0	Libyan Arab Jamahiriya	0	Syrian Arab Republic	1
Djibouti	0	Morocco	10	Tunisia	0
Egypt	7	Oman	0	United Arab Emirates	0
Iran, Islamic Republic of	18	Pakistan	74	West Bank and Gaza	0
Iraq	7	Qatar	1	Yemen	6
Jordan	1	Saudi Arabia	5		
Kuwait	1	Somalia	126		

Table 19. (Cont'd) Tuberculosis Cases Among Foreign-born Persons[1] by Country of Origin[2]: United States, 2010

European Region
Total Cases = 201

Albania	4	Germany	8	Norway	0
Andorra	0	Greece	6	Poland	23
Armenia	4	Hungary	1	Portugal	8
Austria	1	Iceland	0	Romania	21
Azerbaijan	1	Ireland	4	Russian Federation	19
Belarus	1	Israel	2	San Marino	0
Belgium	1	Italy	2	Serbia	1
Bosnia and Herzegovina	20	Kazakhstan	5	Slovakia	0
Bulgaria	0	Kyrgyzstan	2	Slovenia	0
Croatia	9	Latvia	0	Spain	2
Cyprus	0	Lithuania	2	Sweden	1
Czech Republic	1	Luxembourg	0	Switzerland	0
Czechoslovakia*	0	Macedonia, TFYR	1	Tajikistan	2
Denmark	2	Malta	1	Turkey	3
Estonia	0	Moldova, Republic of	0	Turkmenistan	1
Finland	1	Monaco	0	Ukraine	17
France	4	Montenegro	1	United Kingdom	7
Georgia	5	Netherlands	0	Uzbekistan	7
				Yugoslavia*	0

Southeast Asia Region
Total Cases = 982

Bangladesh	58	Korea, DPR	29	Sri Lanka	4
Bhutan	36	Maldives	0	Thailand	47
India	578	Myanmar	109	Timor-Leste	1
Indonesia	57	Nepal	63		

Western Pacific Region
Total Cases = 1,923

Australia	0	Kiribati	0	Philippines	740
Brunei Darussalam	0	Korea, Rep.	104	Samoa	0
Cambodia	67	Lao, PDR	67	Singapore	1
China	364	Malaysia	11	Solomon Islands	0
China, Hong Kong SAR	12	Mongolia	7	Tokelau	0
China, Macao SAR	0	Nauru	0	Tonga	2
Cook Islands	0	New Caledonia	0	Tuvalu	0
Fiji	6	New Zealand	0	Vanuatu	0
French Polynesia	0	Niue	0	Vietnam	532
Japan	10	Papua New Guinea	0	Wallis and Futuna	0

Other[2]
Total Cases = 46

Unknown
Total Cases = 59

[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 2010, World Health Organization (WHO/HTM/TB/2010.7)* (http://www.who.int/tb/publications/global_report/2010/en/).

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Morbidity Tables Reporting Areas, 2010

Table 20. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2010 and 2009

Reporting Area	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2010
	2010	2009	2010	2009	2010	2009	
United States	**11,182**	**11,537**	**3.6**	**3.8**	**--**	**--**	**309,050,816**
Alabama	146	168	3.1	3.6	19	16	4,729,656
Alaska	57	37	8	5.3	2	4	708,862
Arizona	283	232	4.2	3.5	10	17	6,676,627
Arkansas	78	82	2.7	2.8	22	22	2,910,236
California	2,327	2,469	6.2	6.7	3	2	37,266,600
Colorado	71	85	1.4	1.7	41	36	5,095,309
Connecticut	85	95	2.4	2.7	26	24	3,526,937
Delaware	20	19	2.2	2.1	29	31	891,464
District of Columbia[1]	44	41	7.2	6.8	--	--	610,589
Florida	835	822	4.5	4.4	7	7	18,678,049
Georgia	411	414	4.1	4.2	11	9	9,908,357
Hawaii	115	117	8.8	9.1	1	1	1,300,086
Idaho	15	18	1	1.2	44	44	1,559,796
Illinois	372	418	2.9	3.2	21	19	12,944,410
Indiana	90	119	1.4	1.9	40	33	6,445,295
Iowa	48	42	1.6	1.4	38	39	3,023,081
Kansas	46	64	1.6	2.3	37	28	2,841,121
Kentucky	90	75	2.1	1.7	30	35	4,339,435
Louisiana	200	193	4.4	4.3	8	8	4,529,426
Maine	8	9	0.6	0.7	50	49	1,312,939
Maryland	220	218	3.8	3.8	13	13	5,737,274
Massachusetts	222	242	3.3	3.7	16	14	6,631,280
Michigan	184	144	1.9	1.4	32	38	9,931,235
Minnesota	135	161	2.6	3.1	23	21	5,290,447
Mississippi	116	121	3.9	4.1	12	10	2,960,467
Missouri	107	80	1.8	1.3	35	40	6,011,741
Montana	6	8	0.6	0.8	49	47	980,152
Nebraska	27	32	1.5	1.8	39	34	1,811,072
Nevada	114	106	4.3	4	9	11	2,654,751
New Hampshire	10	16	0.8	1.2	47	42	1,323,531
New Jersey	405	405	4.6	4.7	6	6	8,732,811
New Mexico	51	48	2.5	2.4	24	26	2,033,875
New York	954	1,007	4.9	5.2	5	5	19,577,730
North Carolina	296	251	3.1	2.7	18	25	9,458,888
North Dakota	12	5	1.8	0.8	33	48	653,778
Ohio	190	180	1.6	1.6	36	37	11,532,111
Oklahoma	86	102	2.3	2.8	27	23	3,724,447
Oregon	87	89	2.3	2.3	28	27	3,855,536
Pennsylvania	238	236	1.9	1.9	31	32	12,632,780
Rhode Island	26	24	2.5	2.3	25	29	1,056,870
South Carolina	153	164	3.3	3.6	17	15	4,596,958
South Dakota	15	18	1.8	2.2	34	30	820,077
Tennessee	193	202	3	3.2	20	20	6,338,112
Texas	1,385	1,501	5.5	6.1	4	3	25,213,445
Utah	20	37	0.7	1.3	48	41	2,830,753
Vermont	5	6	0.8	1	46	46	622,433
Virginia	268	271	3.4	3.4	15	18	7,952,119
Washington	239	256	3.5	3.8	14	12	6,746,199
West Virginia	15	19	0.8	1	45	45	1,825,513
Wisconsin	55	67	1	1.2	43	43	5,668,519
Wyoming	7	2	1.3	0.4	42	50	547,637
American Samoa[1,2]	3	4	4.5	6	--	--	66,432
Fed. States of Micronesia[1,2]	171	195	159.6	182	--	--	107,154
Guam[1,2]	100	102	55.3	56.4	--	--	180,865
Marshall Islands[1,2]	196	141	297.6	214.1	--	--	65,859
N. Mariana Islands[1,2]	32	32	66.2	66.2	--	--	48,317
Puerto Rico[1,2]	80	63	2	1.6	--	--	3,978,702
Republic of Palau[1,2]	17	19	81.4	91	--	--	20,879
U.S. Virgin Islands[1,2]	...	...	...	...	--	--	109,750

[1]Not ranked with the states. See Table 28 for District of Columbia ranking among states.
[2]Not included in U.S. totals.

Note: Denominators for computing 2009 and 2010 rates for states, the District of Columbia, and Puerto Rico were obtained from 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 August 30, 2011); for all other areas, from IDB Summary Demographic Data (http://www.census.gov/ipc/www/idb/summaries.html).

Ellipses indicate data not available.

See Technical Notes (page 9).

See Surveillance Slide #4.

Table 21. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2010

Reporting Area	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**11,182**	**365**	**(3.3)**	**272**	**(2.4)**	**1,200**	**(10.7)**	**3,672**	**(32.8)**	**3,439**	**(30.8)**	**2,230**	**(19.9)**	**4**	**(0.0)**
Alabama	146	6	(4.1)	2	(1.4)	7	(4.8)	40	(27.4)	50	(34.2)	41	(28.1)	0	(0.0)
Alaska	57	2	(3.5)	1	(1.8)	11	(19.3)	10	(17.5)	22	(38.6)	11	(19.3)	0	(0.0)
Arizona	283	10	(3.5)	8	(2.8)	26	(9.2)	113	(39.9)	84	(29.7)	42	(14.8)	0	(0.0)
Arkansas	78	1	(1.3)	4	(5.1)	12	(15.4)	21	(26.9)	23	(29.5)	17	(21.8)	0	(0.0)
California	2,327	55	(2.4)	46	(2.0)	215	(9.2)	679	(29.2)	738	(31.7)	590	(25.4)	4	(0.2)
Colorado	71	2	(2.8)	3	(4.2)	10	(14.1)	25	(35.2)	15	(21.1)	16	(22.5)	0	(0.0)
Connecticut	85	3	(3.5)	3	(3.5)	12	(14.1)	30	(35.3)	18	(21.2)	19	(22.4)	0	(0.0)
Delaware	20	1	(5.0)	0	(0.0)	5	(25.0)	5	(25.0)	6	(30.0)	3	(15.0)	0	(0.0)
District of Columbia	44	1	(2.3)	1	(2.3)	4	(9.1)	17	(38.6)	13	(29.5)	8	(18.2)	0	(0.0)
Florida	835	32	(3.8)	25	(3.0)	76	(9.1)	275	(32.9)	288	(34.5)	139	(16.6)	0	(0.0)
Georgia	411	14	(3.4)	13	(3.2)	46	(11.2)	138	(33.6)	142	(34.5)	58	(14.1)	0	(0.0)
Hawaii	115	4	(3.5)	3	(2.6)	11	(9.6)	24	(20.9)	31	(27.0)	42	(36.5)	0	(0.0)
Idaho	15	0	(0.0)	2	(13.3)	1	(6.7)	4	(26.7)	3	(20.0)	5	(33.3)	0	(0.0)
Illinois	372	5	(1.3)	1	(0.3)	38	(10.2)	112	(30.1)	126	(33.9)	90	(24.2)	0	(0.0)
Indiana	90	4	(4.4)	5	(5.6)	7	(7.8)	32	(35.6)	28	(31.1)	14	(15.6)	0	(0.0)
Iowa	48	0	(0.0)	3	(6.3)	6	(12.5)	22	(45.8)	9	(18.8)	8	(16.7)	0	(0.0)
Kansas	46	3	(6.5)	2	(4.3)	2	(4.3)	19	(41.3)	10	(21.7)	10	(21.7)	0	(0.0)
Kentucky	90	0	(0.0)	0	(0.0)	7	(7.8)	31	(34.4)	35	(38.9)	17	(18.9)	0	(0.0)
Louisiana	200	5	(2.5)	2	(1.0)	20	(10.0)	60	(30.0)	80	(40.0)	33	(16.5)	0	(0.0)
Maine	8	1	(12.5)	0	(0.0)	1	(12.5)	3	(37.5)	2	(25.0)	1	(12.5)	0	(0.0)
Maryland	220	5	(2.3)	5	(2.3)	27	(12.3)	97	(44.1)	46	(20.9)	40	(18.2)	0	(0.0)
Massachusetts	222	4	(1.8)	2	(0.9)	31	(14.0)	93	(41.9)	49	(22.1)	43	(19.4)	0	(0.0)
Michigan	184	9	(4.9)	2	(1.1)	16	(8.7)	66	(35.9)	47	(25.5)	44	(23.9)	0	(0.0)
Minnesota	135	3	(2.2)	4	(3.0)	26	(19.3)	59	(43.7)	27	(20.0)	16	(11.9)	0	(0.0)
Mississippi	116	3	(2.6)	2	(1.7)	9	(7.8)	35	(30.2)	42	(36.2)	25	(21.6)	0	(0.0)
Missouri	107	4	(3.7)	3	(2.8)	16	(15.0)	33	(30.8)	30	(28.0)	21	(19.6)	0	(0.0)
Montana	6	1	(16.7)	0	(0.0)	1	(16.7)	2	(33.3)	2	(33.3)	0	(0.0)	0	(0.0)
Nebraska	27	1	(3.7)	0	(0.0)	6	(22.2)	9	(33.3)	7	(25.9)	4	(14.8)	0	(0.0)
Nevada	114	16	(14.0)	2	(1.8)	9	(7.9)	28	(24.6)	40	(35.1)	19	(16.7)	0	(0.0)
New Hampshire	10	2	(20.0)	0	(0.0)	2	(20.0)	3	(30.0)	2	(20.0)	1	(10.0)	0	(0.0)
New Jersey	405	15	(3.7)	12	(3.0)	44	(10.9)	138	(34.1)	112	(27.7)	84	(20.7)	0	(0.0)

Table 21. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2010

Reporting Area	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	51	0	(0.0)	0	(0.0)	4	(7.8)	11	(21.6)	14	(27.5)	22	(43.1)	0	(0.0)
New York	954	11	(1.2)	27	(2.8)	132	(13.8)	328	(34.4)	305	(32.0)	151	(15.8)	0	(0.0)
North Carolina	296	20	(6.8)	4	(1.4)	36	(12.2)	86	(29.1)	80	(27.0)	70	(23.6)	0	(0.0)
North Dakota	12	0	(0.0)	0	(0.0)	5	(41.7)	4	(33.3)	2	(16.7)	1	(8.3)	0	(0.0)
Ohio	190	4	(2.1)	4	(2.1)	19	(10.0)	53	(27.9)	65	(34.2)	45	(23.7)	0	(0.0)
Oklahoma	86	8	(9.3)	2	(2.3)	8	(9.3)	23	(26.7)	27	(31.4)	18	(20.9)	0	(0.0)
Oregon	87	3	(3.4)	1	(1.1)	8	(9.2)	35	(40.2)	26	(29.9)	14	(16.1)	0	(0.0)
Pennsylvania	238	2	(0.8)	9	(3.8)	20	(8.4)	77	(32.4)	75	(31.5)	55	(23.1)	0	(0.0)
Rhode Island	26	2	(7.7)	2	(7.7)	4	(15.4)	7	(26.9)	5	(19.2)	6	(23.1)	0	(0.0)
South Carolina	153	10	(6.5)	3	(2.0)	11	(7.2)	43	(28.1)	53	(34.6)	33	(21.6)	0	(0.0)
South Dakota	15	1	(6.7)	3	(20.0)	3	(20.0)	4	(26.7)	1	(6.7)	3	(20.0)	0	(0.0)
Tennessee	193	12	(6.2)	3	(1.6)	14	(7.3)	64	(33.2)	61	(31.6)	39	(20.2)	0	(0.0)
Texas	1,385	64	(4.6)	37	(2.7)	160	(11.6)	489	(35.3)	439	(31.7)	196	(14.2)	0	(0.0)
Utah	20	0	(0.0)	0	(0.0)	1	(5.0)	9	(45.0)	6	(30.0)	4	(20.0)	0	(0.0)
Vermont	5	0	(0.0)	0	(0.0)	1	(20.0)	1	(20.0)	2	(40.0)	1	(20.0)	0	(0.0)
Virginia	268	3	(1.1)	8	(3.0)	31	(11.6)	106	(39.6)	69	(25.7)	51	(19.0)	0	(0.0)
Washington	239	12	(5.0)	8	(3.3)	31	(13.0)	80	(33.5)	64	(26.8)	44	(18.4)	0	(0.0)
West Virginia	15	0	(0.0)	0	(0.0)	1	(6.7)	5	(33.3)	5	(33.3)	4	(26.7)	0	(0.0)
Wisconsin	55	1	(1.8)	4	(7.3)	6	(10.9)	23	(41.8)	11	(20.0)	10	(18.2)	0	(0.0)
Wyoming	7	0	(0.0)	1	(14.3)	1	(14.3)	1	(14.3)	2	(28.6)	2	(28.6)	0	(0.0)
American Samoa[1]	3	0	(0.0)	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	1	(33.3)	0	(0.0)
Fed. States of Micronesia[1]	171	22	(12.9)	28	(16.4)	37	(21.6)	43	(25.1)	33	(19.3)	8	(4.7)	0	(0.0)
Guam[1]	100	11	(11.0)	8	(8.0)	6	(6.0)	34	(34.0)	30	(30.0)	11	(11.0)	0	(0.0)
Marshall Islands[1]	196	24	(12.2)	25	(12.8)	47	(24.0)	45	(23.0)	51	(26.0)	4	(2.0)	0	(0.0)
N. Mariana Islands[1]	32	0	(0.0)	0	(0.0)	3	(9.4)	9	(28.1)	15	(46.9)	5	(15.6)	0	(0.0)
Puerto Rico[1]	80	2	(2.5)	0	(0.0)	2	(2.5)	19	(23.8)	33	(41.3)	24	(30.0)	0	(0.0)
Republic of Palau[1]	17	0	(0.0)	1	(5.9)	1	(5.9)	8	(47.1)	4	(23.5)	3	(17.6)	0	(0.0)
U.S. Virgin Islands[1]	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

[1]Not included in U.S. totals.

Table 22. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2010

Reporting Areas	Total Cases	Hispanic or Latino[1]		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**11,182**	**3,236**	**(28.9)**	**153**	**(1.4)**	**3,143**	**(28.1)**	**2,652**	**(23.7)**	**95**	**(0.8)**	**1,771**	**(15.8)**	**29**	**(0.3)**	**103**	**(0.9)**
Alabama	146	24	(16.4)	1	(0.7)	12	(8.2)	59	(40.4)	0	(0.0)	50	(34.2)	0	(0.0)	0	(0.0)
Alaska	57	0	(0.0)	41	(71.9)	9	(15.8)	1	(1.8)	0	(0.0)	5	(8.8)	0	(0.0)	1	(1.8)
Arizona	283	136	(48.1)	29	(10.2)	56	(19.8)	20	(7.1)	1	(0.4)	41	(14.5)	0	(0.0)	0	(0.0)
Arkansas	78	11	(14.1)	0	(0.0)	8	(10.3)	23	(29.5)	6	(7.7)	30	(38.5)	0	(0.0)	0	(0.0)
California	2,327	870	(37.4)	1	(0.0)	1,071	(46.0)	148	(6.4)	13	(0.6)	187	(8.0)	3	(0.1)	34	(1.5)
Colorado	71	28	(39.4)	1	(1.4)	15	(21.1)	16	(22.5)	2	(2.8)	9	(12.7)	0	(0.0)	0	(0.0)
Connecticut	85	19	(22.4)	0	(0.0)	34	(40.0)	14	(16.5)	0	(0.0)	18	(21.2)	0	(0.0)	0	(0.0)
Delaware	20	2	(10.0)	0	(0.0)	6	(30.0)	10	(50.0)	0	(0.0)	1	(5.0)	0	(0.0)	1	(5.0)
District of Columbia	44	7	(15.9)	0	(0.0)	3	(6.8)	32	(72.7)	0	(0.0)	1	(2.3)	1	(2.3)	0	(0.0)
Florida	835	251	(30.1)	2	(0.2)	91	(10.9)	284	(34.0)	4	(0.5)	202	(24.2)	1	(0.1)	0	(0.0)
Georgia	411	70	(17.0)	1	(0.2)	78	(19.0)	206	(50.1)	0	(0.0)	54	(13.1)	1	(0.2)	1	(0.2)
Hawaii	115	1	(0.9)	0	(0.0)	85	(73.9)	0	(0.0)	19	(16.5)	6	(5.2)	1	(0.9)	3	(2.6)
Idaho	15	4	(26.7)	0	(0.0)	1	(6.7)	4	(26.7)	0	(0.0)	5	(33.3)	1	(6.7)	0	(0.0)
Illinois	372	113	(30.4)	0	(0.0)	102	(27.4)	87	(23.4)	0	(0.0)	69	(18.5)	0	(0.0)	1	(0.3)
Indiana	90	22	(24.4)	0	(0.0)	18	(20.0)	20	(22.2)	0	(0.0)	30	(33.3)	0	(0.0)	0	(0.0)
Iowa	48	10	(20.8)	0	(0.0)	18	(37.5)	11	(22.9)	0	(0.0)	9	(18.8)	0	(0.0)	0	(0.0)
Kansas	46	11	(23.9)	1	(2.2)	14	(30.4)	12	(26.1)	0	(0.0)	8	(17.4)	0	(0.0)	0	(0.0)
Kentucky	90	11	(12.2)	0	(0.0)	12	(13.3)	21	(23.3)	0	(0.0)	46	(51.1)	0	(0.0)	0	(0.0)
Louisiana	200	25	(12.5)	0	(0.0)	23	(11.5)	109	(54.5)	0	(0.0)	42	(21.0)	1	(0.5)	0	(0.0)
Maine	8	1	(12.5)	0	(0.0)	1	(12.5)	5	(62.5)	0	(0.0)	1	(12.5)	0	(0.0)	0	(0.0)
Maryland	220	42	(19.1)	1	(0.5)	68	(30.9)	90	(40.9)	1	(0.5)	18	(8.2)	0	(0.0)	0	(0.0)
Massachusetts	222	33	(14.9)	0	(0.0)	86	(38.7)	56	(25.2)	0	(0.0)	46	(20.7)	0	(0.0)	1	(0.5)
Michigan	184	16	(8.7)	0	(0.0)	41	(22.3)	55	(29.9)	1	(0.5)	36	(19.6)	0	(0.0)	35	(19.0)
Minnesota	135	13	(9.6)	4	(3.0)	40	(29.6)	66	(48.9)	0	(0.0)	11	(8.1)	1	(0.7)	0	(0.0)
Mississippi	116	8	(6.9)	1	(0.9)	5	(4.3)	72	(62.1)	0	(0.0)	30	(25.9)	0	(0.0)	0	(0.0)
Missouri	107	12	(11.2)	1	(0.9)	27	(25.2)	28	(26.2)	3	(2.8)	34	(31.8)	0	(0.0)	2	(1.9)
Montana	6	0	(0.0)	5	(83.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)
Nebraska	27	12	(44.4)	0	(0.0)	4	(14.8)	6	(22.2)	0	(0.0)	4	(14.8)	0	(0.0)	1	(3.7)
Nevada	114	29	(25.4)	2	(1.8)	42	(36.8)	22	(19.3)	2	(1.8)	15	(13.2)	1	(0.9)	1	(0.9)
New Hampshire	10	2	(20.0)	0	(0.0)	2	(20.0)	4	(40.0)	0	(0.0)	2	(20.0)	0	(0.0)	0	(0.0)
New Jersey	405	126	(31.1)	0	(0.0)	153	(37.8)	85	(21.0)	0	(0.0)	41	(10.1)	0	(0.0)	0	(0.0)
New Mexico	51	27	(52.9)	14	(27.5)	5	(9.8)	2	(3.9)	0	(0.0)	3	(5.9)	0	(0.0)	0	(0.0)

Table 22. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2010

Reporting Areas	Total Cases	Hispanic or Latino[1]		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	954	284	(29.8)	1	(0.1)	338	(35.4)	214	(22.4)	1	(0.1)	97	(10.2)	2	(0.2)	17	(1.8)
North Carolina	296	56	(18.9)	5	(1.7)	55	(18.6)	113	(38.2)	5	(1.7)	55	(18.6)	7	(2.4)	0	(0.0)
North Dakota	12	0	(0.0)	2	(16.7)	4	(33.3)	5	(41.7)	0	(0.0)	1	(8.3)	0	(0.0)	0	(0.0)
Ohio	190	23	(12.1)	0	(0.0)	30	(15.8)	81	(42.6)	0	(0.0)	56	(29.5)	0	(0.0)	0	(0.0)
Oklahoma	86	18	(20.9)	12	(14.0)	14	(16.3)	12	(14.0)	6	(7.0)	22	(25.6)	2	(2.3)	0	(0.0)
Oregon	87	19	(21.8)	2	(2.3)	24	(27.6)	14	(16.1)	3	(3.4)	25	(28.7)	0	(0.0)	0	(0.0)
Pennsylvania	238	23	(9.7)	0	(0.0)	78	(32.8)	85	(35.7)	1	(0.4)	50	(21.0)	1	(0.4)	0	(0.0)
Rhode Island	26	8	(30.8)	0	(0.0)	8	(30.8)	5	(19.2)	0	(0.0)	5	(19.2)	0	(0.0)	0	(0.0)
South Carolina	153	24	(15.7)	0	(0.0)	9	(5.9)	84	(54.9)	8	(5.2)	28	(18.3)	0	(0.0)	0	(0.0)
South Dakota	15	0	(0.0)	11	(73.3)	0	(0.0)	2	(13.3)	0	(0.0)	2	(13.3)	0	(0.0)	0	(0.0)
Tennessee	193	37	(19.2)	0	(0.0)	25	(13.0)	62	(32.1)	0	(0.0)	68	(35.2)	1	(0.5)	0	(0.0)
Texas	1,385	709	(51.2)	5	(0.4)	205	(14.8)	255	(18.4)	4	(0.3)	206	(14.9)	0	(0.0)	1	(0.1)
Utah	20	7	(35.0)	1	(5.0)	3	(15.0)	5	(25.0)	0	(0.0)	4	(20.0)	0	(0.0)	0	(0.0)
Vermont	5	0	(0.0)	0	(0.0)	0	(0.0)	2	(40.0)	0	(0.0)	3	(60.0)	0	(0.0)	0	(0.0)
Virginia	268	45	(16.8)	0	(0.0)	101	(37.7)	84	(31.3)	0	(0.0)	38	(14.2)	0	(0.0)	0	(0.0)
Washington	239	35	(14.6)	8	(3.3)	102	(42.7)	40	(16.7)	15	(6.3)	30	(12.6)	5	(2.1)	4	(1.7)
West Virginia	15	0	(0.0)	0	(0.0)	0	(0.0)	4	(26.7)	0	(0.0)	11	(73.3)	0	(0.0)	0	(0.0)
Wisconsin	55	10	(18.2)	1	(1.8)	16	(29.1)	16	(29.1)	0	(0.0)	12	(21.8)	0	(0.0)	0	(0.0)
Wyoming	7	2	(28.6)	0	(0.0)	1	(14.3)	1	(14.3)	0	(0.0)	3	(42.9)	0	(0.0)	0	(0.0)
American Samoa[3]	3	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Microneia[3]	171	1	(0.6)	0	(0.0)	0	(0.0)	0	(0.0)	162	(94.7)	0	(0.0)	2	(1.2)	6	(3.5)
Guam[3]	100	1	(1.0)	0	(0.0)	28	(28.0)	0	(0.0)	67	(67.0)	2	(2.0)	0	(0.0)	2	(2.0)
Marshall Islands[3]	196	0	(0.0)	0	(0.0)	2	(1.0)	0	(0.0)	194	(99.0)	0	(0.0)	0	(0.0)	0	(0.0)
N. Mariana Islands[3]	32	0	(0.0)	0	(0.0)	11	(34.4)	0	(0.0)	12	(37.5)	0	(0.0)	0	(0.0)	9	(28.1)
Puerto Rico[3]	80	77	(96.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(2.5)	0	(0.0)	1	(1.3)
Republic of Palau[3]	17	0	(0.0)	0	(0.0)	7	(41.2)	0	(0.0)	9	(52.9)	0	(0.0)	0	(0.0)	1	(5.9)
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 (page 9).

Table 23. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons[1]: States, 2010

States	Total Cases	U.S.-born Persons		Foreign-born Persons[1]		Unknown Origin	
		No.	(%)	No.	(%)	No.	(%)
United States	**11,182**	**4,393**	**(39.3)**	**6,720**	**(60.1)**	**69**	**(0.6)**
Alabama	146	107	(73.3)	39	(26.7)	0	(0.0)
Alaska	57	40	(70.2)	8	(14.0)	9	(15.8)
Arizona	283	100	(35.3)	181	(64.0)	2	(0.7)
Arkansas	78	62	(79.5)	16	(20.5)	0	(0.0)
California	2,327	501	(21.5)	1,797	(77.2)	29	(1.2)
Colorado	71	18	(25.4)	53	(74.6)	0	(0.0)
Connecticut	85	19	(22.4)	66	(77.6)	0	(0.0)
Delaware	20	4	(20.0)	16	(80.0)	0	(0.0)
District of Columbia	44	17	(38.6)	27	(61.4)	0	(0.0)
Florida	835	424	(50.8)	411	(49.2)	0	(0.0)
Georgia	411	227	(55.2)	183	(44.5)	1	(0.2)
Hawaii	115	35	(30.4)	79	(68.7)	1	(0.9)
Idaho	15	6	(40.0)	9	(60.0)	0	(0.0)
Illinois	372	144	(38.7)	228	(61.3)	0	(0.0)
Indiana	90	53	(58.9)	37	(41.1)	0	(0.0)
Iowa	48	11	(22.9)	37	(77.1)	0	(0.0)
Kansas	46	20	(43.5)	26	(56.5)	0	(0.0)
Kentucky	90	48	(53.3)	42	(46.7)	0	(0.0)
Louisiana	200	155	(77.5)	45	(22.5)	0	(0.0)
Maine	8	1	(12.5)	7	(87.5)	0	(0.0)
Maryland	220	71	(32.3)	149	(67.7)	0	(0.0)
Massachusetts	222	53	(23.9)	154	(69.4)	15	(6.8)
Michigan	184	83	(45.1)	96	(52.2)	5	(2.7)
Minnesota	135	27	(20.0)	108	(80.0)	0	(0.0)
Mississippi	116	100	(86.2)	16	(13.8)	0	(0.0)
Missouri	107	56	(52.3)	51	(47.7)	0	(0.0)
Montana	6	6	(100.0)	0	(0.0)	0	(0.0)
Nebraska	27	6	(22.2)	21	(77.8)	0	(0.0)
Nevada	114	40	(35.1)	72	(63.2)	2	(1.8)
New Hampshire	10	2	(20.0)	8	(80.0)	0	(0.0)
New Jersey	405	107	(26.4)	298	(73.6)	0	(0.0)
New Mexico	51	25	(49.0)	26	(51.0)	0	(0.0)
New York	954	211	(22.1)	743	(77.9)	0	(0.0)
North Carolina	296	175	(59.1)	121	(40.9)	0	(0.0)
North Dakota	12	3	(25.0)	9	(75.0)	0	(0.0)
Ohio	190	103	(54.2)	87	(45.8)	0	(0.0)
Oklahoma	86	66	(76.7)	20	(23.3)	0	(0.0)
Oregon	87	34	(39.1)	53	(60.9)	0	(0.0)
Pennsylvania	238	105	(44.1)	133	(55.9)	0	(0.0)
Rhode Island	26	7	(26.9)	19	(73.1)	0	(0.0)
South Carolina	153	125	(81.7)	28	(18.3)	0	(0.0)
South Dakota	15	13	(86.7)	2	(13.3)	0	(0.0)
Tennessee	193	123	(63.7)	70	(36.3)	0	(0.0)
Texas	1,385	639	(46.1)	746	(53.9)	0	(0.0)
Utah	20	5	(25.0)	15	(75.0)	0	(0.0)
Vermont	5	2	(40.0)	3	(60.0)	0	(0.0)
Virginia	268	106	(39.6)	162	(60.4)	0	(0.0)
Washington	239	67	(28.0)	167	(69.9)	5	(2.1)
West Virginia	15	14	(93.3)	1	(6.7)	0	(0.0)
Wisconsin	55	24	(43.6)	31	(56.4)	0	(0.0)
Wyoming	7	3	(42.9)	4	(57.1)	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 Surveillance Slide #14.

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Table 24. Tuberculosis Cases and Percentages in Foreign-born Persons[1] by Country of Origin: States, 2010

State	Total Cases	Country of Origin																	
		Mexico		Philippines		India		Vietnam		China		Guatemala		Haiti		All Others[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**6,720**	**1,541**	**(22.9)**	**740**	**(11.0)**	**578**	**(8.6)**	**532**	**(7.9)**	**364**	**(5.4)**	**198**	**(2.9)**	**195**	**(2.9)**	**2,507**	**(37.3)**	**65**	**(1.0)**
Alabama	39	12	(30.8)	1	(2.6)	4	(10.3)	5	(12.8)	1	(2.6)	6	(15.4)	0	(0.0)	10	(25.6)	0	(0.0)
Alaska	8	0	(0.0)	3	(37.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(62.5)	0	(0.0)
Arizona	181	98	(54.1)	11	(6.1)	8	(4.4)	5	(2.8)	3	(1.7)	6	(3.3)	0	(0.0)	47	(26.0)	3	(1.7)
Arkansas	16	7	(43.8)	0	(0.0)	2	(12.5)	2	(12.5)	0	(0.0)	0	(0.0)	0	(0.0)	5	(31.3)	0	(0.0)
California	1,797	523	(29.1)	360	(20.0)	110	(6.1)	224	(12.5)	134	(7.5)	48	(2.7)	1	(0.1)	394	(21.9)	3	(0.2)
Colorado	53	21	(39.6)	3	(5.7)	1	(1.9)	2	(3.8)	1	(1.9)	1	(1.9)	0	(0.0)	24	(45.3)	0	(0.0)
Connecticut	66	0	(0.0)	6	(9.1)	9	(13.6)	5	(7.6)	5	(7.6)	4	(6.1)	5	(7.6)	32	(48.5)	0	(0.0)
Delaware	16	2	(12.5)	1	(6.3)	4	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)	8	(50.0)	0	(0.0)
District of Columbia	27	0	(0.0)	2	(7.4)	1	(3.7)	1	(3.7)	0	(0.0)	1	(3.7)	0	(0.0)	22	(81.5)	0	(0.0)
Florida	411	62	(15.1)	22	(5.4)	11	(2.7)	19	(4.6)	1	(0.2)	23	(5.6)	97	(23.6)	176	(42.8)	0	(0.0)
Georgia	183	37	(20.2)	6	(3.3)	17	(9.3)	26	(14.2)	1	(0.5)	10	(5.5)	4	(2.2)	80	(43.7)	2	(1.1)
Hawaii	79	1	(1.3)	58	(73.4)	0	(0.0)	5	(6.3)	3	(3.8)	0	(0.0)	0	(0.0)	12	(15.2)	0	(0.0)
Idaho	9	3	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(22.2)	4	(44.4)	0	(0.0)
Illinois	228	66	(28.9)	26	(11.4)	44	(19.3)	4	(1.8)	11	(4.8)	4	(1.8)	0	(0.0)	71	(31.1)	2	(0.9)
Indiana	37	12	(32.4)	2	(5.4)	5	(13.5)	2	(5.4)	1	(2.7)	0	(0.0)	0	(0.0)	15	(40.5)	0	(0.0)
Iowa	37	5	(13.5)	3	(8.1)	6	(16.2)	2	(5.4)	1	(2.7)	0	(0.0)	0	(0.0)	20	(54.1)	0	(0.0)
Kansas	26	5	(19.2)	2	(7.7)	3	(11.5)	3	(11.5)	0	(0.0)	0	(0.0)	0	(0.0)	13	(50.0)	0	(0.0)
Kentucky	42	9	(21.4)	4	(9.5)	6	(14.3)	3	(7.1)	1	(2.4)	2	(4.8)	0	(0.0)	16	(38.1)	1	(2.4)
Louisiana	45	6	(13.3)	3	(6.7)	4	(8.9)	8	(17.8)	3	(6.7)	2	(4.4)	2	(4.4)	17	(37.8)	0	(0.0)
Maine	7	1	(14.3)	0	(0.0)	1	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(71.4)	0	(0.0)
Maryland	149	8	(5.4)	5	(3.4)	16	(10.7)	5	(3.4)	8	(5.4)	5	(3.4)	1	(0.7)	101	(67.8)	0	(0.0)
Massachusetts	154	1	(0.6)	2	(1.3)	26	(16.9)	8	(5.2)	19	(12.3)	4	(2.6)	16	(10.4)	77	(50.0)	1	(0.6)
Michigan	96	8	(8.3)	9	(9.4)	21	(21.9)	4	(4.2)	5	(5.2)	2	(2.1)	1	(1.0)	45	(46.9)	1	(1.0)
Minnesota	108	8	(7.4)	0	(0.0)	12	(11.1)	4	(3.7)	3	(2.8)	1	(0.9)	0	(0.0)	80	(74.1)	0	(0.0)
Mississippi	16	5	(31.3)	1	(6.3)	1	(6.3)	2	(12.5)	0	(0.0)	1	(6.3)	0	(0.0)	6	(37.5)	0	(0.0)
Missouri	51	8	(15.7)	2	(3.9)	8	(15.7)	4	(7.8)	0	(0.0)	1	(2.0)	0	(0.0)	24	(47.1)	4	(7.8)
Montana	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

Table 24. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons[1] by Country of Origin: States, 2010

State	Total Cases	Country of Origin																	
		Mexico		Philippines		India		Vietnam		China		Guatemala		Haiti		All Others[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Nebraska	21	7	(33.3)	0	(0.0)	0	(0.0)	2	(9.5)	0	(0.0)	4	(19.0)	0	(0.0)	8	(38.1)	0	(0.0)
Nevada	72	16	(22.2)	24	(33.3)	1	(1.4)	6	(8.3)	4	(5.6)	0	(0.0)	0	(0.0)	21	(29.2)	0	(0.0)
New Hampshire	8	0	(0.0)	0	(0.0)	0	(0.0)	2	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(75.0)	0	(0.0)
New Jersey	298	34	(11.4)	42	(14.1)	66	(22.1)	8	(2.7)	6	(2.0)	6	(2.0)	12	(4.0)	124	(41.6)	0	(0.0)
New Mexico	26	19	(73.1)	0	(0.0)	1	(3.8)	3	(11.5)	0	(0.0)	1	(3.8)	0	(0.0)	2	(7.7)	0	(0.0)
New York	743	44	(5.9)	40	(5.4)	43	(5.8)	7	(0.9)	110	(14.8)	17	(2.3)	36	(4.8)	398	(53.6)	48	(6.5)
North Carolina	121	31	(25.6)	10	(8.3)	12	(9.9)	14	(11.6)	2	(1.7)	1	(0.8)	1	(0.8)	50	(41.3)	0	(0.0)
North Dakota	9	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	8	(88.9)	0	(0.0)
Ohio	87	9	(10.3)	7	(8.0)	10	(11.5)	2	(2.3)	5	(5.7)	4	(4.6)	0	(0.0)	50	(57.5)	0	(0.0)
Oklahoma	20	4	(20.0)	0	(0.0)	1	(5.0)	5	(25.0)	0	(0.0)	1	(5.0)	0	(0.0)	9	(45.0)	0	(0.0)
Oregon	53	10	(18.9)	5	(9.4)	3	(5.7)	6	(11.3)	5	(9.4)	2	(3.8)	1	(1.9)	21	(39.6)	0	(0.0)
Pennsylvania	133	8	(6.0)	9	(6.8)	24	(18.0)	15	(11.3)	9	(6.8)	1	(0.8)	11	(8.3)	56	(42.1)	0	(0.0)
Rhode Island	19	0	(0.0)	0	(0.0)	3	(15.8)	0	(0.0)	1	(5.3)	3	(15.8)	1	(5.3)	11	(57.9)	0	(0.0)
South Carolina	28	14	(50.0)	0	(0.0)	3	(10.7)	2	(7.1)	0	(0.0)	1	(3.6)	0	(0.0)	8	(28.6)	0	(0.0)
South Dakota	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(100.0)	0	(0.0)
Tennessee	70	16	(22.9)	2	(2.9)	9	(12.9)	6	(8.6)	1	(1.4)	7	(10.0)	0	(0.0)	29	(41.4)	0	(0.0)
Texas	746	373	(50.0)	31	(4.2)	36	(4.8)	76	(10.2)	10	(1.3)	23	(3.1)	2	(0.3)	195	(26.1)	0	(0.0)
Utah	15	5	(33.3)	1	(6.7)	1	(6.7)	0	(0.0)	1	(6.7)	0	(0.0)	0	(0.0)	7	(46.7)	0	(0.0)
Vermont	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)	0	(0.0)
Virginia	162	7	(4.3)	14	(8.6)	24	(14.8)	15	(9.3)	4	(2.5)	6	(3.7)	0	(0.0)	92	(56.8)	0	(0.0)
Washington	167	27	(16.2)	23	(13.8)	13	(7.8)	19	(11.4)	4	(2.4)	0	(0.0)	1	(0.6)	80	(47.9)	0	(0.0)
West Virginia	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)
Wisconsin	31	7	(22.6)	0	(0.0)	8	(25.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	16	(51.6)	0	(0.0)
Wyoming	4	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)	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 136 countries.
Note: See Surveillance Slide #17.

Table 25. Tuberculosis Cases and Percentages in Foreign-born Persons[1] by Number of Years in the United States: States, 2010

State	Total Cases	<1 Year		1–4		5–9		10–19		≥20		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**6,720**	**1,079**	**(16.1)**	**1,244**	**(18.5)**	**977**	**(14.5)**	**1,171**	**(17.4)**	**1,504**	**(22.4)**	**745**	**(11.1)**
Alabama	39	2	(5.1)	12	(30.8)	10	(25.6)	9	(23.1)	6	(15.4)	0	(0.0)
Alaska	8	3	(37.5)	1	(12.5)	2	(25.0)	0	(0.0)	1	(12.5)	1	(12.5)
Arizona	181	65	(35.9)	18	(9.9)	15	(8.3)	23	(12.7)	40	(22.1)	20	(11.0)
Arkansas	16	1	(6.3)	2	(12.5)	3	(18.8)	6	(37.5)	4	(25.0)	0	(0.0)
California	1,797	183	(10.2)	218	(12.1)	193	(10.7)	328	(18.3)	554	(30.8)	321	(17.9)
Colorado	53	9	(17.0)	10	(18.9)	6	(11.3)	9	(17.0)	9	(17.0)	10	(18.9)
Connecticut	66	10	(15.2)	12	(18.2)	13	(19.7)	13	(19.7)	18	(27.3)	0	(0.0)
Delaware	16	3	(18.8)	3	(18.8)	4	(25.0)	4	(25.0)	1	(6.3)	1	(6.3)
District of Columbia	27	4	(14.8)	9	(33.3)	5	(18.5)	4	(14.8)	3	(11.1)	2	(7.4)
Florida	411	83	(20.2)	69	(16.8)	65	(15.8)	63	(15.3)	68	(16.5)	63	(15.3)
Georgia	183	43	(23.5)	32	(17.5)	39	(21.3)	43	(23.5)	22	(12.0)	4	(2.2)
Hawaii	79	15	(19.0)	9	(11.4)	6	(7.6)	11	(13.9)	26	(32.9)	12	(15.2)
Idaho	9	4	(44.4)	1	(11.1)	1	(11.1)	1	(11.1)	2	(22.2)	0	(0.0)
Illinois	228	30	(13.2)	42	(18.4)	28	(12.3)	49	(21.5)	46	(20.2)	33	(14.5)
Indiana	37	4	(10.8)	4	(10.8)	1	(2.7)	1	(2.7)	0	(0.0)	27	(73.0)
Iowa	37	2	(5.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	35	(94.6)
Kansas	26	5	(19.2)	3	(11.5)	4	(15.4)	5	(19.2)	9	(34.6)	0	(0.0)
Kentucky	42	7	(16.7)	18	(42.9)	9	(21.4)	5	(11.9)	3	(7.1)	0	(0.0)
Louisiana	45	6	(13.3)	15	(33.3)	4	(8.9)	7	(15.6)	12	(26.7)	1	(2.2)
Maine	7	1	(14.3)	2	(28.6)	2	(28.6)	1	(14.3)	1	(14.3)	0	(0.0)
Maryland	149	26	(17.4)	40	(26.8)	29	(19.5)	28	(18.8)	26	(17.4)	0	(0.0)
Massachusetts	154	34	(22.1)	41	(26.6)	31	(20.1)	21	(13.6)	27	(17.5)	0	(0.0)
Michigan	96	16	(16.7)	24	(25.0)	7	(7.3)	10	(10.4)	17	(17.7)	22	(22.9)
Minnesota	108	14	(13.0)	28	(25.9)	27	(25.0)	21	(19.4)	18	(16.7)	0	(0.0)
Mississippi	16	4	(25.0)	3	(18.8)	4	(25.0)	3	(18.8)	2	(12.5)	0	(0.0)
Missouri	51	0	(0.0)	1	(2.0)	1	(2.0)	1	(2.0)	1	(2.0)	47	(92.2)
Montana	0	0	.	0	.	0	.	0	.	0	.	0	.
Nebraska	21	3	(14.3)	4	(19.0)	3	(14.3)	10	(47.6)	0	(0.0)	1	(4.8)
Nevada	72	8	(11.1)	5	(6.9)	6	(8.3)	20	(27.8)	29	(40.3)	4	(5.6)
New Hampshire	8	1	(12.5)	2	(25.0)	0	(0.0)	1	(12.5)	0	(0.0)	4	(50.0)
New Jersey	298	33	(11.1)	60	(20.1)	40	(13.4)	48	(16.1)	52	(17.4)	65	(21.8)
New Mexico	26	9	(34.6)	4	(15.4)	2	(7.7)	3	(11.5)	8	(30.8)	0	(0.0)
New York	743	127	(17.1)	176	(23.7)	133	(17.9)	127	(17.1)	166	(22.3)	14	(1.9)
North Carolina	121	21	(17.4)	25	(20.7)	24	(19.8)	15	(12.4)	16	(13.2)	20	(16.5)
North Dakota	9	4	(44.4)	1	(11.1)	0	(0.0)	1	(11.1)	1	(11.1)	2	(22.2)
Ohio	87	18	(20.7)	22	(25.3)	20	(23.0)	15	(17.2)	12	(13.8)	0	(0.0)
Oklahoma	20	3	(15.0)	5	(25.0)	5	(25.0)	3	(15.0)	2	(10.0)	2	(10.0)
Oregon	53	7	(13.2)	14	(26.4)	8	(15.1)	4	(7.5)	8	(15.1)	12	(22.6)
Pennsylvania	133	31	(23.3)	35	(26.3)	23	(17.3)	26	(19.5)	18	(13.5)	0	(0.0)
Rhode Island	19	4	(21.1)	4	(21.1)	2	(10.5)	4	(21.1)	5	(26.3)	0	(0.0)
South Carolina	28	3	(10.7)	10	(35.7)	4	(14.3)	3	(10.7)	6	(21.4)	2	(7.1)
South Dakota	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	70	15	(21.4)	18	(25.7)	14	(20.0)	15	(21.4)	8	(11.4)	0	(0.0)
Texas	746	164	(22.0)	156	(20.9)	116	(15.5)	139	(18.6)	170	(22.8)	1	(0.1)
Utah	15	3	(20.0)	2	(13.3)	1	(6.7)	5	(33.3)	4	(26.7)	0	(0.0)
Vermont	3	0	(0.0)	1	(33.3)	0	(0.0)	1	(33.3)	1	(33.3)	0	(0.0)
Virginia	162	22	(13.6)	35	(21.6)	40	(24.7)	33	(20.4)	32	(19.8)	0	(0.0)
Washington	167	24	(14.4)	34	(20.4)	24	(14.4)	24	(14.4)	46	(27.5)	15	(9.0)
West Virginia	1	0	(0.0)	1		0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	31	3	(9.7)	11	(35.5)	2	(6.5)	8	(25.8)	4	(12.9)	3	(9.7)
Wyoming	4	1	(25.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)

[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, 2010

Reporting Area	Total Cases	Pulmonary[1]		Extrapulmonary[2]		Pulmonary and Extrapulmonary Cases		
						Total[3]		Miliary
		No.	(%)	No.	(%)	No.	(%)	No.
United States	**11,182**	**7,591**	**(67.9)**	**2,438**	**(21.8)**	**1,118**	**(10.0)**	**299**
Alabama	146	113	(77.4)	29	(19.9)	4	(2.7)	2
Alaska	57	47	(82.5)	8	(14.0)	2	(3.5)	1
Arizona	283	219	(77.4)	53	(18.7)	11	(3.9)	5
Arkansas	78	64	(82.1)	12	(15.4)	2	(2.6)	1
California	2,327	1,568	(67.4)	495	(21.3)	245	(10.5)	54
Colorado	71	40	(56.3)	22	(31.0)	9	(12.7)	3
Connecticut	85	57	(67.1)	21	(24.7)	7	(8.2)	2
Delaware	20	12	(60.0)	8	(40.0)	0	(0.0)	0
District of Columbia	44	28	(63.6)	14	(31.8)	2	(4.5)	1
Florida	835	625	(74.9)	156	(18.7)	54	(6.5)	32
Georgia	411	283	(68.9)	88	(21.4)	36	(8.8)	18
Hawaii	115	89	(77.4)	20	(17.4)	6	(5.2)	0
Idaho	15	12	(80.0)	3	(20.0)	0	(0.0)	0
Illinois	372	239	(64.2)	88	(23.7)	45	(12.1)	9
Indiana	90	68	(75.6)	15	(16.7)	6	(6.7)	4
Iowa	48	29	(60.4)	13	(27.1)	3	(6.3)	2
Kansas	46	29	(63.0)	16	(34.8)	1	(2.2)	0
Kentucky	90	66	(73.3)	16	(17.8)	8	(8.9)	3
Louisiana	200	143	(71.5)	43	(21.5)	14	(7.0)	3
Maine	8	3	(37.5)	5	(62.5)	0	(0.0)	0
Maryland	220	137	(62.3)	62	(28.2)	21	(9.5)	7
Massachusetts	222	138	(62.2)	55	(24.8)	28	(12.6)	6
Michigan	184	129	(70.1)	53	(28.8)	1	(0.5)	1
Minnesota	135	57	(42.2)	60	(44.4)	18	(13.3)	1
Mississippi	116	94	(81.0)	16	(13.8)	6	(5.2)	2
Missouri	107	78	(72.9)	18	(16.8)	7	(6.5)	0
Montana	6	6	(100.0)	0	(0.0)	0	(0.0)	0
Nebraska	27	18	(66.7)	8	(29.6)	1	(3.7)	0
Nevada	114	79	(69.3)	28	(24.6)	6	(5.3)	5
New Hampshire	10	7	(70.0)	3	(30.0)	0	(0.0)	0
New Jersey	405	258	(63.7)	96	(23.7)	51	(12.6)	11
New Mexico	51	39	(76.5)	8	(15.7)	4	(7.8)	3
New York	954	607	(63.6)	213	(22.3)	134	(14.0)	27
North Carolina	296	200	(67.6)	68	(23.0)	28	(9.5)	16
North Dakota	12	6	(50.0)	5	(41.7)	1	(8.3)	0
Ohio	190	118	(62.1)	53	(27.9)	19	(10.0)	3
Oklahoma	86	49	(57.0)	27	(31.4)	10	(11.6)	2
Oregon	87	49	(56.3)	37	(42.5)	1	(1.1)	1
Pennsylvania	238	154	(64.7)	63	(26.5)	21	(8.8)	11
Rhode Island	26	15	(57.7)	8	(30.8)	3	(11.5)	1
South Carolina	153	89	(58.2)	32	(20.9)	32	(20.9)	12
South Dakota	15	10	(66.7)	1	(6.7)	4	(26.7)	1
Tennessee	193	125	(64.8)	36	(18.7)	32	(16.6)	8
Texas	1,385	1,042	(75.2)	206	(14.9)	137	(9.9)	24
Utah	20	9	(45.0)	8	(40.0)	3	(15.0)	1
Vermont	5	3	(60.0)	2	(40.0)	0	(0.0)	0
Virginia	268	173	(64.6)	53	(19.8)	42	(15.7)	4
Washington	239	126	(52.7)	73	(30.5)	40	(16.7)	6
West Virginia	15	9	(60.0)	4	(26.7)	2	(13.3)	0
Wisconsin	55	31	(56.4)	14	(25.5)	10	(18.2)	6
Wyoming	7	2	(28.6)	3	(42.9)	1	(14.3)	0
American Samoa[4]	3	0	(0.0)	0	(0.0)	3	(100.0)	3
Fed. States of Micronesia[4]	171	134	(78.4)	27	(15.8)	10	(5.8)	1
Guam[4]	100	80	(80.0)	8	(8.0)	12	(12.0)	9
Marshall Islands[4]	196	109	(55.6)	65	(33.2)	22	(11.2)	4
N. Mariana Islands[4]	32	30	(93.8)	0	(0.0)	2	(6.3)	1
Puerto Rico[4]	80	73	(91.3)	4	(5.0)	3	(3.8)	2
Republic of Palau[4]	17	16	(94.1)	1	(5.9)	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: 35 cases had missing and/or unknown site of disease.

Table 27. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2010

Reporting Area	Total Extrapulmonary Cases[1]	Total Extrapulmonary Sites	Site of Disease													
			Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other	
			No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**2,438**	**2,522**	**407**	**(16.1)**	**1,012**	**(40.1)**	**259**	**(10.3)**	**117**	**(4.6)**	**138**	**(5.5)**	**142**	**(5.6)**	**447**	**(17.7)**
Alabama	29	29	7	(24.1)	7	(24.1)	6	(20.7)	0	(0.0)	2	(6.9)	1	(3.4)	6	(20.7)
Alaska	8	8	0	(0.0)	3	(37.5)	1	(12.5)	1	(12.5)	0	(0.0)	1	(12.5)	2	(25.0)
Arizona	53	54	4	(7.4)	25	(46.3)	4	(7.4)	6	(11.1)	7	(13.0)	1	(1.9)	7	(13.0)
Arkansas	12	12	2	(16.7)	4	(33.3)	0	(0.0)	0	(0.0)	2	(16.7)	0	(0.0)	4	(33.3)
California	495	498	72	(14.5)	192	(38.6)	42	(8.4)	30	(6.0)	23	(4.6)	30	(6.0)	109	(21.9)
Colorado	22	22	2	(9.1)	8	(36.4)	7	(31.8)	1	(4.5)	2	(9.1)	1	(4.5)	1	(4.5)
Connecticut	21	21	3	(14.3)	16	(76.2)	1	(4.8)	0	(0.0)	0	(0.0)	1	(4.8)	0	(0.0)
Delaware	8	8	3	(37.5)	1	(12.5)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	2	(25.0)
District of Columbia	14	14	3	(21.4)	2	(14.3)	3	(21.4)	1	(7.1)	0	(0.0)	1	(7.1)	4	(28.6)
Florida	156	161	29	(18.0)	65	(40.4)	10	(6.2)	6	(3.7)	5	(3.1)	13	(8.1)	33	(20.5)
Georgia	88	91	20	(22.0)	31	(34.1)	6	(6.6)	1	(1.1)	11	(12.1)	3	(3.3)	19	(20.9)
Hawaii	20	22	4	(18.2)	7	(31.8)	2	(9.1)	0	(0.0)	0	(0.0)	3	(13.6)	6	(27.3)
Idaho	3	3	1	(33.3)	2	(66.7)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	88	96	16	(16.7)	35	(36.5)	13	(13.5)	4	(4.2)	4	(4.2)	4	(4.2)	20	(20.8)
Indiana	15	15	3	(20.0)	4	(26.7)	1	(6.7)	0	(0.0)	1	(6.7)	1	(6.7)	5	(33.3)
Iowa	13	15	4	(26.7)	5	(33.3)	4	(26.7)	0	(0.0)	1	(6.7)	1	(6.7)	0	(0.0)
Kansas	16	16	4	(25.0)	7	(43.8)	4	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)
Kentucky	16	16	2	(12.5)	6	(37.5)	3	(18.8)	0	(0.0)	0	(0.0)	1	(6.3)	4	(25.0)
Louisiana	43	43	9	(20.9)	11	(25.6)	2	(4.7)	5	(11.6)	2	(4.7)	1	(2.3)	13	(30.2)
Maine	5	5	0	(0.0)	5	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Maryland	62	66	6	(9.1)	29	(43.9)	10	(15.2)	1	(1.5)	5	(7.6)	3	(4.5)	12	(18.2)
Massachusetts	55	56	10	(17.9)	28	(50.0)	3	(5.4)	4	(7.1)	1	(1.8)	2	(3.6)	8	(14.3)
Michigan	53	54	11	(20.4)	17	(31.5)	5	(9.3)	0	(0.0)	5	(9.3)	1	(1.9)	15	(27.8)
Minnesota	60	62	3	(4.8)	36	(58.1)	3	(4.8)	2	(3.2)	2	(3.2)	8	(12.9)	8	(12.9)
Mississippi	16	16	3	(18.8)	4	(25.0)	4	(25.0)	1	(6.3)	1	(6.3)	0	(0.0)	3	(18.8)
Missouri	18	18	6	(33.3)	4	(22.2)	0	(0.0)	0	(0.0)	0	(0.0)	1	(5.6)	7	(38.9)
Nebraska	8	8	1	(12.5)	3	(37.5)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)	3	(37.5)
Nevada	28	30	0	(0.0)	16	(53.3)	7	(23.3)	1	(3.3)	0	(0.0)	1	(3.3)	5	(16.7)
New Hampshire	3	3	0	(0.0)	3	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
New Jersey	96	101	16	(15.8)	46	(45.5)	16	(15.8)	5	(5.0)	6	(5.9)	4	(4.0)	8	(7.9)
New Mexico	8	8	0	(0.0)	3	(37.5)	2	(25.0)	1	(12.5)	0	(0.0)	1	(12.5)	1	(12.5)

Table 27. (Cont'd) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2010

Reporting Area	Total Extrapulmonary Cases[1]	Total Extrapulmonary Sites	Site of Disease													
			Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other	
			No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	213	225	47	(20.9)	96	(42.7)	15	(6.7)	14	(6.2)	14	(6.2)	17	(7.6)	22	(9.8)
North Carolina	68	74	13	(17.6)	25	(33.8)	11	(14.9)	1	(1.4)	6	(8.1)	2	(2.7)	16	(21.6)
North Dakota	5	5	0	(0.0)	4	(80.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)
Ohio	53	55	8	(14.5)	21	(38.2)	7	(12.7)	3	(5.5)	4	(7.3)	3	(5.5)	9	(16.4)
Oklahoma	27	28	4	(14.3)	13	(46.4)	1	(3.6)	1	(3.6)	0	(0.0)	2	(7.1)	7	(25.0)
Oregon	37	37	9	(24.3)	14	(37.8)	2	(5.4)	2	(5.4)	1	(2.7)	2	(5.4)	7	(18.9)
Pennyslvania	63	64	4	(6.3)	25	(39.1)	12	(18.8)	2	(3.1)	4	(6.3)	5	(7.8)	12	(18.8)
Rhode Island	8	10	0	(0.0)	4	(40.0)	1	(10.0)	3	(30.0)	0	(0.0)	0	(0.0)	2	(20.0)
South Carolina	32	35	9	(25.7)	11	(31.4)	4	(11.4)	3	(8.6)	1	(2.9)	3	(8.6)	4	(11.4)
South Dakota	1	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	36	37	6	(16.2)	10	(27.0)	8	(21.6)	0	(0.0)	3	(8.1)	3	(8.1)	7	(18.9)
Texas	206	215	42	(19.5)	85	(39.5)	19	(8.8)	6	(2.8)	21	(9.8)	10	(4.7)	32	(14.9)
Utah	8	8	0	(0.0)	2	(25.0)	4	(50.0)	0	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)
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	53	54	5	(9.3)	28	(51.9)	6	(11.1)	3	(5.6)	1	(1.9)	3	(5.6)	8	(14.8)
Washington	73	79	13	(16.5)	38	(48.1)	6	(7.6)	7	(8.9)	1	(1.3)	5	(6.3)	9	(11.4)
West Virginia	4	5	1	(20.0)	4	(80.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	14	14	1	(7.1)	5	(35.7)	3	(21.4)	1	(7.1)	1	(7.1)	1	(7.1)	2	(14.3)
Wyoming	3	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
American Samoa[2]	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia[2]	27	28	8	(28.6)	14	(50.0)	2	(7.1)	0	(0.0)	0	(0.0)	3	(10.7)	1	(3.6)
Guam[2]	8	8	5	(62.5)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0)
Marshall Islands[2]	65	70	33	(47.1)	22	(31.4)	2	(2.9)	0	(0.0)	1	(1.4)	12	(17.1)	0	(0.0)
N. Mariana Islands[2]	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerto Rico[2]	4	4	1	(25.0)	0	(0.0)	1	(25.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)
Republic of Palau[2]	1	1	0	(0.0)	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands[2]	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

[1]Excludes cases with pulmonary site of disease.
[2]Not included in U.S. totals.
Note: Ellipses indicate data not available.
See Technical Notes (page 9).

Table 28. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by Number of Cases: States and the District of Columbia, 2010 and 2009

State	2010		2009		2009–2010 % Change		Overall Rank by 2010 Rate
	No.	Rate	No.	Rate	No.	Rate	
>= 500 cases in 2010							
California	2,327	6.2	2,469	6.7	-5.8	-7.5	3
Texas	1,385	5.5	1,501	6.1	-7.7	-9.8	4
New York[1]	954	4.9	1,007	5.2	-5.3	-5.8	5
Florida	835	4.5	822	4.4	1.6	2.3	7
100 - 499 cases in 2010							
Georgia	411	4.1	414	4.2	-0.7	-2.4	11
New Jersey	405	4.6	405	4.7	0.0	-2.1	6
Illinois	372	2.9	418	3.2	-11.0	-9.4	21
North Carolina	296	3.1	251	2.7	17.9	14.8	18
Arizona	283	4.2	232	3.5	22.0	20.0	10
Virginia	268	3.4	271	3.4	-1.1	0.0	15
Washington	239	3.5	256	3.8	-6.6	-7.9	14
Pennsylvania	238	1.9	236	1.9	0.8	0.0	31
Massachusetts	222	3.3	242	3.7	-8.3	-10.8	16
Maryland	220	3.8	218	3.8	0.9	0.0	13
Louisiana	200	4.4	193	4.3	3.6	2.3	8
Tennessee	193	3	202	3.2	-4.5	-6.3	20
Ohio	190	1.6	180	1.6	5.6	0.0	36
Michigan	184	1.9	144	1.4	27.8	35.7	32
South Carolina	153	3.3	164	3.6	-6.7	-8.3	17
Alabama	146	3.1	168	3.6	-13.1	-13.9	19
Minnesota	135	2.6	161	3.1	-16.1	-16.1	23
Mississippi	116	3.9	121	4.1	-4.1	-4.9	12
Hawaii	115	8.8	117	9.1	-1.7	-3.3	1
Nevada	114	4.3	106	4	7.5	7.5	9
Missouri	107	1.8	80	1.3	33.8	38.5	35
< 100 cases in 2010							
Indiana	90	1.4	119	1.9	-24.4	-26.3	40
Kentucky	90	2.1	75	1.7	20.0	23.5	30
Oregon	87	2.3	89	2.3	-2.2	0.0	28
Oklahoma	86	2.3	102	2.8	-15.7	-17.9	27
Connecticut	85	2.4	95	2.7	-10.5	-11.1	26
Arkansas	78	2.7	82	2.8	-4.9	-3.6	22
Colorado	71	1.4	85	1.7	-16.5	-17.6	41
Alaska	57	8	37	5.3	54.1	50.9	2
Wisconsin	55	1	67	1.2	-17.9	-16.7	43
New Mexico	51	2.5	48	2.4	6.3	4.2	24
Iowa	48	1.6	42	1.4	14.3	14.3	38
Kansas	46	1.6	64	2.3	-28.1	-30.4	37
District of Columbia	44	7.2	41	6.8	7.3	5.9	--
Nebraska	27	1.5	32	1.8	-15.6	-16.7	39
Rhode Island	26	2.5	24	2.3	8.3	8.7	25
Delaware	20	2.2	19	2.1	5.3	4.8	29
Utah	20	0.7	37	1.3	-45.9	-46.2	48
Idaho	15	1	18	1.2	-16.7	-16.7	44
South Dakota	15	1.8	18	2.2	-16.7	-18.2	34
West Virginia	15	0.8	19	1	-21.1	-20.0	45
North Dakota	12	1.8	5	0.8	140.0	125.0	33
New Hampshire	10	0.8	16	1.2	-37.5	-33.3	47
Maine	8	0.6	9	0.7	-11.1	-14.3	50
Wyoming	7	1.3	2	0.4	250.0	225.0	42
Montana	6	0.6	8	0.8	-25.0	-25.0	49
Vermont	5	0.8	6	1	-16.7	-20.0	46
Total	**11,182**	**3.6**	**11,537**	**3.8**	**-3.1**	**-5.3**	

[1]Includes New York City.

Note: Denominators for computing 2009 and 2010 rates for states, the District of Columbia, and Puerto Rico were obtained from 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 August 30, 2011).

See Table 20 for ranking of states without the District of Columbia.

Morbidity Tables
Reporting Areas, 2010 and 2008

Table 29. Tuberculosis Cases and Percentages by Residence in Correctional Facilities[1], Age ≥ 15: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Cases Reported As Residents of Correctional Facilities[2]	
		No.	(%)	No.	(%)
United States	**10,541**	**10,360**	**(98.3)**	**487**	**(4.7)**
Alabama	138	138	(100.0)	7	(5.1)
Alaska	54	46	(85.2)	0	(0.0)
Arizona	265	265	(100.0)	61	(23.0)
Arkansas	73	72	(98.6)	4	(5.6)
California	2,222	2,217	(99.8)	79	(3.6)
Colorado	66	66	(100.0)	0	(0.0)
Connecticut	79	79	(100.0)	0	(0.0)
Delaware	19	19	(100.0)	0	(0.0)
District of Columbia	42	42	(100.0)	1	(2.4)
Florida	778	778	(100.0)	26	(3.3)
Georgia	384	381	(99.2)	38	(10.0)
Hawaii	108	106	(98.1)	0	(0.0)
Idaho	13	13	(100.0)	0	(0.0)
Illinois	366	365	(99.7)	9	(2.5)
Indiana	81	81	(100.0)	4	(4.9)
Iowa	45	45	(100.0)	1	(2.2)
Kansas	41	41	(100.0)	1	(2.4)
Kentucky	90	90	(100.0)	2	(2.2)
Louisiana	193	193	(100.0)	7	(3.6)
Maine	7	7	(100.0)	0	(0.0)
Maryland	210	206	(98.1)	6	(2.9)
Massachusetts	216	215	(99.5)	3	(1.4)
Michigan	173	165	(95.4)	2	(1.2)
Minnesota	128	128	(100.0)	4	(3.1)
Mississippi	111	111	(100.0)	6	(5.4)
Missouri	100	94	(94.0)	2	(2.1)
Montana	5	5	(100.0)	0	(0.0)
Nebraska	26	25	(96.2)	0	(0.0)
Nevada	96	96	(100.0)	2	(2.1)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	378	(100.0)	3	(0.8)
New Mexico	51	51	(100.0)	5	(9.8)
New York State[2]	232	230	(99.1)	7	(3.0)
New York City	684	572	(83.6)	11	(1.9)
North Carolina	272	272	(100.0)	11	(4.0)
North Dakota	12	12	(100.0)	0	(0.0)
Ohio	182	180	(98.9)	3	(1.7)
Oklahoma	76	55	(72.4)	--	--
Oregon	83	83	(100.0)	3	(3.6)
Pennsylvania	227	227	(100.0)	5	(2.2)
Rhode Island	22	22	(100.0)	0	(0.0)
South Carolina	140	140	(100.0)	5	(3.6)
South Dakota	11	11	(100.0)	1	(9.1)
Tennessee	178	178	(100.0)	10	(5.6)
Texas	1,284	1,283	(99.9)	141	(11.0)
Utah	20	20	(100.0)	0	(0.0)
Vermont	5	5	(100.0)	0	(0.0)
Virginia	257	257	(100.0)	7	(2.7)
Washington	219	216	(98.6)	4	(1.9)
West Virginia	15	15	(100.0)	4	(26.7)
Wisconsin	50	50	(100.0)	2	(4.0)
Wyoming	6	6	(100.0)	0	(0.0)
American Samoa[3]	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia[3]	121	121	(100.0)	0	(0.0)
Guam[3]	81	80	(98.8)	0	(0.0)
Marshall Islands[3]	147	147	(100.0)	0	(0.0)
N. Mariana Islands[3]	32	32	(100.0)	0	(0.0)
Puerto Rico[3]	78	78	(100.0)	0	(0.0)
Republic of Palau[3]	16	16	(100.0)	0	(0.0)
U.S. Virgin Islands[3]	...	...	...	...	...

[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.

Table 30. Tuberculosis Cases and Percentages by Homeless Status,[1] Age ≥15: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on Homeless Status		Cases Reported As Being Homeless[2]	
		No.	(%)	No.	(%)
United States	**10,541**	**10,370**	**(98.4)**	**578**	**(5.6)**
Alabama	138	138	(100.0)	5	(3.6)
Alaska	54	45	(83.3)	10	(22.2)
Arizona	265	231	(87.2)	23	(10.0)
Arkansas	73	73	(100.0)	5	(6.8)
California	2,222	2,202	(99.1)	101	(4.6)
Colorado	66	66	(100.0)	3	(4.5)
Connecticut	79	79	(100.0)	1	(1.3)
Delaware	19	19	(100.0)	0	(0.0)
District of Columbia	42	42	(100.0)	3	(7.1)
Florida	778	757	(97.3)	53	(7.0)
Georgia	384	380	(99.0)	25	(6.6)
Hawaii	108	99	(91.7)	5	(5.1)
Idaho	13	13	(100.0)	0	(0.0)
Illinois	366	360	(98.4)	38	(10.6)
Indiana	81	81	(100.0)	13	(16.0)
Iowa	45	45	(100.0)	0	(0.0)
Kansas	41	41	(100.0)	5	(12.2)
Kentucky	90	89	(98.9)	13	(14.6)
Louisiana	193	193	(100.0)	10	(5.2)
Maine	7	7	(100.0)	0	(0.0)
Maryland	210	205	(97.6)	9	(4.4)
Massachusetts	216	216	(100.0)	15	(6.9)
Michigan	173	167	(96.5)	12	(7.2)
Minnesota	128	128	(100.0)	3	(2.3)
Mississippi	111	111	(100.0)	14	(12.6)
Missouri	100	94	(94.0)	6	(6.4)
Montana	5	5	(100.0)	2	(40.0)
Nebraska	26	26	(100.0)	2	(7.7)
Nevada	96	96	(100.0)	13	(13.5)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	378	(100.0)	6	(1.6)
New Mexico	51	51	(100.0)	2	(3.9)
New York State[3]	232	228	(98.3)	8	(3.5)
New York City	684	669	(97.8)	15	(2.2)
North Carolina	272	272	(100.0)	11	(4.0)
North Dakota	12	12	(100.0)	2	(16.7)
Ohio	182	181	(99.5)	9	(5.0)
Oklahoma	76	55	(72.4)	--	--
Oregon	83	83	(100.0)	7	(8.4)
Pennsylvania	227	226	(99.6)	9	(4.0)
Rhode Island	22	22	(100.0)	0	(0.0)
South Carolina	140	139	(99.3)	9	(6.5)
South Dakota	11	11	(100.0)	1	(9.1)
Tennessee	178	178	(100.0)	11	(6.2)
Texas	1,284	1,283	(99.9)	73	(5.7)
Utah	20	20	(100.0)	1	(5.0)
Vermont	5	5	(100.0)	1	(20.0)
Virginia	257	257	(100.0)	11	(4.3)
Washington	219	214	(97.7)	9	(4.2)
West Virginia	15	15	(100.0)	0	(0.0)
Wisconsin	50	50	(100.0)	1	(2.0)
Wyoming	6	5	(83.3)	0	(0.0)
American Samoa[4]	3	3	(100.0)	1	(33.3)
Fed. States of Micronesia[4]	121	121	(100.0)	0	(0.0)
Guam[4]	81	80	(98.8)	1	(1.3)
Marshall Islands[4]	147	147	(100.0)	0	(0.0)
N. Mariana Islands[4]	32	32	(100.0)	0	(0.0)
Puerto Rico[4]	78	78	(100.0)	4	(5.1)
Republic of Palau[4]	16	16	(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.

Table 31. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,[1] Age ≥15: Reporting Areas, 2010

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	**10,541**	**10,302**	**(97.7)**	**264**	**(2.6)**
Alabama	138	138	(100.0)	3	(2.2)
Alaska	54	46	(85.2)	1	(2.2)
Arizona	265	265	(100.0)	6	(2.3)
Arkansas	73	73	(100.0)	1	(1.4)
California	2,222	2,214	(99.6)	65	(2.9)
Colorado	66	66	(100.0)	0	(0.0)
Connecticut	79	78	(98.7)	1	(1.3)
Delaware	19	19	(100.0)	0	(0.0)
District of Columbia	42	42	(100.0)	2	(4.8)
Florida	778	778	(100.0)	8	(1.0)
Georgia	384	381	(99.2)	3	(0.8)
Hawaii	108	107	(99.1)	1	(0.9)
Idaho	13	13	(100.0)	0	(0.0)
Illinois	366	365	(99.7)	12	(3.3)
Indiana	81	81	(100.0)	2	(2.5)
Iowa	45	45	(100.0)	0	(0.0)
Kansas	41	41	(100.0)	0	(0.0)
Kentucky	90	90	(100.0)	1	(1.1)
Louisiana	193	193	(100.0)	6	(3.1)
Maine	7	7	(100.0)	1	(14.3)
Maryland	210	208	(99.0)	7	(3.4)
Massachusetts	216	215	(99.5)	2	(0.9)
Michigan	173	166	(96.0)	9	(5.4)
Minnesota	128	128	(100.0)	3	(2.3)
Mississippi	111	111	(100.0)	2	(1.8)
Missouri	100	94	(94.0)	3	(3.2)
Montana	5	5	(100.0)	0	(0.0)
Nebraska	26	24	(92.3)	1	(4.2)
Nevada	96	96	(100.0)	0	(0.0)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	378	(100.0)	7	(1.9)
New Mexico	51	51	(100.0)	1	(2.0)
New York State[3]	232	230	(99.1)	8	(3.5)
New York City	684	514	(75.1)	54	(10.5)
North Carolina	272	272	(100.0)	7	(2.6)
North Dakota	12	12	(100.0)	0	(0.0)
Ohio	182	180	(98.9)	2	(1.1)
Oklahoma	76	55	(72.4)	--	--
Oregon	83	83	(100.0)	4	(4.8)
Pennsylvania	227	227	(100.0)	10	(4.4)
Rhode Island	22	22	(100.0)	0	(0.0)
South Carolina	140	140	(100.0)	4	(2.9)
South Dakota	11	11	(100.0)	0	(0.0)
Tennessee	178	178	(100.0)	5	(2.8)
Texas	1,284	1,283	(99.9)	16	(1.2)
Utah	20	20	(100.0)	0	(0.0)
Vermont	5	5	(100.0)	1	(20.0)
Virginia	257	257	(100.0)	2	(0.8)
Washington	219	216	(98.6)	2	(0.9)
West Virginia	15	15	(100.0)	0	(0.0)
Wisconsin	50	50	(100.0)	1	(2.0)
Wyoming	6	6	(100.0)	0	(0.0)
American Samoa[4]	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia[4]	121	121	(100.0)	6	(5.0)
Guam[4]	81	80	(98.8)	0	(0.0)
Marshall Islands[4]	147	146	(99.3)	11	(7.5)
N. Mariana Islands[4]	32	30	(93.8)	0	(0.0)
Puerto Rico[4]	78	78	(100.0)	1	(1.3)
Republic of Palau[4]	16	16	(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 32. Tuberculosis Cases and Percentages by Injecting Drug Use,[1] Age ≥15: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Cases Reporting Injecting Drug Use	
		No.	(%)	No.	(%)
United States	**10,541**	**10,116**	**(96.0)**	**162**	**(1.6)**
Alabama	138	137	(99.3)	1	(0.7)
Alaska	54	52	(96.3)	0	(0.0)
Arizona	265	214	(80.8)	8	(3.7)
Arkansas	73	66	(90.4)	1	(1.5)
California	2,222	2,180	(98.1)	25	(1.1)
Colorado	66	66	(100.0)	0	(0.0)
Connecticut	79	79	(100.0)	1	(1.3)
Delaware	19	19	(100.0)	0	(0.0)
District of Columbia	42	42	(100.0)	0	(0.0)
Florida	778	770	(99.0)	16	(2.1)
Georgia	384	374	(97.4)	6	(1.6)
Hawaii	108	88	(81.5)	1	(1.1)
Idaho	13	13	(100.0)	0	(0.0)
Illinois	366	356	(97.3)	12	(3.4)
Indiana	81	81	(100.0)	5	(6.2)
Iowa	45	43	(95.6)	0	(0.0)
Kansas	41	41	(100.0)	2	(4.9)
Kentucky	90	89	(98.9)	1	(1.1)
Louisiana	193	192	(99.5)	8	(4.2)
Maine	7	7	(100.0)	0	(0.0)
Maryland	210	206	(98.1)	2	(1.0)
Massachusetts	216	214	(99.1)	4	(1.9)
Michigan	173	159	(91.9)	7	(4.4)
Minnesota	128	128	(100.0)	0	(0.0)
Mississippi	111	111	(100.0)	1	(0.9)
Missouri	100	94	(94.0)	1	(1.1)
Montana	5	5	(100.0)	0	(0.0)
Nebraska	26	24	(92.3)	0	(0.0)
Nevada	96	95	(99.0)	2	(2.1)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	377	(99.7)	3	(0.8)
New Mexico	51	51	(100.0)	1	(2.0)
New York State[2]	232	223	(96.1)	4	(1.8)
New York City	684	525	(76.8)	7	(1.3)
North Carolina	272	272	(100.0)	1	(0.4)
North Dakota	12	12	(100.0)	0	(0.0)
Ohio	182	178	(97.8)	1	(0.6)
Oklahoma	76	53	(69.7)	--	--
Oregon	83	83	(100.0)	2	(2.4)
Pennsylvania	227	223	(98.2)	3	(1.3)
Rhode Island	22	21	(95.5)	0	(0.0)
South Carolina	140	137	(97.9)	1	(0.7)
South Dakota	11	11	(100.0)	0	(0.0)
Tennessee	178	178	(100.0)	1	(0.6)
Texas	1,284	1,269	(98.8)	28	(2.2)
Utah	20	20	(100.0)	0	(0.0)
Vermont	5	5	(100.0)	0	(0.0)
Virginia	257	257	(100.0)	2	(0.8)
Washington	219	198	(90.4)	3	(1.5)
West Virginia	15	15	(100.0)	0	(0.0)
Wisconsin	50	50	(100.0)	1	(2.0)
Wyoming	6	5	(83.3)	0	(0.0)
Amercian Samoa[3]	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia[3]	121	121	(100.0)	0	(0.0)
Guam[3]	81	78	(96.3)	1	(1.3)
Marshall Islands[3]	147	147	(100.0)	1	(0.7)
N. Mariana Islands[3]	32	32	(100.0)	0	(0.0)
Puerto Rico[3]	78	78	(100.0)	7	(9.0)
Republic of Palau[3]	16	16	(100.0)	0	(0.0)
U.S. Virgin Islands[3]	...	...	...	...	...

[1]Injecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.
[2]Excludes New York City.
[3]Not included in U.S. totals.
Note: Ellipses indicate data not available.

Table 33. Tuberculosis Cases and Percentages by Noninjecting Drug Use,[1] Age ≥15: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Cases Reporting Noninjecting Drug Use	
		No.	(%)	No.	(%)
United States	**10,541**	**10,091**	**(95.7)**	**703**	**(7.0)**
Alabama	138	137	(99.3)	10	(7.3)
Alaska	54	51	(94.4)	6	(11.8)
Arizona	265	212	(80.0)	16	(7.5)
Arkansas	73	68	(93.2)	4	(5.9)
California	2,222	2,170	(97.7)	134	(6.2)
Colorado	66	66	(100.0)	1	(1.5)
Connecticut	79	79	(100.0)	4	(5.1)
Delaware	19	19	(100.0)	0	(0.0)
District of Columbia	42	42	(100.0)	2	(4.8)
Florida	778	769	(98.8)	70	(9.1)
Georgia	384	374	(97.4)	30	(8.0)
Hawaii	108	87	(80.6)	1	(1.1)
Idaho	13	13	(100.0)	1	(7.7)
Illinois	366	354	(96.7)	30	(8.5)
Indiana	81	80	(98.8)	9	(11.3)
Iowa	45	43	(95.6)	1	(2.3)
Kansas	41	41	(100.0)	6	(14.6)
Kentucky	90	89	(98.9)	2	(2.2)
Louisiana	193	191	(99.0)	27	(14.1)
Maine	7	7	(100.0)	0	(0.0)
Maryland	210	203	(96.7)	5	(2.5)
Massachusetts	216	211	(97.7)	12	(5.7)
Michigan	173	158	(91.3)	18	(11.4)
Minnesota	128	128	(100.0)	4	(3.1)
Mississippi	111	111	(100.0)	18	(16.2)
Missouri	100	94	(94.0)	6	(6.4)
Montana	5	5	(100.0)	2	(40.0)
Nebraska	26	25	(96.2)	1	(4.0)
Nevada	96	95	(99.0)	5	(5.3)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	377	(99.7)	9	(2.4)
New Mexico	51	51	(100.0)	1	(2.0)
New York State[2]	232	224	(96.6)	7	(3.1)
New York City	684	522	(76.3)	29	(5.6)
North Carolina	272	272	(100.0)	25	(9.2)
North Dakota	12	12	(100.0)	0	(0.0)
Ohio	182	178	(97.8)	7	(3.9)
Oklahoma	76	53	(69.7)	--	--
Oregon	83	83	(100.0)	8	(9.6)
Pennsylvania	227	223	(98.2)	13	(5.8)
Rhode Island	22	21	(95.5)	2	(9.5)
South Carolina	140	137	(97.9)	19	(13.9)
South Dakota	11	11	(100.0)	1	(9.1)
Tennessee	178	178	(100.0)	16	(9.0)
Texas	1,284	1,269	(98.8)	119	(9.4)
Utah	20	20	(100.0)	1	(5.0)
Vermont	5	5	(100.0)	0	(0.0)
Virginia	257	257	(100.0)	3	(1.2)
Washington	219	198	(90.4)	11	(5.6)
West Virginia	15	15	(100.0)	0	(0.0)
Wisconsin	50	50	(100.0)	4	(8.0)
Wyoming	6	5	(83.3)	1	(20.0)
American Samoa[3]	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia[3]	121	120	(99.2)	1	(0.8)
Guam[3]	81	78	(96.3)	0	(0.0)
Marshall Islands[3]	147	147	(100.0)	2	(1.4)
N. Mariana Islands[3]	32	32	(100.0)	0	(0.0)
Puerto Rico[3]	78	78	(100.0)	7	(9.0)
Republic of Palau[3]	16	16	(100.0)	1	(6.3)
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 34. Tuberculosis Cases and Percentages by Excess Alcohol Use,[1] Age ≥15: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Cases Reporting Excess Alcohol Use	
		No.	(%)	No.	(%)
United States	**10,541**	**10,123**	**(96.0)**	**1,267**	**(12.5)**
Alabama	138	137	(99.3)	24	(17.5)
Alaska	54	50	(92.6)	24	(48.0)
Arizona	265	212	(80.0)	27	(12.7)
Arkansas	73	69	(94.5)	11	(15.9)
California	2,222	2,169	(97.6)	167	(7.7)
Colorado	66	66	(100.0)	3	(4.5)
Connecticut	79	79	(100.0)	4	(5.1)
Delaware	19	19	(100.0)	2	(10.5)
District of Columbia	42	42	(100.0)	3	(7.1)
Florida	778	773	(99.4)	124	(16.0)
Georgia	384	376	(97.9)	55	(14.6)
Hawaii	108	92	(85.2)	6	(6.5)
Idaho	13	13	(100.0)	1	(7.7)
Illinois	366	351	(95.9)	44	(12.5)
Indiana	81	81	(100.0)	20	(24.7)
Iowa	45	43	(95.6)	7	(16.3)
Kansas	41	41	(100.0)	4	(9.8)
Kentucky	90	89	(98.9)	10	(11.2)
Louisiana	193	191	(99.0)	40	(20.9)
Maine	7	7	(100.0)	0	(0.0)
Maryland	210	204	(97.1)	12	(5.9)
Massachusetts	216	215	(99.5)	17	(7.9)
Michigan	173	157	(90.8)	25	(15.9)
Minnesota	128	128	(100.0)	5	(3.9)
Mississippi	111	111	(100.0)	13	(11.7)
Missouri	100	94	(94.0)	15	(16.0)
Montana	5	5	(100.0)	3	(60.0)
Nebraska	26	25	(96.2)	2	(8.0)
Nevada	96	95	(99.0)	11	(11.6)
New Hampshire	8	8	(100.0)	0	(0.0)
New Jersey	378	377	(99.7)	20	(5.3)
New Mexico	51	51	(100.0)	7	(13.7)
New York State[2]	232	226	(97.4)	20	(8.8)
New York City	684	543	(79.4)	76	(14.0)
North Carolina	272	272	(100.0)	31	(11.4)
North Dakota	12	12	(100.0)	2	(16.7)
Ohio	182	176	(96.7)	17	(9.7)
Oklahoma	76	57	(75.0)	11	(19.3)
Oregon	83	83	(100.0)	11	(13.3)
Pennsylvania	227	223	(98.2)	16	(7.2)
Rhode Island	22	22	(100.0)	1	(4.5)
South Carolina	140	137	(97.9)	33	(24.1)
South Dakota	11	10	(90.9)	3	(30.0)
Tennessee	178	178	(100.0)	28	(15.7)
Texas	1,284	1,269	(98.8)	268	(21.1)
Utah	20	20	(100.0)	2	(10.0)
Vermont	5	5	(100.0)	1	(20.0)
Virginia	257	257	(100.0)	21	(8.2)
Washington	219	194	(88.6)	15	(7.7)
West Virginia	15	15	(100.0)	1	(6.7)
Wisconsin	50	49	(98.0)	4	(8.2)
Wyoming	6	5	(83.3)	0	(0.0)
American Samoa[3]	3	3	(100.0)	1	(33.3)
Fed. States of Micronesia[3]	121	119	(98.3)	6	(5.0)
Guam[3]	81	77	(95.1)	1	(1.3)
Marshall Islands[3]	147	145	(98.6)	38	(26.2)
N. Mariana Islands[3]	32	32	(100.0)	0	(0.0)
Puerto Rico[3]	78	77	(98.7)	9	(11.7)
Republic of Palau[3]	16	16	(100.0)	2	(12.5)
U.S. Virgin Islands[3]	...	...	...	...	...

[1]Excess alcohol use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.
[2]Excludes New York City.
[3]Not included in U.S. totals.
Note: Ellipses indicate data not available.

Table 35. Tuberculosis Cases and Percentages by Initial Drug Regimen: Reporting Areas, 2010

Reporting Area	Total Cases	Cases in Persons Alive at Diagnosis	Cases with Information on Initial Drug Regimen		Percentage of Cases in Persons with Initial Drug Regimen[1,2]		
			No.	(%)	IR	IRZ	IRZE[3]
United States	**11,182**	**10,919**	**10,769**	**98.6**	**0.9**	**2.9**	**(85.0)**
Alabama	146	142	142	(100.0)	(0.0)	(3.5)	(84.5)
Alaska	57	55	53	(96.4)	(0.0)	(9.4)	(81.1)
Arizona	283	280	266	(95.0)	(0.4)	(1.9)	(89.5)
Arkansas	78	78	78	(100.0)	(0.0)	(3.8)	(14.1)
California	2,327	2,267	2,240	(98.8)	(0.3)	(1.7)	(88.4)
Colorado	71	71	71	(100.0)	(0.0)	(0.0)	(80.3)
Connecticut	85	84	84	(100.0)	(0.0)	(3.6)	(85.7)
Delaware	20	20	20	(100.0)	(0.0)	(0.0)	(75.0)
District of Columbia	44	42	41	(97.6)	(0.0)	(0.0)	(100.0)
Florida	835	814	802	(98.5)	(0.5)	(4.5)	(85.3)
Georgia	411	399	392	(98.2)	(2.0)	(0.0)	(90.8)
Hawaii	115	114	112	(98.2)	(0.0)	(4.5)	(91.1)
Idaho	15	14	14	(100.0)	(0.0)	(21.4)	(78.6)
Illinois	372	364	355	(97.5)	(1.7)	(1.1)	(87.0)
Indiana	90	89	89	(100.0)	(1.1)	(6.7)	(88.8)
Iowa	48	47	47	(100.0)	(0.0)	(6.4)	(83.0)
Kansas	46	45	44	(97.8)	(0.0)	(2.3)	(93.2)
Kentucky	90	89	88	(98.9)	(0.0)	(1.1)	(88.6)
Louisiana	200	198	198	(100.0)	(1.0)	(5.6)	(87.9)
Maine	8	8	8	(100.0)	(0.0)	(0.0)	(62.5)
Maryland	220	216	216	(100.0)	(1.4)	(2.8)	(85.6)
Massachusetts	222	219	206	(94.1)	(1.0)	(1.9)	(73.3)
Michigan	184	173	167	(96.5)	(0.6)	(7.2)	(71.3)
Minnesota	135	133	133	(100.0)	(0.0)	(4.5)	(90.2)
Mississippi	116	115	114	(99.1)	(2.6)	(5.3)	(76.3)
Missouri	107	104	102	(98.1)	(0.0)	(6.9)	(76.5)
Montana	6	6	6	(100.0)	(0.0)	(0.0)	(100.0)
Nebraska	27	27	27	(100.0)	(0.0)	(0.0)	(85.2)
Nevada	114	114	114	(100.0)	(0.0)	(0.0)	(93.9)
New Hampshire	10	9	9	(100.0)	(0.0)	(0.0)	(88.9)
New Jersey	405	398	396	(99.5)	(1.3)	(2.8)	(87.1)
New Mexico	51	46	46	(100.0)	(2.2)	(0.0)	(93.5)
New York State[3]	243	239	239	(100.0)	(1.3)	(1.7)	(83.7)
New York City	711	697	678	(97.3)	(0.3)	(2.9)	(73.5)
North Carolina	296	292	292	(100.0)	(0.0)	(2.1)	(83.9)
North Dakota	12	12	12	(100.0)	(0.0)	(0.0)	(100.0)
Ohio	190	183	182	(99.5)	(1.1)	(2.2)	(91.2)
Oklahoma	86	85	78	(91.8)	(10.3)	(15.4)	(57.7)
Oregon	87	83	83	(100.0)	(1.2)	(7.2)	(90.4)
Pennsylvania	238	227	226	(99.6)	(0.4)	(0.9)	(57.5)
Rhode Island	26	25	25	(100.0)	(0.0)	(0.0)	(96.0)
South Carolina	153	148	147	(99.3)	(0.0)	(6.8)	(88.4)
South Dakota	15	14	14	(100.0)	(0.0)	(14.3)	(85.7)
Tennessee	193	185	184	(99.5)	(0.0)	(4.9)	(88.6)
Texas	1,385	1,350	1,337	(99.0)	(2.1)	(3.2)	(89.0)
Utah	20	20	20	(100.0)	(0.0)	(10.0)	(90.0)
Vermont	5	5	5	(100.0)	(0.0)	(20.0)	(80.0)
Virginia	268	262	259	(98.9)	(0.0)	(0.4)	(97.7)
Washington	239	236	234	(99.2)	(0.4)	(2.6)	(86.3)
West Virginia	15	14	14	(100.0)	(0.0)	(0.0)	(100.0)
Wisconsin	55	55	53	(96.4)	(3.8)	(7.5)	(83.0)
Wyoming	7	7	7	(100.0)	(0.0)	(0.0)	(85.7)
American Samoa[4]	3	3	3	(100.0)	(0.0)	(0.0)	(100.0)
Fed. States of Micronesia[4]	171	171	171	(100.0)	(0.0)	(1.2)	(92.4)
Guam[4]	100	97	97	(100.0)	(1.0)	(7.2)	(83.5)
Marshall Islands[4]	196	193	192	(99.5)	(0.0)	(0.5)	(67.2)
N. Mariana Islands[4]	32	30	30	(100.0)	(0.0)	(0.0)	(100.0)
Puerto Rico[4]	80	78	78	(100.0)	(0.0)	(2.6)	(94.9)
Republic of Palau[4]	17	17	17	(100.0)	(0.0)	(0.0)	(100.0)
U.S. Virgin Islands[4]	...	...	...	...	...	...	...

[1]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.

[2]I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol.

[3]Excludes New York City.

[4]Not included in U.S. totals.

Note: Excluding cases with no information on drug regimen, 109 (1.00%) persons were not started on any drugs, 15 (0.14%) were started on one drug, and 1,192 (10.96%) 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, 2010

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	**8,413**	**8,063**	**(95.8)**	**667**	**(8.3)**	**107**	**(1.3)**
Alabama	117	116	(99.1)	5	(4.3)	0	(0.0)
Alaska	52	51	(98.1)	3	(5.9)	1	(2.0)
Arizona	201	194	(96.5)	15	(7.7)	0	(0.0)
Arkansas	56	56	(100.0)	1	(1.8)	0	(0.0)
California	1,843	1,799	(97.6)	174	(9.7)	25	(1.4)
Colorado	51	51	(100.0)	6	(11.8)	1	(2.0)
Connecticut	77	74	(96.1)	9	(12.2)	5	(6.8)
Delaware	13	13	(100.0)	0	(0.0)	0	(0.0)
District of Columbia	32	29	(90.6)	2	(6.9)	1	(3.4)
Florida	634	602	(95.0)	37	(6.1)	5	(0.8)
Georgia	293	288	(98.3)	23	(8.0)	3	(1.0)
Hawaii	79	74	(93.7)	0	(0.0)	0	(0.0)
Idaho	11	11	(100.0)	0	(0.0)	0	(0.0)
Illinois	277	265	(95.7)	22	(8.3)	2	(0.8)
Indiana	63	61	(96.8)	3	(4.9)	0	(0.0)
Iowa	27	24	(88.9)	1	(4.2)	0	(0.0)
Kansas	40	40	(100.0)	2	(5.0)	0	(0.0)
Kentucky	75	72	(96.0)	6	(8.3)	2	(2.8)
Louisiana	155	136	(87.7)	13	(9.6)	1	(0.7)
Maine	4	4	(100.0)	0	(0.0)	0	(0.0)
Maryland	162	159	(98.1)	11	(6.9)	0	(0.0)
Massachusetts	171	169	(98.8)	14	(8.3)	0	(0.0)
Michigan	129	125	(96.9)	10	(8.0)	2	(1.6)
Minnesota	109	109	(100.0)	5	(4.6)	0	(0.0)
Mississippi	82	82	(100.0)	5	(6.1)	1	(1.2)
Missouri	75	34	(45.3)	--	--	--	--
Montana	5	5	(100.0)	0	(0.0)	0	(0.0)
Nebraska	14	13	(92.9)	0	(0.0)	0	(0.0)
Nevada	74	72	(97.3)	11	(15.3)	1	(1.4)
New Hampshire	8	8	(100.0)	3	(37.5)	0	(0.0)
New Jersey	315	310	(98.4)	32	(10.3)	8	(2.6)
New Mexico	44	44	(100.0)	3	(6.8)	1	(2.3)
New York State[3]	170	169	(99.4)	15	(8.9)	3	(1.8)
New York City	501	488	(97.4)	48	(9.8)	11	(2.3)
North Carolina	215	207	(96.3)	15	(7.2)	1	(0.5)
North Dakota	8	7	(87.5)	0	(0.0)	0	(0.0)
Ohio	143	142	(99.3)	11	(7.7)	3	(2.1)
Oklahoma	58	54	(93.1)	4	(7.4)	1	(1.9)
Oregon	60	60	(100.0)	4	(6.7)	0	(0.0)
Pennsylvania	191	160	(83.8)	14	(8.8)	4	(2.5)
Rhode Island	19	19	(100.0)	0	(0.0)	0	(0.0)
South Carolina	112	101	(90.2)	5	(5.0)	0	(0.0)
South Dakota	11	11	(100.0)	1	(9.1)	0	(0.0)
Tennessee	135	135	(100.0)	13	(9.6)	3	(2.2)
Texas	1,007	957	(95.0)	76	(7.9)	12	(1.3)
Utah	18	18	(100.0)	6	(33.3)	2	(11.1)
Vermont	4	4	(100.0)	0	(0.0)	0	(0.0)
Virginia	215	189	(87.9)	12	(6.3)	0	(0.0)
Washington	197	193	(98.0)	20	(10.4)	5	(2.6)
West Virginia	12	11	(91.7)	0	(0.0)	0	(0.0)
Wisconsin	46	45	(97.8)	5	(11.1)	2	(4.4)
Wyoming	3	3	(100.0)	0	(0.0)	0	(0.0)
American Samoa[4]	2	2	(100.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia[4]	64	58	(90.6)	3	(5.2)	1	(1.7)
Guam[4]	57	53	(93.0)	5	(9.4)	2	(3.8)
Marshall Islands[4]	70	68	(97.1)	2	(2.9)	1	(1.5)
N. Mariana Islands[4]	18	17	(94.4)	0	(0.0)	0	(0.0)
Puerto Rico[4]	73	72	(98.6)	7	(9.7)	0	(0.0)
Republic of Palau[4]	13	12	(92.3)	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 Among Persons Aged 25–44 by HIV Status: Reporting Areas, 2010

Reporting Area	Total Cases	Cases with Information on HIV Status[1]		Cases in Persons with HIV-Positive Results[2]	
		No.	(%)	No.	(%)
United States	**3,672**	**2,697**	**(73.4)**	**--**	**--**
Alabama	40	38	(95.0)	1	(2.6)
Alaska	10	10	(100.0)	0	(0.0)
Arizona	113	100	(88.5)	8	(8.0)
Arkansas	21	21	(100.0)	3	(14.3)
California	679	0	(0.0)	--	--
Colorado	25	25	(100.0)	4	(16.0)
Connecticut	30	25	(83.3)	2	(8.0)
Delaware	5	4	(80.0)	1	(25.0)
District of Columbia	17	16	(94.1)	0	(0.0)
Florida	275	249	(90.5)	45	(18.1)
Georgia	138	129	(93.5)	22	(17.1)
Hawaii	24	17	(70.8)	--	--
Idaho	4	2	(50.0)	--	--
Illinois	112	105	(93.8)	13	(12.4)
Indiana	32	27	(84.4)	4	(14.8)
Iowa	22	21	(95.5)	2	(9.5)
Kansas	19	19	(100.0)	1	(5.3)
Kentucky	31	30	(96.8)	2	(6.7)
Louisiana	60	60	(100.0)	10	(16.7)
Maine	3	3	(100.0)	0	(0.0)
Maryland	97	94	(96.9)	9	(9.6)
Massachusetts	93	60	(64.5)	--	--
Michigan	66	59	(89.4)	9	(15.3)
Minnesota	59	55	(93.2)	5	(9.1)
Mississippi	35	35	(100.0)	3	(8.6)
Missouri	33	29	(87.9)	4	(13.8)
Montana	2	2	(100.0)	0	(0.0)
Nebraska	9	9	(100.0)	0	(0.0)
Nevada	28	28	(100.0)	3	(10.7)
New Hampshire	3	3	(100.0)	0	(0.0)
New Jersey	138	124	(89.9)	12	(9.7)
New Mexico	11	11	(100.0)	0	(0.0)
New York State[3]	88	79	(89.8)	5	(6.3)
New York City	240	223	(92.9)	25	(11.2)
North Carolina	86	85	(98.8)	12	(14.1)
North Dakota	4	4	(100.0)	0	(0.0)
Ohio	53	49	(92.5)	4	(8.2)
Oklahoma	23	23	(100.0)	0	(0.0)
Oregon	35	35	(100.0)	1	(2.9)
Pennsylvania	77	66	(85.7)	10	(15.2)
Rhode Island	7	7	(100.0)	0	(0.0)
South Carolina	43	43	(100.0)	7	(16.3)
South Dakota	4	4	(100.0)	1	(25.0)
Tennessee	64	64	(100.0)	9	(14.1)
Texas	489	394	(80.6)	65	(16.5)
Utah	9	9	(100.0)	0	(0.0)
Vermont	1	0	(0.0)	--	--
Virginia	106	103	(97.2)	5	(4.9)
Washington	80	71	(88.8)	2	(2.8)
West Virginia	5	5	(100.0)	1	(20.0)
Wisconsin	23	22	(95.7)	2	(9.1)
Wyoming	1	1	(100.0)	1	(100.0)
American Samoa[4]	2	2	(100.0)	0	(0.0)
Fed. States of Micronesia[4]	43	26	(60.5)	--	--
Guam[4]	34	29	(85.3)	2	(6.9)
Marshall Islands[4]	45	38	(84.4)	0	(0.0)
N. Mariana Islands[4]	9	9	(100.0)	0	(0.0)
Puerto Rico[4]	19	18	(94.7)	3	(16.7)
Republic of Palau[4]	8	8	(100.0)	0	(0.0)
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 ≥75% of cases. All 2010 California and 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 (page 9).

Table 38. Tuberculosis Cases and Percentages by Primary Occupation, Age ≥15: Reporting Areas, 2010

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	**10,541**	**9,666**	**(91.7)**	**(32.8)**	**(4.1)**	**(0.2)**	**(1.6)**	**(13.7)**	**(12.1)**	**(35.5)**
Alabama	138	138	(100.0)	(13.0)	(2.2)	(0.0)	(1.4)	(21.0)	(29.0)	(33.3)
Alaska	54	52	(96.3)	(57.7)	(0.0)	(0.0)	(1.9)	(13.5)	(7.7)	(19.2)
Arizona	265	226	(85.3)	(41.2)	(1.8)	(0.4)	(3.5)	(8.4)	(12.4)	(32.3)
Arkansas	73	64	(87.7)	(25.0)	(9.4)	(0.0)	(0.0)	(18.8)	(10.9)	(35.9)
California	2,222	2,135	(96.1)	(29.6)	(4.2)	(0.0)	(2.4)	(17.2)	(11.9)	(34.7)
Colorado	66	66	(100.0)	(9.1)	(3.0)	(0.0)	(0.0)	(19.7)	(30.3)	(37.9)
Connecticut	79	77	(97.5)	(23.4)	(6.5)	(0.0)	(1.3)	(19.5)	(9.1)	(40.3)
Delaware	19	19	(100.0)	(21.1)	(10.5)	(0.0)	(5.3)	(10.5)	(15.8)	(36.8)
District of Columbia	42	42	(100.0)	(76.2)	(4.8)	(0.0)	(0.0)	(2.4)	(0.0)	(16.7)
Florida	778	768	(98.7)	(63.9)	(2.6)	(0.3)	(3.1)	(3.1)	(0.9)	(26.0)
Georgia	384	363	(94.5)	(44.1)	(1.4)	(0.3)	(0.0)	(12.9)	(9.4)	(32.0)
Hawaii	108	97	(89.8)	(17.5)	(6.2)	(0.0)	(1.0)	(29.9)	(10.3)	(35.1)
Idaho	13	13	(100.0)	(7.7)	(0.0)	(0.0)	(0.0)	(30.8)	(15.4)	(46.2)
Illinois	366	333	(91.0)	(36.0)	(4.2)	(0.0)	(0.6)	(10.2)	(11.7)	(37.2)
Indiana	81	81	(100.0)	(42.0)	(1.2)	(1.2)	(0.0)	(14.8)	(7.4)	(33.3)
Iowa	45	43	(95.6)	(16.3)	(2.3)	(0.0)	(0.0)	(11.6)	(20.9)	(48.8)
Kansas	41	41	(100.0)	(26.8)	(4.9)	(0.0)	(2.4)	(17.1)	(14.6)	(34.1)
Kentucky	90	89	(98.9)	(31.5)	(3.4)	(0.0)	(2.2)	(15.7)	(11.2)	(36.0)
Louisiana	193	190	(98.4)	(34.7)	(4.7)	(0.5)	(2.6)	(13.7)	(7.9)	(35.8)
Maine	7	7	(100.0)	(0.0)	(14.3)	(0.0)	(0.0)	(14.3)	(28.6)	(42.9)
Maryland	210	201	(95.7)	(21.9)	(9.0)	(0.0)	(1.0)	(11.4)	(15.9)	(40.8)
Massachusetts	216	214	(99.1)	(25.2)	(6.5)	(0.0)	(0.0)	(16.4)	(16.8)	(35.0)
Michigan	173	153	(88.4)	(64.1)	(4.6)	(0.0)	(2.0)	(0.0)	(0.0)	(29.4)
Minnesota	128	128	(100.0)	(20.3)	(5.5)	(0.0)	(0.0)	(4.7)	(25.8)	(43.8)
Mississippi	111	111	(100.0)	(63.1)	(2.7)	(0.0)	(1.8)	(0.0)	(0.0)	(32.4)
Missouri	100	99	(99.0)	(34.3)	(9.1)	(0.0)	(0.0)	(15.2)	(15.2)	(26.3)
Montana	5	5	(100.0)	(0.0)	(20.0)	(0.0)	(0.0)	(0.0)	(40.0)	(40.0)
Nebraska	26	26	(100.0)	(30.8)	(0.0)	(0.0)	(3.8)	(7.7)	(26.9)	(30.8)
Nevada	96	96	(100.0)	(16.7)	(3.1)	(0.0)	(0.0)	(10.4)	(25.0)	(44.8)
New Hampshire	8	8	(100.0)	(0.0)	(12.5)	(0.0)	(0.0)	(12.5)	(12.5)	(62.5)
New Jersey	378	377	(99.7)	(19.1)	(5.6)	(0.3)	(2.1)	(17.0)	(17.0)	(39.0)
New Mexico	51	51	(100.0)	(41.2)	(2.0)	(2.0)	(0.0)	(25.5)	(3.9)	(25.5)
New York State[2]	232	221	(95.3)	(25.3)	(4.1)	(0.5)	(2.3)	(15.4)	(8.1)	(44.3)
New York City	684	175	(25.6)	--	--	--	--	--	--	--
North Carolina	272	272	(100.0)	(29.0)	(2.2)	(0.0)	(0.4)	(20.6)	(7.0)	(40.8)
North Dakota	12	12	(100.0)	(25.0)	(16.7)	(0.0)	(0.0)	(8.3)	(25.0)	(25.0)
Ohio	182	178	(97.8)	(28.7)	(4.5)	(0.6)	(1.1)	(21.9)	(12.4)	(30.9)
Oklahoma	76	54	(71.1)	--	--	--	--	--	--	--
Oregon	83	83	(100.0)	(21.7)	(2.4)	(0.0)	(0.0)	(21.7)	(14.5)	(39.8)
Pennsylvania	227	223	(98.2)	(29.1)	(3.6)	(0.0)	(0.9)	(22.9)	(13.9)	(29.6)
Rhode Island	22	22	(100.0)	(22.7)	(0.0)	(0.0)	(0.0)	(18.2)	(13.6)	(45.5)
South Carolina	140	139	(99.3)	(28.8)	(0.0)	(0.0)	(0.7)	(22.3)	(8.6)	(39.6)
South Dakota	11	11	(100.0)	(72.7)	(0.0)	(0.0)	(0.0)	(9.1)	(0.0)	(18.2)
Tennessee	178	178	(100.0)	(32.0)	(2.8)	(0.6)	(2.8)	(15.2)	(12.9)	(33.7)
Texas	1,284	1,247	(97.1)	(38.6)	(3.1)	(0.2)	(0.4)	(9.9)	(13.1)	(34.7)
Utah	20	20	(100.0)	(20.0)	(5.0)	(0.0)	(5.0)	(15.0)	(15.0)	(40.0)
Vermont	5	5	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(80.0)	(20.0)
Virginia	257	257	(100.0)	(0.4)	(4.3)	(0.0)	(0.0)	(17.9)	(26.8)	(50.6)
Washington	219	187	(85.4)	(11.8)	(5.9)	(1.1)	(5.9)	(13.9)	(26.7)	(34.8)
West Virginia	15	15	(100.0)	(6.7)	(6.7)	(6.7)	(0.0)	(33.3)	(33.3)	(13.3)
Wisconsin	50	48	(96.0)	(27.1)	(4.2)	(0.0)	(2.1)	(18.8)	(8.3)	(39.6)
Wyoming	6	6	(100.0)	(0.0)	(16.7)	(0.0)	(16.7)	(0.0)	(16.7)	(50.0)
American Samoa[3]	3	3	(100.0)	(66.7)	(0.0)	(0.0)	(0.0)	(33.3)	(0.0)	(0.0)
Fed. States of Micronesia[3]	121	118	(97.5)	(50.0)	(1.7)	(0.0)	(0.0)	(1.7)	(36.4)	(10.2)
Guam[3]	81	81	(100.0)	(39.5)	(0.0)	(0.0)	(0.0)	(11.1)	(2.5)	(46.9)
Marshall Islands[3]	147	143	(97.3)	(42.0)	(0.7)	(0.0)	(0.0)	(4.2)	(28.7)	(24.5)
N. Mariana Islands[3]	32	32	(100.0)	(34.4)	(3.1)	(0.0)	(0.0)	(3.1)	(9.4)	(50.0)
Puerto Rico[3]	78	77	(98.7)	(45.5)	(2.6)	(0.0)	(0.0)	(15.6)	(11.7)	(24.7)
Republic of Palau[3]	16	16	(100.0)	(31.3)	(6.3)	(0.0)	(37.5)	(6.3)	(6.3)	(12.5)
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 39. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2008[1]

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	**12,905**	**12,650**	**12,434**	**(98.3)**	**(61.4)**	**(18.5)**	**(20.1)**
Alabama	176	168	168	(100.0)	(72.6)	(3.6)	(23.8)
Alaska	50	49	49	(100.0)	(55.1)	(2.0)	(42.9)
Arizona	227	225	225	(100.0)	(59.1)	(33.3)	(7.6)
Arkansas	84	80	79	(98.8)	(92.4)	(5.1)	(2.5)
California	2,700	2,662	2,632	(98.9)	(51.4)	(30.6)	(18.0)
Colorado	103	101	101	(100.0)	(88.1)	(5.0)	(6.9)
Connecticut	98	97	97	(100.0)	(6.2)	(33.0)	(60.8)
Delaware	23	23	23	(100.0)	(91.3)	(0.0)	(8.7)
District of Columbia	54	54	54	(100.0)	(83.3)	(14.8)	(1.9)
Florida	957	920	918	(99.8)	(65.3)	(12.9)	(21.9)
Georgia	477	467	418	(89.5)	(72.0)	(9.8)	(18.2)
Hawaii	124	124	124	(100.0)	(41.9)	(16.9)	(41.1)
Idaho	11	11	11	(100.0)	(36.4)	(45.5)	(18.2)
Illinois	466	461	459	(99.6)	(76.0)	(24.0)	(0.0)
Indiana	118	116	116	(100.0)	(30.2)	(4.3)	(65.5)
Iowa	49	48	48	(100.0)	(0.0)	(4.2)	(95.8)
Kansas	57	57	57	(100.0)	(29.8)	(1.8)	(68.4)
Kentucky	101	98	98	(100.0)	(69.4)	(9.2)	(21.4)
Louisiana	227	220	220	(100.0)	(72.3)	(9.5)	(18.2)
Maine	9	9	8	(88.9)	(37.5)	(62.5)	(0.0)
Maryland	278	273	272	(99.6)	(90.1)	(4.0)	(5.9)
Massachusetts	261	256	256	(100.0)	(49.6)	(9.4)	(41.0)
Michigan	188	178	164	(92.1)	(74.4)	(25.6)	(0.0)
Minnesota	211	210	210	(100.0)	(54.3)	(44.8)	(1.0)
Mississippi	117	111	111	(100.0)	(95.5)	(0.9)	(3.6)
Missouri	107	106	106	(100.0)	(55.7)	(20.8)	(23.6)
Montana	9	8	8	(100.0)	(75.0)	(12.5)	(12.5)
Nebraska	33	33	33	(100.0)	(0.0)	(21.2)	(78.8)
Nevada	102	102	92	(90.2)	(83.7)	(13.0)	(3.3)
New Hampshire	19	19	19	(100.0)	(5.3)	(42.1)	(52.6)
New Jersey	422	417	417	(100.0)	(71.5)	(23.5)	(5.0)
New Mexico	60	57	56	(98.2)	(57.1)	(23.2)	(19.6)
New York State[3]	304	298	291	(97.7)	(66.3)	(18.2)	(15.5)
New York City	893	887	849	(95.7)	(40.6)	(18.5)	(40.9)
North Carolina	335	328	328	(100.0)	(61.3)	(4.0)	(34.8)
North Dakota	3	3	3	(100.0)	(100.0)	(0.0)	(0.0)
Ohio	213	209	208	(99.5)	(63.9)	(13.0)	(23.1)
Oklahoma	100	97	89	(91.8)	(93.3)	(2.2)	(4.5)
Oregon	75	74	74	(100.0)	(62.2)	(21.6)	(16.2)
Pennsylvania	387	375	329	(87.7)	(83.9)	(16.1)	(0.0)
Rhode Island	36	36	36	(100.0)	(91.7)	(5.6)	(2.8)
South Carolina	188	180	180	(100.0)	(74.4)	(5.0)	(20.6)
South Dakota	16	16	16	(100.0)	(93.8)	(0.0)	(6.3)
Tennessee	282	275	271	(98.5)	(60.9)	(5.5)	(33.6)
Texas	1,501	1,467	1,467	(100.0)	(61.6)	(19.0)	(19.4)
Utah	27	26	26	(100.0)	(80.8)	(0.0)	(19.2)
Vermont	6	5	5	(100.0)	(0.0)	(0.0)	(100.0)
Virginia	292	289	289	(100.0)	(91.0)	(5.2)	(3.8)
Washington	228	226	225	(99.6)	(58.7)	(8.4)	(32.9)
West Virginia	28	26	26	(100.0)	(42.3)	(7.7)	(50.0)
Wisconsin	68	68	68	(100.0)	(57.4)	(41.2)	(1.5)
Wyoming	5	5	5	(100.0)	(0.0)	(40.0)	(60.0)
American Samoa[4]	3	3	0	...	...	...	...
Fed. States of Micronesia[4]	182	181	44	(24.3)	--	--	--
Guam[4]	89	89	88	(98.9)	(97.7)	(2.3)	(0.0)
Marshall Islands[4]	128	124	119	(96.0)	(99.2)	(0.8)	(0.0)
N. Mariana Islands[4]	35	35	35	(100.0)	(100.0)	(0.0)	(0.0)
Puerto Rico[4]	95	86	86	(100.0)	(90.7)	(9.3)	(0.0)
Republic of Palau[4]	17	17	3	(17.6)	--	--	--
U.S. Virgin Islands[4]	4	4	4	(100.0)	(100.0)	(0.0)	(0.0)

[1]Most recent year for which data are available.

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

[3]Excludes New York City.

[4]Not included in U.S. totals.

Note: Ellipses indicate data not available.

Table 40. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2008[1]

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	**12,905**	**12,542**	**12,369**	**(98.6)**	**(56.5)**	**(33.4)**
Alabama	176	168	168	(100.0)	(50.6)	(48.8)
Alaska	50	48	47	(97.9)	(97.9)	(0.0)
Arizona	227	212	212	(100.0)	(84.4)	(10.8)
Arkansas	84	80	78	(97.5)	(16.7)	(71.8)
California	2,700	2,635	2,597	(98.6)	(55.5)	(29.9)
Colorado	103	101	101	(100.0)	(87.1)	(10.9)
Connecticut	98	97	97	(100.0)	(27.8)	(47.4)
Delaware	23	23	23	(100.0)	(65.2)	(34.8)
District of Columbia	54	53	53	(100.0)	(83.0)	(5.7)
Florida	957	912	910	(99.8)	(39.0)	(55.7)
Georgia	477	458	411	(89.7)	(76.4)	(21.9)
Hawaii	124	123	120	(97.6)	(28.3)	(46.7)
Idaho	11	11	11	(100.0)	(54.5)	(45.5)
Illinois	466	459	457	(99.6)	(45.1)	(33.3)
Indiana	118	115	115	(100.0)	(80.0)	(20.0)
Iowa	49	48	48	(100.0)	(64.6)	(25.0)
Kansas	57	57	57	(100.0)	(98.2)	(1.8)
Kentucky	101	96	96	(100.0)	(39.6)	(57.3)
Louisiana	227	219	219	(100.0)	(78.1)	(11.0)
Maine	9	9	8	(88.9)	(100.0)	(0.0)
Maryland	278	272	272	(100.0)	(94.9)	(4.0)
Massachusetts	261	255	253	(99.2)	(35.6)	(40.7)
Michigan	188	174	146	(83.9)	(40.4)	(55.5)
Minnesota	211	209	209	(100.0)	(90.0)	(9.1)
Mississippi	117	111	111	(100.0)	(54.1)	(45.9)
Missouri	107	106	105	(99.1)	(37.1)	(45.7)
Montana	9	8	8	(100.0)	(100.0)	(0.0)
Nebraska	33	33	33	(100.0)	(66.7)	(18.2)
Nevada	102	102	94	(92.2)	(92.6)	(7.4)
New Hampshire	19	19	19	(100.0)	(47.4)	(47.4)
New Jersey	422	416	416	(100.0)	(57.7)	(16.3)
New Mexico	60	56	56	(100.0)	(91.1)	(8.9)
New York State[4]	304	296	296	(100.0)	(19.6)	(76.0)
New York City	893	882	875	(99.2)	(4.0)	(67.2)
North Carolina	335	328	326	(99.4)	(99.7)	(0.3)
North Dakota	3	3	3	(100.0)	(0.0)	(100.0)
Ohio	213	209	207	(99.0)	(69.6)	(15.5)
Oklahoma	100	95	89	(93.7)	(98.9)	(1.1)
Oregon	75	74	74	(100.0)	(83.8)	(16.2)
Pennsylvania	387	373	362	(97.1)	(76.0)	(14.6)
Rhode Island	36	36	36	(100.0)	(8.3)	(88.9)
South Carolina	188	179	179	(100.0)	(92.7)	(5.0)
South Dakota	16	16	16	(100.0)	(100.0)	(0.0)
Tennessee	282	274	271	(98.9)	(97.0)	(3.0)
Texas	1,501	1,452	1,452	(100.0)	(54.5)	(43.4)
Utah	27	26	26	(100.0)	(92.3)	(7.7)
Vermont	6	5	5	(100.0)	(80.0)	(20.0)
Virginia	292	288	288	(100.0)	(56.9)	(42.4)
Washington	228	222	221	(99.5)	(69.7)	(17.2)
West Virginia	28	26	26	(100.0)	(65.4)	(34.6)
Wisconsin	68	68	62	(91.2)	(61.3)	(35.5)
Wyoming	5	5	5	(100.0)	(0.0)	(60.0)
American Samoa[5]	3	3	...	...	...	...
Fed. States of Micronesia[5]	182	176	69	(39.2)	--	--
Guam[5]	89	89	89	(100.0)	(92.1)	(3.4)
Marshall Islands[5]	128	123	117	(95.1)	(81.2)	(18.8)
N. Mariana Islands[5]	35	35	35	(100.0)	(100.0)	(0.0)
Puerto Rico[5]	95	85	85	(100.0)	(69.4)	(0.0)
Republic of Palau[5]	17	16	4	(25.0)	--	--
U.S. Virgin Islands[5]	4	4	4	(100.0)	(0.0)	(100.0)

[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 41. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2008[1]

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	**12,905**	**11371**	**(84.6)**	**(92.7)**	**291**	**(80.4)**	**11705**	**(92.0)**
Alabama	176	150	(90.0)	(94.0)	2	(100.0)	152	(94.1)
Alaska	50	45	(88.9)	(97.8)	0	...	45	(97.8)
Arizona	227	195	(72.8)	(79.5)	2	(50.0)	197	(79.2)
Arkansas	84	75	(76.0)	(88.0)	2	(100.0)	77	(88.3)
California	2,700	2390	(83.1)	(92.2)	69	(66.7)	2459	(91.5)
Colorado	103	94	(92.6)	(96.8)	4	(75.0)	98	(95.9)
Connecticut	98	88	(90.9)	(97.7)	4	(100.0)	92	(97.8)
Delaware	23	22	(81.8)	(90.9)	1	(0.0)	23	(87.0)
District of Columbia	54	49	(79.6)	(83.7)	1	(100.0)	50	(84.0)
Florida	957	826	(89.6)	(94.7)	16	(93.8)	842	(94.7)
Georgia	477	411	(86.1)	(91.2)	9	(55.6)	428	(88.8)
Hawaii	124	115	(76.5)	(93.0)	0	...	115	(93.0)
Idaho	11	11	(90.9)	(100.0)	0	...	11	(100.0)
Illinois	466	414	(84.5)	(93.2)	15	(100.0)	430	(93.3)
Indiana	118	102	(91.2)	(93.1)	1	(100.0)	103	(93.2)
Iowa	49	47	(89.4)	(93.6)	0	...	47	(93.6)
Kansas	57	54	(92.6)	(98.1)	1	(100.0)	55	(98.2)
Kentucky	101	88	(80.7)	(88.6)	1	(0.0)	89	(87.6)
Louisiana	227	210	(79.5)	(93.3)	0	...	210	(93.3)
Maine	9	8	--	--	1	--	9	--
Maryland	278	248	(89.1)	(94.4)	6	(100.0)	254	(94.5)
Massachusetts	261	235	(80.9)	(93.6)	5	(60.0)	240	(92.9)
Michigan	188	151	(80.1)	(92.1)	7	(85.7)	158	(91.8)
Minnesota	211	182	(89.6)	(95.1)	4	(100.0)	203	(87.2)
Mississippi	117	96	(92.7)	(97.9)	4	(75.0)	100	(97.0)
Missouri	107	100	(86.0)	(94.0)	2	(100.0)	102	(94.1)
Montana	9	5	(100.0)	(100.0)	0	...	5	(100.0)
Nebraska	33	30	(80.0)	(90.0)	0	...	30	(90.0)
Nevada	102	89	(83.1)	(91.0)	3	(100.0)	92	(91.3)
New Hampshire	19	17	(82.4)	(82.4)	0	...	17	(82.4)
New Jersey	422	379	(87.6)	(93.9)	11	(90.9)	390	(93.8)
New Mexico	60	48	(91.7)	(100.0)	2	(100.0)	50	(100.0)
New York State[6]	304	275	(85.8)	(94.9)	7	(100.0)	282	(95.0)
New York City	893	788	(88.1)	(94.9)	25	(80.0)	828	(92.8)
North Carolina	335	301	(90.0)	(97.0)	10	(90.0)	311	(96.8)
North Dakota	3	3	(33.3)	(33.3)	0	...	3	(33.3)
Ohio	213	189	(85.7)	(91.5)	5	(100.0)	194	(91.8)
Oklahoma	100	86	(76.7)	(86.0)	1	(100.0)	87	(86.2)
Oregon	75	70	(97.1)	(98.6)	1	(100.0)	71	(98.6)
Pennsylvania	387	343	(77.3)	(89.2)	8	(87.5)	353	(88.7)
Rhode Island	36	34	(85.3)	(100.0)	0	...	34	(100.0)
South Carolina	188	160	(85.0)	(93.8)	2	(100.0)	162	(93.8)
South Dakota	16	15	(93.3)	(100.0)	1	(100.0)	16	(100.0)
Tennessee	282	248	(86.7)	(94.4)	3	(66.7)	251	(94.0)
Texas	1,501	1304	(80.4)	(90.0)	42	(73.8)	1346	(89.5)
Utah	27	23	(95.7)	(95.7)	2	(100.0)	25	(96.0)
Vermont	6	5	(60.0)	(60.0)	0	...	5	(60.0)
Virginia	292	269	(83.6)	(91.4)	3	(100.0)	272	(91.5)
Washington	228	197	(90.4)	(97.5)	7	(85.7)	204	(97.1)
West Virginia	28	22	(95.5)	(100.0)	0	...	22	(100.0)
Wisconsin	68	60	(70.0)	(86.7)	1	(100.0)	61	(86.9)
Wyoming	5	5	(80.0)	(80.0)	0	...	5	(80.0)
American Samoa[7]	3	3	--	--	0	...	3	--
Fed. States of Micronesia[7]	182	157	--	--	1	--	165	--
Guam[7]	89	84	(92.9)	(97.6)	2	(100.0)	86	(97.7)
Marshall Islands[7]	128	115	(80.0)	(87.8)	2	(100.0)	120	(85.8)
N. Mariana Islands[7]	35	34	(70.6)	(82.4)	0	...	34	(82.4)
Puerto Rico[7]	95	69	(95.7)	(97.1)	1	(100.0)	70	(97.1)
Republic of Palau[7]	17	14	--	--	0	...	15	--
U.S. Virgin Islands[7]	4	4	(50.0)	(50.0)	(0.0)	...	4	(50.0)

[1]Most recent year for which data are available.

[2]Initial isolate susceptible to rifampin (n=8,543) or susceptibility unknown (n=155); culture negative (n=2,236); culture status unknown (n=437).

[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.

[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 42. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2008[1]

Reporting Area	Cases with Initial Drug Regimen Prescribed[2]	Completed Therapy		Adverse Event		Moved		Lost		Refused		Died[3]		Unknown[4]	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**12,542**	**10,813**	**(86.2)**	**5**	**(0.0)**	**284**	**(2.3)**	**315**	**(2.5)**	**78**	**(0.6)**	**837**	**(6.7)**	**210**	**(1.7)**
Alabama	168	143	(85.1)	0	(0.0)	2	(1.2)	6	(3.6)	1	(0.6)	16	(9.5)	0	(0.0)
Alaska	48	44	(91.7)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.1)	3	(6.3)	0	(0.0)
Arizona	212	156	(73.6)	0	(0.0)	2	(0.9)	13	(6.1)	1	(0.5)	15	(7.1)	25	(11.8)
Arkansas	80	68	(85.0)	0	(0.0)	3	(3.8)	4	(5.0)	0	(0.0)	3	(3.8)	2	(2.5)
California	2,635	2,250	(85.4)	0	(0.0)	112	(4.3)	35	(1.3)	13	(0.5)	176	(6.7)	49	(1.9)
Colorado	101	94	(93.1)	0	(0.0)	1	(1.0)	3	(3.0)	0	(0.0)	3	(3.0)	0	(0.0)
Connecticut	97	90	(92.8)	0	(0.0)	1	(1.0)	1	(1.0)	0	(0.0)	5	(5.2)	0	(0.0)
Delaware	23	20	(87.0)	0	(0.0)	2	(8.7)	1	(4.3)	0	(0.0)	0	(0.0)	0	(0.0)
District of Columbia	53	42	(79.2)	0	(0.0)	7	(13.2)	1	(1.9)	0	(0.0)	3	(5.7)	0	(0.0)
Florida	912	797	(87.4)	0	(0.0)	18	(2.0)	20	(2.2)	1	(0.1)	70	(7.7)	6	(0.7)
Georgia	458	388	(84.7)	0	(0.0)	10	(2.2)	10	(2.2)	3	(0.7)	30	(6.6)	17	(3.7)
Hawaii	123	107	(87.0)	0	(0.0)	6	(4.9)	0	(0.0)	0	(0.0)	8	(6.5)	2	(1.6)
Idaho	11	11	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	459	402	(87.6)	0	(0.0)	0	(0.0)	17	(3.7)	9	(2.0)	29	(6.3)	2	(0.4)
Indiana	115	96	(83.5)	0	(0.0)	1	(0.9)	3	(2.6)	0	(0.0)	12	(10.4)	3	(2.6)
Iowa	48	44	(91.7)	0	(0.0)	2	(4.2)	0	(0.0)	1	(2.1)	1	(2.1)	0	(0.0)
Kansas	57	54	(94.7)	0	(0.0)	0	(0.0)	1	(1.8)	0	(0.0)	2	(3.5)	0	(0.0)
Kentucky	96	78	(81.3)	0	(0.0)	1	(1.0)	6	(6.3)	2	(2.1)	7	(7.3)	2	(2.1)
Louisiana	219	196	(89.5)	0	(0.0)	7	(3.2)	2	(0.9)	2	(0.9)	9	(4.1)	3	(1.4)
Maine	9	7	(77.8)	0	(0.0)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)
Maryland	272	240	(88.2)	0	(0.0)	7	(2.6)	5	(1.8)	0	(0.0)	18	(6.6)	2	(0.7)
Massachusetts	255	223	(87.5)	0	(0.0)	12	(4.7)	3	(1.2)	0	(0.0)	15	(5.9)	2	(0.8)
Michigan	174	145	(83.3)	1	(0.0)	0	(0.0)	2	(1.1)	3	(1.7)	16	(9.2)	7	(4.0)
Minnesota	209	194	(92.8)	0	(0.0)	4	(1.9)	1	(0.5)	1	(0.5)	6	(2.9)	3	(1.4)
Mississippi	111	97	(87.4)	0	(0.0)	1	(0.9)	0	(0.0)	0	(0.0)	11	(9.9)	2	(1.8)
Missouri	106	96	(90.6)	0	(0.0)	6	(5.7)	0	(0.0)	0	(0.0)	4	(3.8)	0	(0.0)
Montana	8	5	(62.5)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(37.5)	0	(0.0)
Nebraska	33	27	(81.8)	0	(0.0)	2	(6.1)	1	(3.0)	0	(0.0)	3	(9.1)	0	(0.0)
Nevada	102	84	(82.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	10	(9.8)	8	(7.8)
New Hampshire	19	14	(73.7)	0	(0.0)	0	(0.0)	1	(5.3)	1	(5.3)	2	(10.5)	1	(5.3)
New Jersey	416	366	(88.0)	0	(0.0)	1	(0.2)	22	(5.3)	1	(0.2)	26	(6.3)	0	(0.0)
New Mexico	56	50	(89.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	6	(10.7)	0	(0.0)

Table 42. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2008[1]

Reporting Area	Cases with Initial Drug Regimen Prescribed[2]	Completed Therapy		Adverse Event		Moved		Lost		Refused		Died[3]		Unknown[4]	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York State[5]	296	268	(90.5)	0	(0.0)	3	(1.0)	9	(3.0)	2	(0.7)	14	(4.7)	0	(0.0)
New York City	882	783	(88.8)	0	(0.0)	12	(1.4)	16	(1.8)	5	(0.6)	54	(6.1)	12	(1.4)
North Carolina	328	301	(91.8)	0	(0.0)	0	(0.0)	7	(2.1)	0	(0.0)	17	(5.2)	3	(0.9)
North Dakota	3	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(33.3)	0	(0.0)	1	(33.3)
Ohio	209	178	(85.2)	0	(0.0)	4	(1.9)	2	(1.0)	6	(2.9)	15	(7.2)	4	(1.9)
Oklahoma	95	75	(78.9)	0	(0.0)	4	(4.2)	0	(0.0)	0	(0.0)	8	(8.4)	8	(8.4)
Oregon	74	70	(94.6)	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	3	(4.1)	0	(0.0)
Pennsylvania	373	314	(84.2)	3	(0.0)	0	(0.0)	10	(2.7)	5	(1.3)	20	(5.4)	21	(5.6)
Rhode Island	36	34	(94.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(5.6)	0	(0.0)
South Carolina	179	152	(84.9)	0	(0.0)	3	(1.7)	4	(2.2)	3	(1.7)	17	(9.5)	0	(0.0)
South Dakota	16	16	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	274	236	(86.1)	0	(0.0)	9	(3.3)	1	(0.4)	0	(0.0)	23	(8.4)	5	(1.8)
Texas	1,452	1,204	(82.9)	0	(0.0)	26	(1.8)	101	(7.0)	6	(0.4)	106	(7.3)	9	(0.6)
Utah	26	24	(92.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(3.8)	1	(3.8)
Vermont	5	3	(60.0)	0	(0.0)	2	(40.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	288	249	(86.5)	0	(0.0)	9	(3.1)	5	(1.7)	8	(2.8)	16	(5.6)	1	(0.3)
Washington	222	198	(89.2)	0	(0.0)	2	(0.9)	2	(0.9)	1	(0.5)	18	(8.1)	1	(0.5)
West Virginia	26	22	(84.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(15.4)	0	(0.0)
Wisconsin	68	53	(77.9)	1	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(10.3)	7	(10.3)
Wyoming	5	4	(80.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa[6]	3	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
Fed. States of Micronesia[6]	176	89	(50.6)	0	(0.0)	4	(2.3)	3	(1.7)	0	(0.0)	11	(6.3)	69	(39.2)
Guam[6]	89	84	(94.4)	0	(0.0)	1	(1.1)	0	(0.0)	0	(0.0)	3	(3.4)	1	(1.1)
Marshall Islands[6]	123	106	(86.2)	0	(0.0)	0	(0.0)	1	(0.8)	7	(5.7)	3	(2.4)	6	(4.9)
N. Mariana Islands[6]	35	28	(80.0)	0	(0.0)	5	(14.3)	0	(0.0)	0	(0.0)	1	(2.9)	1	(2.9)
Puerto Rico[6]	85	68	(80.0)	0	(0.0)	0	(0.0)	2	(2.4)	0	(0.0)	15	(17.6)	0	(0.0)
Republic of Palau[6]	16	3	(18.8)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.3)	12	(75.0)
U.S. Virgin Islands[6]	4	2	(50.0)	0	(0.0)	0	(0.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)

[1]Most recent year for which data are available.
[2]Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia).
[3]Died = Died of any cause.
[4]Includes cases reported as Other, Missing, or Unknown.
[5]Excludes New York City.
[6]Not included in U.S. totals.
Note: Ellipses indicate data not available.

Table 43. Completion of Tuberculosis Therapy (COT) Cases and Percentages[1] by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2008[2]

Reporting Area	Total Cases[3]	Hispanic[4]		Non-Hispanic													
				American Indian or Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White		Multiple Race[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	**11,371**	**3398**	**(81.3)**	**120**	**(87.5)**	**3072**	**(85.1)**	**2828**	**(86.2)**	**66**	**(83.3)**	**1821**	**(87.4)**	**41**	**(80.5)**	**25**	**(64.0)**
Alabama	150	26	(76.9)	0	...	7	(71.4)	64	(90.6)	0	...	53	(98.1)	0	...	0	...
Alaska	45	3	(100.0)	29	(86.2)	9	(88.9)	1	(100.0)	0	...	3	(100.0)	0	...	0	...
Arizona	195	107	(63.6)	10	(60.0)	32	(84.4)	17	(100.0)	0	...	27	(81.5)	2	(100.0)	0	...
Arkansas	75	10	(70.0)	0	...	10	(80.0)	20	(70.0)	1	(0.0)	34	(82.4)	0	...	0	...
California	2,390	953	(80.2)	9	(88.9)	1001	(84.2)	181	(86.7)	12	(100.0)	225	(86.7)	6	(66.7)	3	(66.7)
Colorado	94	30	(83.3)	3	(100.0)	27	(100.0)	18	(88.9)	0	...	15	(100.0)	1	(100.0)	0	...
Connecticut	88	28	(100.0)	0	...	29	(93.1)	15	(66.7)	1	(100.0)	15	(93.3)	0	...	0	...
Delaware	22	6	(83.3)	0	...	4	(100.0)	6	(83.3)	0	...	6	(66.7)	0	...	0	...
District of Columbia	49	8	(75.0)	0	...	2	(100.0)	38	(78.9)	0	...	1	(100.0)	0	...	0	...
Florida	826	229	(85.2)	1	(100.0)	89	(88.8)	329	(91.2)	0	...	177	(92.7)	1	(100.0)	0	...
Georgia	411	85	(68.2)	0	...	75	(94.7)	197	(88.3)	1	(100.0)	53	(94.3)	0	...	0	...
Hawaii	115	1	(100.0)	0	...	85	(77.6)	1	(100.0)	25	(72.0)	3	(66.7)	0	...	0	...
Idaho	11	2	(100.0)	0	...	1	(0.0)	2	(100.0)	1	(100.0)	5	(100.0)	0	...	0	...
Illinois	414	89	(82.0)	0	...	140	(83.6)	106	(86.8)	0	...	73	(89.0)	0	...	6	(50.0)
Indiana	102	21	(81.0)	1	(100.0)	23	(91.3)	20	(100.0)	0	...	37	(91.9)	0	...	0	...
Iowa	47	7	(100.0)	0	...	18	(83.3)	8	(87.5)	0	...	14	(92.9)	0	...	0	...
Kansas	54	20	(90.0)	2	(100.0)	16	(93.8)	9	(88.9)	0	...	7	(100.0)	0	...	0	...
Kentucky	88	19	(78.9)	0	...	8	(62.5)	17	(76.5)	0	...	43	(86.0)	1	(100.0)	0	...
Louisiana	210	21	(71.4)	0	...	19	(78.9)	113	(85.8)	0	...	57	(70.2)	0	...	0	...
Maine	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maryland	248	50	(86.0)	0	...	75	(92.0)	99	(87.9)	0	...	24	(91.7)	0	...	0	...
Massachusetts	235	39	(84.6)	0	...	84	(77.4)	66	(75.8)	0	...	44	(90.9)	2	(100.0)	0	...
Michigan	151	21	(90.5)	0	...	42	(78.6)	41	(75.6)	0	...	42	(81.0)	0	...	5	(80.0)
Minnesota	182	20	(90.0)	4	(75.0)	42	(88.1)	101	(90.1)	0	...	15	(93.3)	0	...	0	...
Mississippi	96	5	(80.0)	0	...	3	(66.7)	65	(92.3)	0	...	23	(100.0)	0	...	0	...
Missouri	100	12	(75.0)	0	...	20	(80.0)	34	(88.2)	2	(100.0)	32	(90.6)	0	...	0	...
Montana	5	0	...	2	(100.0)	2	(100.0)	0	...	0	...	1	(100.0)	0	...	0	...
Nebraska	30	13	(76.9)	1	(100.0)	6	(100.0)	7	(57.1)	0	...	3	(100.0)	0	...	0	...
Nevada	89	39	(79.5)	1	(100.0)	26	(88.5)	8	(62.5)	0	...	15	(93.3)	0	...	0	...
New Hampshire	17	3	(66.7)	0	...	5	(80.0)	2	(100.0)	0	...	7	(85.7)	0	...	0	...
New Jersey	379	119	(90.8)	0	...	156	(84.6)	62	(90.3)	0	...	42	(85.7)	0	...	0	...

Table 43. (Cont'd) Completion of Tuberculosis Therapy (COT) Cases and Percentages[1] by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2008[2]

Reporting Area	Total Cases[3]	Hispanic[4]		Non-Hispanic													
				American Indian or Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White		Multiple Race[2]		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	48	29	(93.1)	14	(100.0)	5	(60.0)	0	...	0	...	0	...	0	...	0	...
New York State[5]	275	94	(89.4)	1	(100.0)	79	(88.6)	42	(78.6)	0	...	58	(82.8)	1	(0.0)	0	...
New York City	788	232	(87.5)	0	...	288	(90.3)	190	(88.4)	0	...	60	(85.0)	8	(62.5)	10	(70.0)
North Carolina	301	76	(84.2)	11	(100.0)	43	(86.0)	107	(89.7)	0	...	53	(98.1)	11	(100.0)	0	...
North Dakota	3	0	...	1	(100.0)	1	(0.0)	0	...	0	...	1	(0.0)	0	...	0	...
Ohio	189	28	(78.6)	0	...	39	(89.7)	76	(88.2)	0	...	45	(82.2)	1	(100.0)	0	...
Oklahoma	86	11	(54.5)	18	(77.8)	6	(50.0)	23	(87.0)	6	(83.3)	21	(85.7)	0	...	1	(0.0)
Oregon	70	19	(94.7)	0	...	30	(96.7)	3	(100.0)	2	(100.0)	16	(100.0)	0	...	0	...
Pennsylvania	343	34	(76.5)	0	...	105	(73.3)	122	(77.9)	1	(100.0)	79	(82.3)	2	(50.0)	0	...
Rhode Island	34	9	(77.8)	1	(100.0)	11	(90.9)	9	(77.8)	0	...	4	(100.0)	0	...	0	...
South Carolina	160	42	(81.0)	0	...	20	(90.0)	80	(85.0)	0	...	18	(88.9)	0	...	0	...
South Dakota	15	0	...	4	(100.0)	1	(0.0)	9	(100.0)	0	...	1	(100.0)	0	...	0	...
Tennessee	248	42	(81.0)	0	...	25	(88.0)	100	(85.0)	0	...	81	(91.4)	0	...	0	...
Texas	1,304	670	(79.4)	1	(100.0)	153	(83.0)	283	(80.6)	2	(100.0)	190	(81.6)	5	(80.0)	0	...
Utah	23	8	(100.0)	1	(100.0)	6	(100.0)	2	(100.0)	1	(100.0)	5	(80.0)	0	...	0	...
Vermont	5	0	...	0	...	1	(0.0)	1	(100.0)	0	...	3	(66.7)	0	...	0	...
Virginia	269	59	(78.0)	0	...	107	(83.2)	69	(87.0)	0	...	34	(88.2)	0	...	0	...
Washington	197	42	(90.5)	4	(75.0)	69	(92.8)	48	(91.7)	11	(81.8)	23	(87.0)	0	...	0	...
West Virginia	22	2	(100.0)	0	...	3	(100.0)	3	(100.0)	0	...	14	(92.9)	0	...	0	...
Wisconsin	60	12	(66.7)	1	(100.0)	21	(76.2)	11	(72.7)	0	...	15	(60.0)	0	...	0	...
Wyoming	5	2	(50.0)	0	...	1	(100.0)	0	...	0	...	2	(100.0)	0	...	0	...
American Samoa[6]	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fed. States of Micronesia[6]	157	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guam[6]	84	1	(100.0)	0	...	19	(89.5)	1	(100.0)	47	(93.6)	0	...	0	...	16	(93.8)
Marshall Islands[6]	115	0	...	0	...	2	(50.0)	0	...	111	(80.2)	0	...	0	...	2	(100.0)
N. Mariana Islands[6]	34	0	...	0	...	25	(80.0)	0	...	8	(37.5)	1	(100.0)	0	...	0	...
Puerto Rico[6]	69	68	(95.6)	0	...	1	(100.0)	0	...	0	...	0	...	0	...	0	...
Republic of Palau[6]	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Virgin Islands[6]	4	0	...	0	...	0	...	3	(66.7)	0	...	1	(0.0)	0	...	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 meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture.
[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 44. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2004–2008[1]

Reporting Area	Year									
	2004		2005		2006		2007		2008	
	No.[2]	(%)[3]	No.[2]	(%)[3]	No.[2]	(%)[3]	No.[2]	(%)[3]	No.[2]	(%)[3]
United States	**12776**	**(83.7)**	**12345**	**(83.2)**	**12032**	**(83.9)**	**11751**	**(84.5)**	**11371**	**(84.6)**
Alabama	179	(89.9)	194	(89.7)	166	(86.7)	149	(91.9)	150	(90.0)
Alaska	38	(84.2)	57	(93.0)	63	(88.9)	43	(88.4)	45	(88.9)
Arizona	246	(74.8)	245	(83.7)	273	(76.9)	242	(69.4)	195	(72.8)
Arkansas	115	(88.7)	103	...	90	(90.0)	96	(92.7)	75	(76.0)
California	2638	(81.8)	2541	(81.3)	2399	(80.9)	2427	(78.9)	2390	(83.1)
Colorado	116	(96.6)	85	(96.5)	108	(88.9)	91	(97.8)	94	(92.6)
Connecticut	85	(77.6)	87	(83.9)	77	(88.3)	96	(82.3)	88	(90.9)
Delaware	29	(93.1)	24	(87.5)	24	(83.3)	18	(94.4)	22	(81.8)
District of Columbia	66	(93.9)	49	(87.8)	64	(70.3)	51	(70.6)	49	(79.6)
Florida	928	(85.9)	968	(88.6)	919	(89.4)	884	(90.2)	826	(89.6)
Georgia	457	(83.6)	449	(82.0)	443	(82.6)	418	(85.2)	411	(86.1)
Hawaii	107	(80.4)	95	(74.7)	101	(79.2)	109	(76.1)	115	(76.5)
Idaho	10	(80.0)	21	(76.2)	18	(77.8)	8	(75.0)	11	(90.9)
Illinois	503	(79.9)	524	(80.0)	500	(82.2)	456	(82.7)	414	(84.5)
Indiana	111	(93.7)	133	(91.0)	116	(90.5)	118	(89.0)	102	(91.2)
Iowa	47	(76.6)	52	(84.6)	37	(86.5)	36	(88.9)	47	(89.4)
Kansas	57	(84.2)	57	(86.0)	73	(93.2)	53	(83.0)	54	(92.6)
Kentucky	110	(87.3)	104	(87.5)	75	(82.7)	108	(89.8)	88	(80.7)
Louisiana	231	(73.2)	218	...	178	(77.0)	196	(79.6)	210	(79.5)
Maine	18	(66.7)	16	(75.0)	13	(100.0)	18	(88.9)	8	...
Maryland	279	(90.7)	249	(89.2)	226	(90.7)	246	(89.4)	248	(89.1)
Massachusetts	256	(77.7)	235	(78.7)	239	(85.8)	205	(81.5)	235	(80.9)
Michigan	239	(87.0)	201	(80.1)	200	(79.5)	184	(82.1)	151	(80.1)
Minnesota	188	(91.0)	183	(92.9)	200	(90.0)	225	(88.9)	182	(89.6)
Mississippi	101	(85.1)	84	(84.5)	97	(85.6)	118	(95.8)	96	(92.7)
Missouri	111	(82.0)	91	(85.7)	92	(76.1)	106	(75.5)	100	(86.0)
Montana	14	(92.9)	8	(87.5)	10	(90.0)	11	(100.0)	5	(100.0)
Nebraska	37	(86.5)	29	(75.9)	23	(100.0)	24	(91.7)	30	(80.0)
Nevada	88	(90.9)	106	...	82	(90.2)	82	(86.6)	89	(83.1)
New Hampshire	21	(100.0)	4	(75.0)	15	(93.3)	10	(90.0)	17	(82.4)
New Jersey	429	(82.3)	423	(86.5)	463	(84.9)	411	(85.2)	379	(87.6)
New Mexico	33	(84.8)	26	(80.8)	37	(81.1)	43	(88.4)	48	(91.7)
New York State[4]	293	(86.3)	266	(87.6)	271	(85.6)	228	(87.3)	275	(85.8)
New York City	901	(84.5)	844	(82.0)	823	(84.4)	791	(90.8)	788	(88.1)
North Carolina	332	(92.8)	290	(85.9)	338	(87.3)	312	(91.7)	301	(90.0)
North Dakota	4	(100.0)	6	(50.0)	10	(60.0)	4	(100.0)	3	(33.3)
Ohio	190	(87.9)	231	(87.0)	205	(82.9)	221	(87.3)	189	(85.7)
Oklahoma	164	(80.5)	118	(85.6)	129	(81.4)	131	(81.7)	86	(76.7)
Oregon	97	(89.7)	95	(93.7)	71	(91.5)	88	(90.9)	70	(97.1)
Pennsylvania	280	...	270	...	295	(81.7)	245	(82.0)	343	(77.3)
Rhode Island	49	(85.7)	41	(82.9)	24	(79.2)	40	(90.0)	34	(85.3)
South Carolina	213	(82.2)	231	(87.4)	194	(86.1)	188	(89.4)	160	(85.0)
South Dakota	9	(44.4)	13	(53.8)	12	(50.0)	11	(100.0)	15	(93.3)
Tennessee	237	(86.1)	267	(88.8)	239	(88.3)	202	(86.6)	248	(86.7)
Texas	1449	(83.0)	1342	(82.3)	1363	(83.1)	1339	(82.0)	1304	(80.4)
Utah	32	(96.9)	26	(96.2)	32	(84.4)	35	(94.3)	23	(95.7)
Vermont	6	(66.7)	7	(100.0)	6	(83.3)	3	(33.3)	5	(60.0)
Virginia	292	(88.4)	321	(83.2)	292	(85.3)	292	(88.4)	269	(83.6)
Washington	226	(88.5)	227	(83.3)	227	(81.9)	264	(88.6)	197	(90.4)
West Virginia	21	(81.0)	24	(58.3)	18	(77.8)	16	(100.0)	22	(95.5)
Wisconsin	89	(79.8)	65	(84.6)	58	(86.2)	57	(77.2)	60	(70.0)
Wyoming	5	(100.0)	0	...	4	(100.0)	2	(50.0)	5	(80.0)
American Samoa[5]	3	...	5	...	2	(100.0)	3	...	3	...
Fed. States of Micronesia[5]	7	...	71	...	76	...	126	...	157	...
Guam[5]	45	(84.4)	58	(79.3)	52	(86.5)	90	(91.1)	84	(92.9)
Marshall Islands[5]	38	...	63	...	33	...	124	...	115	(80.0)
N. Mariana Islands[5]	54	(87.0)	54	...	44	...	38	(84.2)	34	(70.6)
Puerto Rico[5]	89	(79.8)	86	(87.2)	89	(96.6)	81	(97.5)	69	(95.7)
Republic of Palau[5]	5	(80.0)	10	(100.0)	9	(66.7)	12	...	14	...
U.S. Virgin Islands[5]	0	...	0	...	0	...	0	...	4	(50.0)

[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.

[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 (page 9).

Morbidity Tables

Cities and Metropolitan Statistical Areas, 2010

Table 45. Tuberculosis Cases in Selected Cities[1]: 2010 and 2009

City	Cases[2]	
	2010	2009
Albuquerque, NM	10	12
Anaheim, CA	30	28
Arlington, TX	19	23
Atlanta, GA	9	22
Austin, TX	61	54
Baltimore, MD	41	24
Birmingham, AL	17	26
Boston, MA	58	58
Buffalo, NY	9	10
Charlotte, NC	38	26
Chicago, IL	161	200
Cincinnati, OH	22	20
Cleveland, OH	26	29
Colorado Springs, CO	8	6
Columbus, OH	54	27
Corpus Christi, TX	12	9
Dallas, TX	131	123
Denver, CO	25	30
Detroit, MI	49	32
El Paso, TX	40	49
Fort Worth, TX	70	57
Fresno, CA	35	52
Honolulu, HI	53	44
Houston, TX	237	260
Indianapolis, IN	35	46
Jacksonville, FL	67	85
Kansas City, MO	14	13
Las Vegas, NV	85	74
Long Beach, CA	42	44
Los Angeles, CA	236	273
Louisville, KY	35	25
Memphis, TN	46	61
Mesa, AZ	11	8
Miami, FL	98	110
Milwaukee, WI	18	25
Minneapolis, MN	39	33
Nashville, TN	29	50
Newark, NJ	25	27
New Orleans, LA	44	34
New York, NY	711	761
Norfolk, VA	3	5
Oakland, CA	57	57
Oklahoma City, OK	0	0
Omaha, NE	15	16
Philadelphia, PA	93	96
Phoenix, AZ	81	82
Pittsburgh, PA	5	7
Portland, OR	41	29
Sacramento, CA	46	72
St. Louis, MO	28	18
St. Paul, MN	16	35
San Antonio, TX	83	91
San Diego, CA	125	127
San Francisco, CA	98	115
San Jose, CA	130	125
Santa Ana, CA	41	39
Seattle, WA	51	55
Tampa, FL	24	41
Toledo, OH	2	3
Tucson, AZ	17	27
Tulsa, OK	0	0
Virginia Beach, VA	14	13
Washington, DC	44	41
Wichita, KS	12	10
TOTAL - 62 CITIES	**3,776**	**3,994**
San Juan, PR	30	4

[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 46. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with ≥500,000 Population, 2010 and 2009

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2010
	2010	2009	2010	2009	
Akron, OH	3	10	0.4	1.4	698,580
Albany-Schenectady-Troy, NY	20	9	2.3	1.1	855,070
Albuquerque, NM	18	16	2.1	1.9	867,366
Allentown-Bethlehem-Easton, PA-NJ	11	13	1.3	1.6	817,519
Atlanta-Sandy Springs-Marietta, GA	251	256	4.5	4.7	5,540,092
Augusta-Richmond County, GA-SC	36	28	6.6	5.2	545,737
Austin-Round Rock, TX	83	71	4.7	4.2	1,754,980
Bakersfield, CA	36	41	4.4	5.1	814,852
Baltimore-Towson, MD	89	62	3.3	2.3	2,699,135
Baton Rouge, LA	22	24	2.8	3.1	793,147
Birmingham-Hoover, AL	39	49	3.4	4.3	1,134,598
Boise City-Nampa, ID	12	13	2.0	2.1	612,061
Boston-Cambridge-Quincy, MA-NH	181	194	3.9	4.2	4,622,636
Bridgeport-Stamford-Norwalk, CT	33	41	3.6	4.6	908,263
Buffalo-Niagara Falls, NY	11	16	1.0	1.4	1,120,093
Cape Coral-Fort Myers, FL	26	29	4.4	4.9	592,655
Charleston-North Charleston, SC	34	37	5.1	5.6	669,608
Charlotte-Gastonia-Concord, NC-SC	52	44	2.9	2.5	1,769,237
Chattanooga, TN-GA	12	13	2.3	2.5	527,591
Chicago-Naperville-Joliet, IL	343	377	3.6	3.9	9,622,245
Cincinnati-Middleton, OH-KY-IN	37	33	1.7	1.5	2,177,821
Cleveland-Elyria-Mentor, OH	42	45	2.0	2.2	2,083,470
Colorado Springs, CO	8	8	1.3	1.3	639,964
Columbia, SC	10	26	1.3	3.5	751,075
Columbus, OH	68	44	3.7	2.4	1,817,075
Dallas-Fort Worth-Arlington, TX	373	382	5.7	5.9	6,577,300
Dayton, OH	10	15	1.2	1.8	833,542
Denver-Aurora, CO	49	57	1.9	2.2	2,599,235
Des Moines-West Des Moines, IA	14	12	2.4	2.1	571,479
Detroit-Warren-Livonia, MI	107	85	2.4	1.9	4,381,330
Durham-Chapel Hill, NC	18	17	3.5	3.4	507,541
El Paso, TX	48	57	6.3	7.6	762,563
Fresno, CA	54	66	5.8	7.2	924,691
Grand Rapids-Wyoming, MI	17	18	2.2	2.3	779,280
Greensboro-High Point, NC	34	22	4.7	3.1	718,999
Greenville, SC	16	15	2.5	2.3	645,870
Harrisburg-Carlisle, PA	11	15	2.0	2.8	538,906
Hartford-West Hartford-East Hartford, CT	30	19	2.5	1.6	1,198,392
Honolulu, HI	81	83	8.9	9.2	909,151
Houston-Sugar Land-Baytown, TX	402	484	6.7	8.2	5,987,609
Indianapolis-Carmel, IN	45	58	2.6	3.3	1,761,732
Jackson, MS	39	56	7.2	10.4	545,041
Jacksonville, FL	80	99	6.0	7.5	1,338,606
Kansas City, MO-KS	35	39	1.7	1.9	2,086,771
Knoxville, TN	11	11	1.6	1.6	702,729
Lakeland, FL	16	9	2.7	1.5	585,128
Lancaster, PA	12	3	2.3	0.6	510,692
Las Vegas-Paradise, NV	97	87	5.1	4.6	1,911,769
Little Rock-North Little Rock-Conway, AR	16	17	2.3	2.5	692,103
Los Angeles-Long Beach-Santa Ana, CA	944	946	7.3	7.4	12,939,474
Louisville-Jefferson County, KY-IN	41	29	3.2	2.3	1,269,694
Madison, WI	11	13	1.9	2.3	574,904
McAllen-Edinburg-Mission, TX	69	75	9.1	10.1	761,223
Memphis, TN-MS-AR	62	72	4.7	5.5	1,312,719
Miami-Fort Lauderdale-Pompano Beach, FL	292	294	5.2	5.3	5,613,309
Milwaukee-Waukesha-West Allis, WI	23	34	1.5	2.2	1,564,931
Minneapolis-St. Paul-Bloomington, MN-WI	120	133	3.6	4.1	3,294,867

Table 46. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with ≥500,000 Population, 2010 and 2009

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2010
	2010	2009	2010	2009	
Modesto, CA	16	20	3.1	3.9	512,183
Nashville-Davidson-Murfreesboro-Franklin, TN	56	75	3.5	4.7	1,600,358
New Haven-Milford, CT	15	27	1.8	3.2	850,587
New Orleans-Metairie-Kenner, LA	82	71	6.8	6.0	1,209,128
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,191	1,241	6.2	6.5	19,151,072
Ogden-Clearfield, UT	6	7	1.1	1.3	548,039
Oklahoma City, OK	31	32	2.5	2.6	1,245,822
Omaha-Council Bluffs, NE-IA	16	17	1.9	2.0	859,853
Orlando-Kissimmee, FL	82	66	3.9	3.2	2,106,614
Oxnard-Thousand Oaks-Ventura, CA	33	48	4.1	6.0	810,359
Palm Bay-Melbourne-Titusville, FL	10	8	1.9	1.5	535,907
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	202	195	3.4	3.3	5,992,395
Phoenix-Mesa-Scottsdale, AZ	204	164	4.6	3.8	4,435,482
Pittsburgh, PA	16	21	0.7	0.9	2,354,197
Portland-South Portland-Biddeford, ME	6	4	1.2	0.8	514,127
Portland-Vancouver-Beaverton, OR-WA	80	72	3.5	3.2	2,270,720
Poughkeepsie-Newburgh-Middletown, NY	14	5	2.1	0.7	675,544
Providence-New Bedford-Fall River, RI-MA	37	36	2.3	2.2	1,605,265
Provo-Orem, UT	.	4	.	0.7	568,407
Raleigh-Cary, NC	44	30	3.8	2.7	1,152,966
Richmond, VA	43	30	3.5	2.4	1,244,822
Riverside-San Bernardino-Ontario, CA	136	145	3.2	3.5	4,216,209
Rochester, NY	19	22	1.8	2.1	1,035,082
Sacramento-Arden Arcade-Roseville, CA	75	118	3.5	5.6	2,144,904
St. Louis, MO-IL	56	46	2.0	1.6	2,831,707
Salt Lake City, UT	13	20	1.1	1.8	1,150,349
San Antonio, TX	96	99	4.5	4.8	2,110,905
San Diego-Carlsbad-San Marcos, CA	222	223	7.2	7.3	3,076,745
San Francisco-Oakland-Fremont, CA	387	402	8.9	9.3	4,353,975
San Jose-Sunnyvale-Santa Clara, CA	197	197	10.6	10.7	1,863,711
Sarasota-Bradenton-Venice, FL	29	35	4.2	5.1	690,670
Scranton-Wilkes-Barre, PA	5	7	0.9	1.3	547,621
Seattle-Tacoma-Bellevue, WA	156	191	4.5	5.6	3,450,898
Springfield, MA	16	19	2.3	2.7	697,458
Stockton, CA	46	76	6.7	11.3	683,494
Syracuse, NY	13	19	2.0	2.9	647,108
Tampa-St. Petersburg-Clearwater, FL	126	112	4.6	4.1	2,768,166
Toledo, OH	3	3	0.4	0.4	669,840
Tucson, AZ	19	26	1.8	2.6	1,027,226
Tulsa, OK	15	16	1.6	1.7	939,989
Virginia Beach-Norfolk-Newport News, VA-NC	34	37	2.0	2.2	1,674,649
Washington-Arlington-Alexandria, DC-VA-MD-WV	315	343	5.6	6.3	5,575,780
Wichita, KS	12	11	1.9	1.8	616,372
Worchester, MA	18	17	2.2	2.1	808,309
Youngstown-Warren-Boardman, OH-PA	6	5	1.1	0.9	558,556
Total - 102 Areas	**8,852**	**9,183**	**4.3**	**4.5**	**204,220,020**
San Juan-Caguas-Guaynabo, PR	72	46	2.7	1.8	2,617,089

Note: 2010 and 2009 population case counts and rates updated using U.S. Census Metropolitan Statistical Areas and Components, December 2009, with Codes (http://www.whitehouse.gov/sites/default/files/omb/assets/bulletins/b10-02.pdf) (accessed August 30, 2011). See Technical Notes for definition of MSA (page 9).

Table 47. Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	Pulmonary[1]		Extrapulmonary[2]		Cases in Persons with Both Pulmonary and Extrapulm. Disease		
						Total[3]		Miliary
		No.	(%)	No.	(%)	No.	(%)	No.
Akron, OH	3	2	66.7	1	33.3	0	0	0
Albany-Schenectady-Troy, NY	20	12	60	6	30	2	10	2
Albuquerque, NM	18	14	77.8	3	16.7	1	5.6	1
Allentown-Bethlehem-Easton, PA-NJ	11	8	72.7	2	18.2	1	9.1	1
Atlanta-Sandy Springs-Marietta, GA	251	176	70.1	51	20.3	23	9.2	11
Augusta-Richmond County, GA-SC	36	21	58.3	10	27.8	5	13.9	2
Austin-Round Rock, TX	83	61	73.5	10	12	12	14.5	2
Bakersfield, CA	36	23	63.9	10	27.8	3	8.3	1
Baltimore-Towson, MD	89	50	56.2	27	30.3	12	13.5	2
Baton Rouge, LA	22	14	63.6	4	18.2	4	18.2	3
Birmingham-Hoover, AL	39	27	69.2	10	25.6	2	5.1	2
Boise City-Nampa, ID	12	9	75	3	25	0	0	0
Boston-Cambridge-Quincy, MA-NH	181	113	62.4	48	26.5	20	11	6
Bridgeport-Stamford-Norwalk, CT	33	22	66.7	8	24.2	3	9.1	1
Buffalo-Niagara Falls, NY	11	7	63.6	4	36.4	0	0	0
Cape Coral-Fort Myers, FL	26	20	76.9	3	11.5	3	11.5	2
Charleston-North Charleston, SC	34	17	50	11	32.4	6	17.6	2
Charlotte-Gastonia-Concord, NC-SC	52	35	67.3	15	28.8	2	3.8	1
Chattanooga, TN-GA	12	9	75	2	16.7	1	8.3	0
Chicago-Naperville-Joliet, IL	343	222	64.7	81	23.6	40	11.7	8
Cincinnati-Middleton, OH-KY-IN	37	26	70.3	9	24.3	2	5.4	1
Cleveland-Elyria-Mentor, OH	42	29	69	10	23.8	3	7.1	0
Colorado Springs, CO	8	6	75	2	25	0	0	0
Columbia, SC	10	6	60	1	10	3	30	1
Columbus, OH	68	38	55.9	23	33.8	7	10.3	1
Dallas-Fort Worth-Arlington, TX	373	264	70.8	68	18.2	41	11	2
Dayton, OH	10	4	40	4	40	2	20	0
Denver-Aurora, CO	49	22	44.9	19	38.8	8	16.3	3
Des Moines-West Des Moines, IA	14	9	64.3	2	14.3	1	7.1	1
Detroit-Warren-Livonia, MI	107	77	72	28	26.2	1	0.9	1
Durham-Chapel Hill, NC	18	13	72.2	4	22.2	1	5.6	0
El Paso, TX	48	31	64.6	10	20.8	7	14.6	1
Fresno, CA	54	38	70.4	8	14.8	8	14.8	2
Grand Rapids-Wyoming, MI	17	14	82.4	3	17.6	0	0	0
Greensboro-High Point, NC	34	24	70.6	6	17.6	4	11.8	2
Greenville, SC	16	10	62.5	5	31.3	1	6.3	1
Harrisburg-Carlisle, PA	11	8	72.7	3	27.3	0	0	0
Hartford-West Hartford-East Hartford, CT	30	21	70	5	16.7	4	13.3	1
Honolulu, HI	81	64	79	14	17.3	3	3.7	0
Houston-Sugar Land-Baytown, TX	402	309	76.9	58	14.4	35	8.7	5
Indianapolis-Carmel, IN	45	33	73.3	9	20	3	6.7	1
Jackson, MS	39	32	82.1	2	5.1	5	12.8	2
Jacksonville, FL	80	67	83.8	12	15	1	1.3	1
Kansas City, MO-KS	35	21	60	9	25.7	4	11.4	0
Knoxville, TN	11	9	81.8	2	18.2	0	0	0
Lakeland, FL	16	10	62.5	3	18.8	3	18.8	3
Lancaster, PA	12	7	58.3	5	41.7	0	0	0
Las Vegas-Paradise, NV	97	70	72.2	24	24.7	2	2.1	1
Little Rock-North Little Rock-Conway, AR	16	14	87.5	2	12.5	0	0	0
Los Angeles-Long Beach-Santa Ana, CA	944	669	70.9	173	18.3	83	8.8	12
Louisville-Jefferson County, KY-IN	41	33	80.5	6	14.6	2	4.9	0
Madison, WI	11	7	63.6	3	27.3	1	9.1	1
McAllen-Edinburg-Mission, TX	69	48	69.6	10	14.5	11	15.9	1
Memphis, TN-MS-AR	62	36	58.1	10	16.1	16	25.8	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	204	69.9	71	24.3	17	5.8	8
Milwaukee-Waukesha-West Allis, WI	23	13	56.5	5	21.7	5	21.7	1
Minneapolis-St. Paul-Bloomington, MN-WI	120	49	40.8	55	45.8	16	13.3	1

Table 47. (Cont'd) Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	Pulmonary[1]		Extrapulmonary[2]		Cases in Persons with Both Pulmonary and Extrapulm. Disease		
						Total[3]		Miliary
		No.	(%)	No.	(%)	No.	(%)	No.
Modesto, CA	16	12	75	4	25	0	0	0
Nashville-Davidson-Murfreesboro-Franklin, TN	56	36	64.3	13	23.2	7	12.5	2
New Haven-Milford, CT	15	8	53.3	7	46.7	0	0	0
New Orleans-Metairie-Kenner, LA	82	60	73.2	16	19.5	6	7.3	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,191	768	64.5	264	22.2	159	13.4	30
Ogden-Clearfield, UT	6	3	50	2	33.3	1	16.7	0
Oklahoma City, OK	31	19	61.3	8	25.8	4	12.9	0
Omaha-Council Bluffs, NE-IA	16	10	62.5	6	37.5	0	0	0
Orlando-Kissimmee, FL	82	62	75.6	13	15.9	7	8.5	2
Oxnard-Thousand Oaks-Ventura, CA	33	19	57.6	8	24.2	6	18.2	0
Palm Bay-Melbourne-Titusville, FL	10	8	80	2	20	0	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	202	123	60.9	56	27.7	23	11.4	10
Phoenix-Mesa-Scottsdale, AZ	204	157	77	42	20.6	5	2.5	3
Pittsburgh, PA	16	10	62.5	4	25	2	12.5	1
Portland-South Portland-Biddeford, ME	6	2	33.3	4	66.7	0	0	0
Portland-Vancouver-Beaverton, OR-WA	80	44	55	32	40	4	5	1
Poughkeepsie-Newburgh-Middletown, NY	14	10	71.4	2	14.3	2	14.3	0
Providence-New Bedford-Fall River, RI-MA	37	23	62.2	10	27	3	8.1	1
Provo-Orem, UT	0	0	.	0	.	0	.	0
Raleigh-Cary, NC	44	24	54.5	15	34.1	5	11.4	2
Richmond, VA	43	25	58.1	9	20.9	9	20.9	1
Riverside-San Bernardino-Ontario, CA	136	100	73.5	28	20.6	8	5.9	3
Rochester, NY	19	8	42.1	7	36.8	4	21.1	2
Sacramento-Arden Arcade-Roseville, CA	75	55	73.3	15	20	5	6.7	4
St. Louis, MO-IL	56	40	71.4	9	16.1	4	7.1	1
Salt Lake City, UT	13	6	46.2	5	38.5	2	15.4	1
San Antonio, TX	96	77	80.2	13	13.5	6	6.3	2
San Diego-Carlsbad-San Marcos, CA	222	138	62.2	39	17.6	45	20.3	14
San Francisco-Oakland-Fremont, CA	387	242	62.5	103	26.6	42	10.9	7
San Jose-Sunnyvale-Santa Clara, CA	197	119	60.4	68	34.5	10	5.1	2
Sarasota-Bradenton-Venice, FL	29	21	72.4	6	20.7	2	6.9	1
Scranton-Wilkes-Barre, PA	5	5	100	0	0	0	0	0
Seattle-Tacoma-Bellevue, WA	156	75	48.1	53	34	28	17.9	5
Springfield, MA	16	7	43.8	5	31.3	4	25	0
Stockton, CA	46	29	63	5	10.9	12	26.1	3
Syracuse, NY	13	7	53.8	3	23.1	3	23.1	1
Tampa-St. Petersburg-Clearwater, FL	126	102	81	18	14.3	6	4.8	4
Toledo, OH	3	1	33.3	1	33.3	1	33.3	1
Tucson, AZ	19	12	63.2	3	15.8	4	21.1	1
Tulsa, OK	15	8	53.3	5	33.3	2	13.3	0
Virginia Beach-Norfolk-Newport News, VA-NC	34	29	85.3	4	11.8	1	2.9	1
Washington-Arlington-Alexandria, DC-VA-MD-WV	315	194	61.6	82	26	39	12.4	6
Wichita, KS	12	9	75	3	25	0	0	0
Worchester, MA	18	12	66.7	2	11.1	4	22.2	0
Youngstown-Warren-Boardman, OH-PA	6	3	50	3	50	0	0	0
Total - 102 Areas	**8,852**	**5,919**	**66.9**	**1,989**	**22.5**	**915**	**10.3**	**213**
San Juan-Caguas-Guaynabo, PR	72	64	91.4	4	5.7	2	2.9	1

[1]Includes cases in persons with pulmonary listed as the only site of disease.
[2]Includes cases in persons 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.
Note: 29 cases had missing and/or unknown site of disease.
See Technical Notes for definition of MSA (page 9).

Table 48. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15 –24	25–44	45–64	≥65	Unknown or Missing
Akron, OH	3	0	0	1	1	1	0	0
Albany-Schenectady-Troy, NY	20	0	0	0	9	6	5	0
Albuquerque, NM	18	0	0	0	4	4	10	0
Allentown-Bethlehem-Easton, PA-NJ	11	0	0	0	4	1	6	0
Atlanta-Sandy Springs-Marietta, GA	251	9	13	29	85	86	29	0
Augusta-Richmond County, GA-SC	36	2	0	6	13	11	4	0
Austin-Round Rock, TX	83	9	6	9	30	21	8	0
Bakersfield, CA	36	1	0	4	11	11	9	0
Baltimore-Towson, MD	89	3	4	9	35	21	17	0
Baton Rouge, LA	22	2	0	1	11	6	2	0
Birmingham-Hoover, AL	39	0	1	3	10	18	7	0
Boise City-Nampa, ID	12	0	2	1	2	3	4	0
Boston-Cambridge-Quincy, MA-NH	181	5	2	25	75	39	35	0
Bridgeport-Stamford-Norwalk, CT	33	1	0	8	9	8	7	0
Buffalo-Niagara Falls, NY	11	1	0	2	3	3	2	0
Cape Coral-Fort Myers, FL	26	4	2	2	12	5	1	0
Charleston-North Charleston, SC	34	1	1	3	14	11	4	0
Charlotte-Gastonia-Concord, NC-SC	52	3	2	5	19	16	7	0
Chattanooga, TN-GA	12	2	0	1	5	3	1	0
Chicago-Naperville-Joliet, IL	343	5	2	33	102	117	84	0
Cincinnati-Middleton, OH-KY-IN	37	2	0	1	10	14	10	0
Cleveland-Elyria-Mentor, OH	42	1	0	4	10	13	14	0
Colorado Springs, CO	8	0	0	2	4	1	1	0
Columbia, SC	10	0	0	1	2	5	2	0
Columbus, OH	68	1	4	9	25	21	8	0
Dallas-Fort Worth-Arlington, TX	373	7	3	42	151	132	38	0
Dayton, OH	10	0	0	1	2	3	4	0
Denver-Aurora, CO	49	1	3	8	18	8	11	0
Des Moines-West Des Moines, IA	14	0	1	2	4	4	3	0
Detroit-Warren-Livonia, MI	107	5	0	9	30	37	26	0
Durham-Chapel Hill, NC	18	0	0	5	6	5	2	0
El Paso, TX	48	1	0	4	12	17	14	0
Fresno, CA	54	3	1	8	15	17	10	0
Grand Rapids-Wyoming, MI	17	2	0	1	9	2	3	0
Greensboro-High Point, NC	34	2	1	6	10	7	8	0
Greenville, SC	16	5	0	3	5	1	2	0
Harrisburg-Carlisle, PA	11	0	0	0	3	5	3	0
Hartford-West Hartford-East Hartford, CT	30	2	3	2	11	6	6	0
Honolulu, HI	81	1	2	7	16	21	34	0
Houston-Sugar Land-Baytown, TX	402	22	17	49	134	125	55	0
Indianapolis-Carmel, IN	45	3	3	5	19	11	4	0
Jackson, MS	39	0	1	3	14	16	5	0
Jacksonville, FL	80	5	1	8	26	33	7	0
Kansas City, MO-KS	35	0	3	7	14	6	5	0
Knoxville, TN	11	1	0	1	4	4	1	0
Lakeland, FL	16	0	0	2	5	6	3	0
Lancaster, PA	12	0	1	0	3	4	4	0
Las Vegas-Paradise, NV	97	15	2	8	24	34	14	0
Little Rock-North Little Rock-Conway, AR	16	0	1	1	4	6	4	0
Los Angeles-Long Beach-Santa Ana, CA	944	22	18	87	256	298	260	3
Louisville-Jefferson County, KY-IN	41	0	0	2	15	23	1	0
Madison, WI	11	0	0	0	6	4	1	0
McAllen-Edinburg-Mission, TX	69	6	2	9	19	23	10	0
Memphis, TN-MS-AR	62	7	0	4	24	21	6	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	7	7	26	102	103	47	0

Table 48. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15 –24	25–44	45–64	≥65	Unknown or Missing
Milwaukee-Waukesha-West Allis, WI	23	0	2	4	8	4	5	0
Minneapolis-St. Paul-Bloomington, MN-WI	120	2	4	21	56	23	14	0
Modesto, CA	16	1	1	2	6	3	3	0
Nashville-Davidson-Murfreesboro-Franklin, TN	56	1	3	4	22	17	9	0
New Haven-Milford, CT	15	0	0	2	6	3	4	0
New Orleans-Metairie-Kenner, LA	82	2	0	9	27	30	14	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,191	24	35	155	410	358	209	0
Ogden-Clearfield, UT	6	0	0	1	2	1	2	0
Oklahoma City, OK	31	0	1	3	10	11	6	0
Omaha-Council Bluffs, NE-IA	16	1	0	3	7	4	1	0
Orlando-Kissimmee, FL	82	1	1	11	27	24	18	0
Oxnard-Thousand Oaks-Ventura, CA	33	3	3	7	4	9	7	0
Palm Bay-Melbourne-Titusville, FL	10	0	0	0	1	7	2	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	202	4	10	24	62	68	34	0
Phoenix-Mesa-Scottsdale, AZ	204	9	6	22	86	59	22	0
Pittsburgh, PA	16	0	0	1	3	3	9	0
Portland-South Portland-Biddeford, ME	6	1	0	1	2	2	0	0
Portland-Vancouver-Beaverton, OR-WA	80	4	3	12	30	18	13	0
Poughkeepsie-Newburgh-Middletown, NY	14	0	0	3	5	4	2	0
Providence-New Bedford-Fall River, RI-MA	37	2	2	6	10	7	10	0
Provo-Orem, UT	0	0	0	0	0	0	0	0
Raleigh-Cary, NC	44	7	1	3	14	8	11	0
Richmond, VA	43	2	4	4	12	13	8	0
Riverside-San Bernardino-Ontario, CA	136	0	1	8	36	50	41	0
Rochester, NY	19	0	1	2	8	7	1	0
Sacramento-Arden Arcade-Roseville, CA	75	1	2	6	20	26	20	0
St. Louis, MO-IL	56	4	0	7	19	18	8	0
Salt Lake City, UT	13	0	0	0	6	5	2	0
San Antonio, TX	96	9	6	9	30	28	14	0
San Diego-Carlsbad-San Marcos, CA	222	8	4	25	78	64	43	0
San Francisco-Oakland-Fremont, CA	387	6	7	37	114	122	100	1
San Jose-Sunnyvale-Santa Clara, CA	197	4	3	12	73	60	45	0
Sarasota-Bradenton-Venice, FL	29	2	0	1	9	6	11	0
Scranton-Wilkes-Barre, PA	5	0	0	0	3	1	1	0
Seattle-Tacoma-Bellevue, WA	156	7	5	20	54	41	29	0
Springfield, MA	16	0	0	1	6	6	3	0
Stockton, CA	46	0	2	1	12	16	15	0
Syracuse, NY	13	0	0	2	8	2	1	0
Tampa-St. Petersburg-Clearwater, FL	126	1	8	10	35	52	20	0
Toledo, OH	3	0	0	0	2	0	1	0
Tucson, AZ	19	0	0	2	5	8	4	0
Tulsa, OK	15	3	0	2	2	4	4	0
Virginia Beach-Norfolk-Newport News, VA-NC	34	0	1	5	10	9	9	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	315	4	5	42	141	73	50	0
Wichita, KS	12	0	0	0	5	3	4	0
Worchester, MA	18	0	0	3	10	3	2	0
Youngstown-Warren-Boardman, OH-PA	6	0	0	0	1	3	2	0
Total - 102 Areas	**8,852**	**282**	**230**	**962**	**2,963**	**2,710**	**1,701**	**4**
San Juan-Caguas-Guaynabo, PR	72	2	0	2	17	30	19	0

Note: See Technical Notes for definition of MSA (page 9).

Table 49. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with ≥500,000 Population, 2010

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	3	0	0	1	0	0	2	0	0
Albany-Schenectady-Troy, NY	20	1	0	10	4	0	3	0	2
Albuquerque, NM	18	9	5	3	1	0	0	0	0
Allentown-Bethlehem-Easton, PA-NJ	11	3	0	1	3	1	3	0	0
Atlanta-Sandy Springs-Marietta, GA	251	41	1	67	123	0	18	1	0
Augusta-Richmond County, GA-SC	36	1	0	2	24	0	9	0	0
Austin-Round Rock, TX	83	50	0	13	7	0	13	0	0
Bakersfield, CA	36	16	0	14	2	0	3	0	1
Baltimore-Towson, MD	89	9	0	30	39	1	10	0	0
Baton Rouge, LA	22	4	0	6	11	0	1	0	0
Birmingham-Hoover, AL	39	3	0	3	23	0	10	0	0
Boise City-Nampa, ID	12	3	0	1	3	0	4	1	0
Boston-Cambridge-Quincy, MA-NH	181	27	0	74	47	0	32	0	1
Bridgeport-Stamford-Norwalk, CT	33	9	0	10	6	0	8	0	0
Buffalo-Niagara Falls, NY	11	0	0	7	4	0	0	0	0
Cape Coral-Fort Myers, FL	26	14	1	1	2	0	8	0	0
Charleston-North Charleston, SC	34	6	0	2	20	2	4	0	0
Charlotte-Gastonia-Concord, NC-SC	52	11	0	15	17	0	9	0	0
Chattanooga, TN-GA	12	3	0	0	2	0	7	0	0
Chicago-Naperville-Joliet, IL	343	109	0	97	81	0	55	0	1
Cincinnati-Middleton, OH-KY-IN	37	8	0	7	13	0	9	0	0
Cleveland-Elyria-Mentor, OH	42	1	0	7	23	0	11	0	0
Colorado Springs, CO	8	3	0	1	2	2	0	0	0
Columbia, SC	10	3	0	4	3	0	0	0	0
Columbus, OH	68	10	0	9	33	0	16	0	0
Dallas-Fort Worth-Arlington, TX	373	118	2	76	101	1	75	0	0
Dayton, OH	10	1	0	2	3	0	4	0	0
Denver-Aurora, CO	49	15	1	12	13	0	8	0	0
Des Moines-West Des Moines, IA	14	3	0	5	6	0	0	0	0
Detroit-Warren-Livonia, MI	107	5	0	18	45	0	17	0	22
Durham-Chapel Hill, NC	18	3	0	4	10	0	1	0	0
El Paso, TX	48	39	0	2	2	0	5	0	0
Fresno, CA	54	29	0	18	1	0	6	0	0
Grand Rapids-Wyoming, MI	17	5	0	4	2	0	3	0	3
Greensboro-High Point, NC	34	3	0	15	14	0	2	0	0
Greenville, SC	16	4	0	1	2	6	3	0	0
Harrisburg-Carlisle, PA	11	0	0	4	2	0	4	1	0
Hartford-West Hartford-East Hartford, CT	30	7	0	11	4	0	8	0	0
Honolulu, HI	81	1	0	60	0	15	1	1	3
Houston-Sugar Land-Baytown, TX	402	168	1	83	93	2	54	0	1
Indianapolis-Carmel, IN	45	13	0	8	11	0	13	0	0
Jackson, MS	39	4	0	2	24	0	9	0	0
Jacksonville, FL	80	10	0	15	32	0	23	0	0
Kansas City, MO-KS	35	6	0	10	13	1	5	0	0
Knoxville, TN	11	3	0	2	1	0	5	0	0
Lakeland, FL	16	2	0	1	5	0	8	0	0
Lancaster, PA	12	2	0	3	3	0	4	0	0
Las Vegas-Paradise, NV	97	26	1	36	21	0	12	1	0
Little Rock-North Little Rock-Conway, AR	16	1	0	2	7	0	6	0	0
Los Angeles-Long Beach-Santa Ana, CA	944	364	0	437	72	1	67	1	2
Louisville-Jefferson County, KY-IN	41	5	0	1	14	0	21	0	0
Madison, WI	11	4	0	3	3	0	1	0	0
McAllen-Edinburg-Mission, TX	69	64	0	3	0	0	2	0	0
Memphis, TN-MS-AR	62	6	0	3	44	0	9	0	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	111	0	17	121	2	41	0	0
Milwaukee-Waukesha-West Allis, WI	23	3	0	8	9	0	3	0	0
Minneapolis-St. Paul-Bloomington, MN-WI	120	11	3	36	59	0	10	1	0

Table 49. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with ≥500,000 Population, 2010

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	16	11	0	5	0	0	0	0	0
Nashville-Davidson-Murfreesboro-Franklin, TN	56	13	0	15	12	0	15	1	0
New Haven-Milford, CT	15	3	0	8	3	0	1	0	0
New Orleans-Metairie-Kenner, LA	82	16	0	10	39	0	16	1	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,191	378	1	429	254	1	111	2	15
Ogden-Clearfield, UT	6	4	0	1	0	0	1	0	0
Oklahoma City, OK	31	4	1	11	7	0	8	0	0
Omaha-Council Bluffs, NE-IA	16	7	0	3	4	0	2	0	0
Orlando-Kissimmee, FL	82	18	0	12	35	2	15	0	0
Oxnard-Thousand Oaks-Ventura, CA	33	23	0	8	0	0	1	0	1
Palm Bay-Melbourne-Titusville, FL	10	0	0	2	2	0	6	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	202	23	0	80	80	0	18	0	1
Phoenix-Mesa-Scottsdale, AZ	204	104	2	49	17	1	31	0	0
Pittsburgh, PA	16	0	0	1	5	0	10	0	0
Portland-South Portland-Biddeford, ME	6	1	0	1	3	0	1	0	0
Portland-Vancouver-Beaverton, OR-WA	80	14	2	25	11	4	24	0	0
Poughkeepsie-Newburgh-Middletown, NY	14	3	0	3	4	0	4	0	0
Providence-New Bedford-Fall River, RI-MA	37	10	0	8	7	0	12	0	0
Provo-Orem, UT	0	0	0	0	0	0	0	0	0
Raleigh-Cary, NC	44	12	0	8	15	0	8	1	0
Richmond, VA	43	2	0	7	29	0	5	0	0
Riverside-San Bernardino-Ontario, CA	136	67	0	43	7	0	15	0	4
Rochester, NY	19	3	0	9	5	0	2	0	0
Sacramento-Arden Arcade-Roseville, CA	75	16	1	31	10	4	6	0	7
St. Louis, MO-IL	56	6	1	14	15	0	20	0	0
Salt Lake City, UT	13	3	1	2	4	0	3	0	0
San Antonio, TX	96	68	0	7	10	0	11	0	0
San Diego-Carlsbad-San Marcos, CA	222	116	0	73	13	0	20	0	0
San Francisco-Oakland-Fremont, CA	387	72	0	237	35	5	29	1	8
San Jose-Sunnyvale-Santa Clara, CA	197	33	0	147	1	1	11	0	4
Sarasota-Bradenton-Venice, FL	29	12	0	2	3	0	12	0	0
Scranton-Wilkes-Barre, PA	5	1	0	0	3	0	1	0	0
Seattle-Tacoma-Bellevue, WA	156	11	4	78	37	8	12	2	4
Springfield, MA	16	3	0	5	4	0	4	0	0
Stockton, CA	46	17	0	18	4	0	6	0	1
Syracuse, NY	13	0	0	5	6	0	2	0	0
Tampa-St. Petersburg-Clearwater, FL	126	34	0	27	29	0	36	0	0
Toledo, OH	3	0	0	1	2	0	0	0	0
Tucson, AZ	19	6	2	6	2	0	3	0	0
Tulsa, OK	15	4	2	2	3	0	4	0	0
Virginia Beach-Norfolk-Newport News, VA-NC	34	2	0	10	12	0	10	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	315	67	1	119	114	0	13	1	0
Wichita, KS	12	1	0	7	3	0	1	0	0
Worchester, MA	18	1	0	7	6	0	4	0	0
Youngstown-Warren-Boardman, OH-PA	6	2	0	0	1	0	3	0	0
Total - 102 Areas	**8,852**	**2,571**	**33**	**2,823**	**2,086**	**60**	**1,182**	**16**	**81**
San Juan-Caguas-Guaynabo, PR	72	67	0	0	0	0	2	0	1

[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 (page 9).

Table 50. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons[1]: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons[1]		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Akron, OH	3	1	33.3	2	66.7	0	0
Albany-Schenectady-Troy, NY	20	5	25	15	75	0	0
Albuquerque, NM	18	8	44.4	10	55.6	0	0
Allentown-Bethlehem-Easton, PA-NJ	11	5	45.5	6	54.5	0	0
Atlanta-Sandy Springs-Marietta, GA	251	112	44.6	139	55.4	0	0
Augusta-Richmond County, GA-SC	36	30	83.3	6	16.7	0	0
Austin-Round Rock, TX	83	31	37.3	52	62.7	0	0
Bakersfield, CA	36	10	27.8	26	72.2	0	0
Baltimore-Towson, MD	89	39	43.8	50	56.2	0	0
Baton Rouge, LA	22	14	63.6	8	36.4	0	0
Birmingham-Hoover, AL	39	28	71.8	11	28.2	0	0
Boise City-Nampa, ID	12	5	41.7	7	58.3	0	0
Boston-Cambridge-Quincy, MA-NH	181	37	20.4	129	71.3	15	8.3
Bridgeport-Stamford-Norwalk, CT	33	6	18.2	27	81.8	0	0
Buffalo-Niagara Falls, NY	11	6	54.5	5	45.5	0	0
Cape Coral-Fort Myers, FL	26	16	61.5	10	38.5	0	0
Charleston-North Charleston, SC	34	25	73.5	9	26.5	0	0
Charlotte-Gastonia-Concord, NC-SC	52	25	48.1	27	51.9	0	0
Chattanooga, TN-GA	12	11	91.7	1	8.3	0	0
Chicago-Naperville-Joliet, IL	343	127	37	216	63	0	0
Cincinnati-Middleton, OH-KY-IN	37	20	54.1	17	45.9	0	0
Cleveland-Elyria-Mentor, OH	42	28	66.7	14	33.3	0	0
Colorado Springs, CO	8	3	37.5	5	62.5	0	0
Columbia, SC	10	3	30	7	70	0	0
Columbus, OH	68	25	36.8	43	63.2	0	0
Dallas-Fort Worth-Arlington, TX	373	167	44.8	206	55.2	0	0
Dayton, OH	10	7	70	3	30	0	0
Denver-Aurora, CO	49	11	22.4	38	77.6	0	0
Des Moines-West Des Moines, IA	14	2	14.3	12	85.7	0	0
Detroit-Warren-Livonia, MI	107	54	50.5	48	44.9	5	4.7
Durham-Chapel Hill, NC	18	9	50	9	50	0	0
El Paso, TX	48	14	29.2	34	70.8	0	0
Fresno, CA	54	14	25.9	38	70.4	2	3.7
Grand Rapids-Wyoming, MI	17	7	41.2	10	58.8	0	0
Greensboro-High Point, NC	34	14	41.2	20	58.8	0	0
Greenville, SC	16	13	81.3	3	18.8	0	0
Harrisburg-Carlisle, PA	11	5	45.5	6	54.5	0	0
Hartford-West Hartford-East Hartford, CT	30	9	30	21	70	0	0
Honolulu, HI	81	24	29.6	56	69.1	1	1.2
Houston-Sugar Land-Baytown, TX	402	186	46.3	216	53.7	0	0
Indianapolis-Carmel, IN	45	26	57.8	19	42.2	0	0
Jackson, MS	39	32	82.1	7	17.9	0	0
Jacksonville, FL	80	54	67.5	26	32.5	0	0
Kansas City, MO-KS	35	14	40	21	60	0	0
Knoxville, TN	11	7	63.6	4	36.4	0	0
Lakeland, FL	16	10	62.5	6	37.5	0	0
Lancaster, PA	12	6	50	6	50	0	0
Las Vegas-Paradise, NV	97	31	32	65	67	1	1
Little Rock-North Little Rock-Conway, AR	16	13	81.3	3	18.8	0	0
Los Angeles-Long Beach-Santa Ana, CA	944	176	18.6	760	80.5	8	0.8
Louisville-Jefferson County, KY-IN	41	19	46.3	22	53.7	0	0
Madison, WI	11	1	9.1	10	90.9	0	0
McAllen-Edinburg-Mission, TX	69	25	36.2	44	63.8	0	0
Memphis, TN-MS-AR	62	50	80.6	12	19.4	0	0
Miami-Fort Lauderdale-Pompano Beach, FL	292	102	34.9	190	65.1	0	0
Milwaukee-Waukesha-West Allis, WI	23	13	56.5	10	43.5	0	0

Table 50. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons[1]: Metropolitan Statistical Areas with ≥500,000 Population, 2010

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons[1]		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Minneapolis-St. Paul-Bloomington, MN-WI	120	22	18.3	98	81.7	0	0
Modesto, CA	16	4	25	12	75	0	0
Nashville-Davidson-Murfreesboro-Franklin, TN	56	20	35.7	36	64.3	0	0
New Haven-Milford, CT	15	3	20	12	80	0	0
New Orleans-Metairie-Kenner, LA	82	58	70.7	24	29.3	0	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,191	254	21.3	937	78.7	0	0
Ogden-Clearfield, UT	6	2	33.3	4	66.7	0	0
Oklahoma City, OK	31	19	61.3	12	38.7	0	0
Omaha-Council Bluffs, NE-IA	16	3	18.8	13	81.3	0	0
Orlando-Kissimmee, FL	82	44	53.7	38	46.3	0	0
Oxnard-Thousand Oaks-Ventura, CA	33	9	27.3	22	66.7	2	6.1
Palm Bay-Melbourne-Titusville, FL	10	6	60	4	40	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	202	74	36.6	128	63.4	0	0
Phoenix-Mesa-Scottsdale, AZ	204	53	26	150	73.5	1	0.5
Pittsburgh, PA	16	13	81.3	3	18.8	0	0
Portland-South Portland-Biddeford, ME	6	0	0	6	100	0	0
Portland-Vancouver-Beaverton, OR-WA	80	32	40	48	60	0	0
Poughkeepsie-Newburgh-Middletown, NY	14	7	50	7	50	0	0
Providence-New Bedford-Fall River, RI-MA	37	14	37.8	23	62.2	0	0
Provo-Orem, UT	0	0	.	0	.	0	.
Raleigh-Cary, NC	44	25	56.8	19	43.2	0	0
Richmond, VA	43	32	74.4	11	25.6	0	0
Riverside-San Bernardino-Ontario, CA	136	38	27.9	95	69.9	3	2.2
Rochester, NY	19	6	31.6	13	68.4	0	0
Sacramento-Arden Arcade-Roseville, CA	75	22	29.3	50	66.7	3	4
St. Louis, MO-IL	56	30	53.6	26	46.4	0	0
Salt Lake City, UT	13	3	23.1	10	76.9	0	0
San Antonio, TX	96	66	68.8	30	31.3	0	0
San Diego-Carlsbad-San Marcos, CA	222	63	28.4	159	71.6	0	0
San Francisco-Oakland-Fremont, CA	387	74	19.1	311	80.4	2	0.5
San Jose-Sunnyvale-Santa Clara, CA	197	21	10.7	176	89.3	0	0
Sarasota-Bradenton-Venice, FL	29	14	48.3	15	51.7	0	0
Scranton-Wilkes-Barre, PA	5	3	60	2	40	0	0
Seattle-Tacoma-Bellevue, WA	156	34	21.8	118	75.6	4	2.6
Springfield, MA	16	8	50	8	50	0	0
Stockton, CA	46	16	34.8	30	65.2	0	0
Syracuse, NY	13	2	15.4	11	84.6	0	0
Tampa-St. Petersburg-Clearwater, FL	126	65	51.6	61	48.4	0	0
Toledo, OH	3	2	66.7	1	33.3	0	0
Tucson, AZ	19	6	31.6	12	63.2	1	5.3
Tulsa, OK	15	12	80	3	20	0	0
Virginia Beach-Norfolk-Newport News, VA-NC	34	22	64.7	12	35.3	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	315	71	22.5	244	77.5	0	0
Wichita, KS	12	2	16.7	10	83.3	0	0
Worchester, MA	18	2	11.1	16	88.9	0	0
Youngstown-Warren-Boardman, OH-PA	6	4	66.7	2	33.3	0	0
Total - 102 Areas	**8,852**	**3,015**	**34.1**	**5,789**	**65.4**	**48**	**0.5**
San Juan-Caguas-Guaynabo, PR	72	60	85.7	10	14.3	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 (page 9).

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United States Affiliated Pacific Islands, 2010

Tuberculosis in the U.S.-affiliated Pacific Island Jurisdictions (USAPI), 2010

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, and Guam. The other three — Federated States of Micronesia, Republic of the Marshall Islands, 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 share responsibility for their health, education, defense, and other essential operations with 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 constitute 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 rate of disease is much greater when compared with 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 (106.0/100,000) is over 12 times greater than that of the State of Hawaii (8.8/100,000) and almost 30 times greater than the U.S. national rate (3.6/100,000).

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

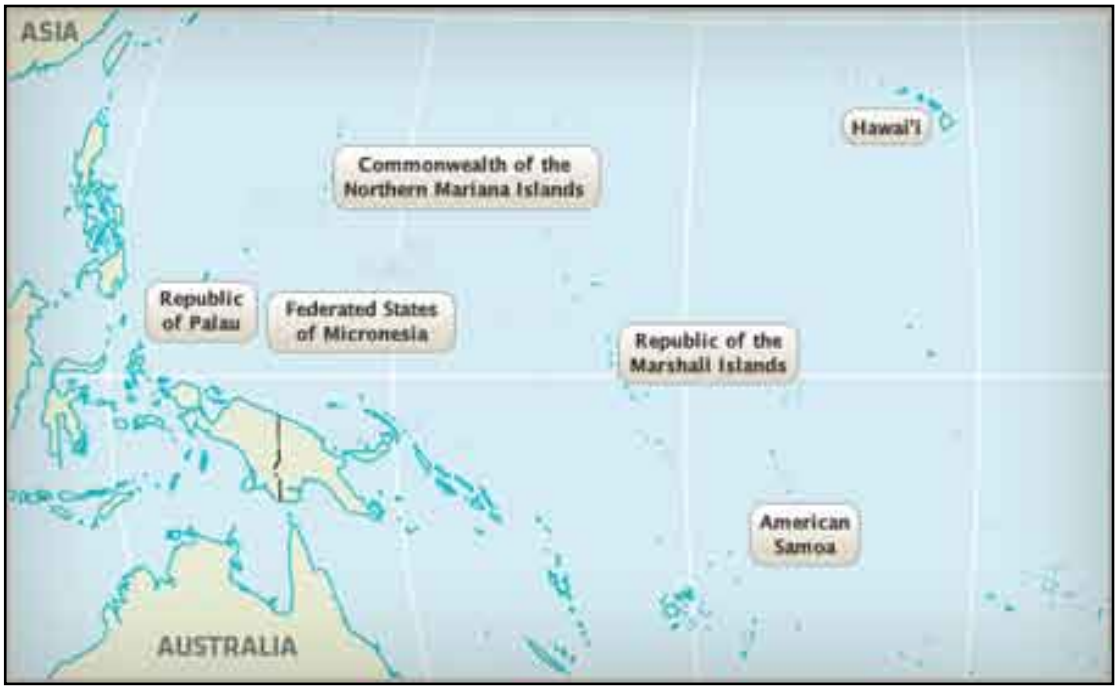
Jurisdiction	Cases	Rate	Population
USAPI Regional Total	**519**	**106**	**489,506**
American Samoa	3	4.5	66,432
Federated States of Micronesia	171	159.6	107,154
Guam	100	55.3	180,865
Marshall Islands	196	297.6	65,859
North Mariana Islands	32	66.2	48,317
Palau	17	81.4	20,879
Hawaii[1]	115	8.8	1,300,086
United States[1]	11,182	3.6	309,050,816

[1]Not included in USAPI regional total.

USAPI TB Surveillance Data Highlights, 2010 (N=519)

- 119 (23%) age less than 15 years
- 141(27%) age 25–44 years
- 289 (56%) male
- 56 (11%) not born in the USAPI jurisdictions or the United States
  - 46 (82%) of these emigrating from the Republic of the Philippines
- 369 (71%) diagnosed with pulmonary disease only
- 224 (43%) positive culture for *Mycobacterium Tuberculosis*
- 4 (<1%) with MDR TB; no cases of XDR TB
- 174 (34%) were unemployed

The data reported here reflect cases reported to the CDC National TB Surveillance System using the Report of a Verified Case of TB. Denominators for computing 2010 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 (July 1, 2000– July 1, 2010) (www.census.gov/popest/states/tables/NST-PEST2010-01.xls) (accessed August 30, 2011); for all other areas, from IDB Summary Demographic Data (http://www.census.gov/ipc/www/idb/summaries.html).



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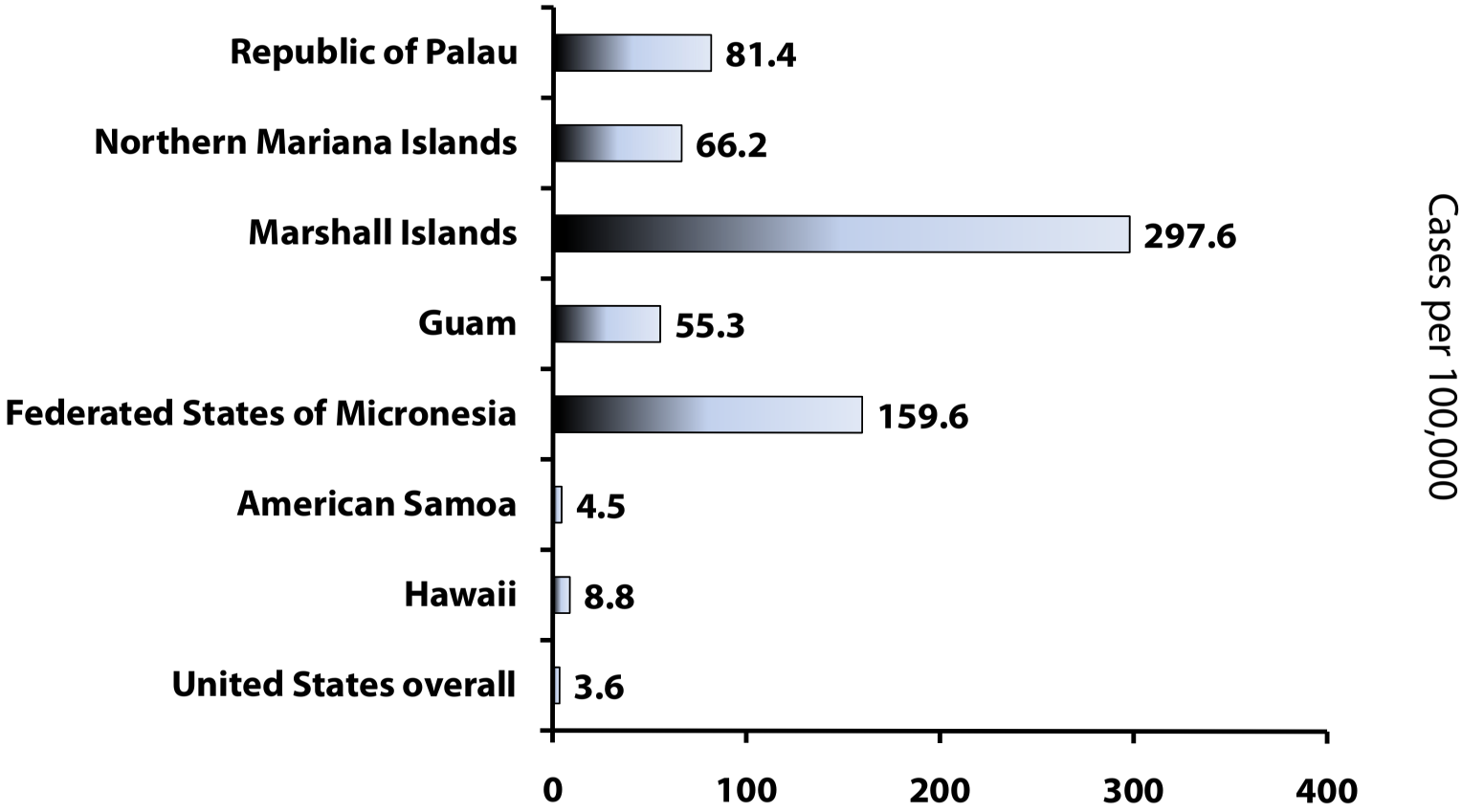
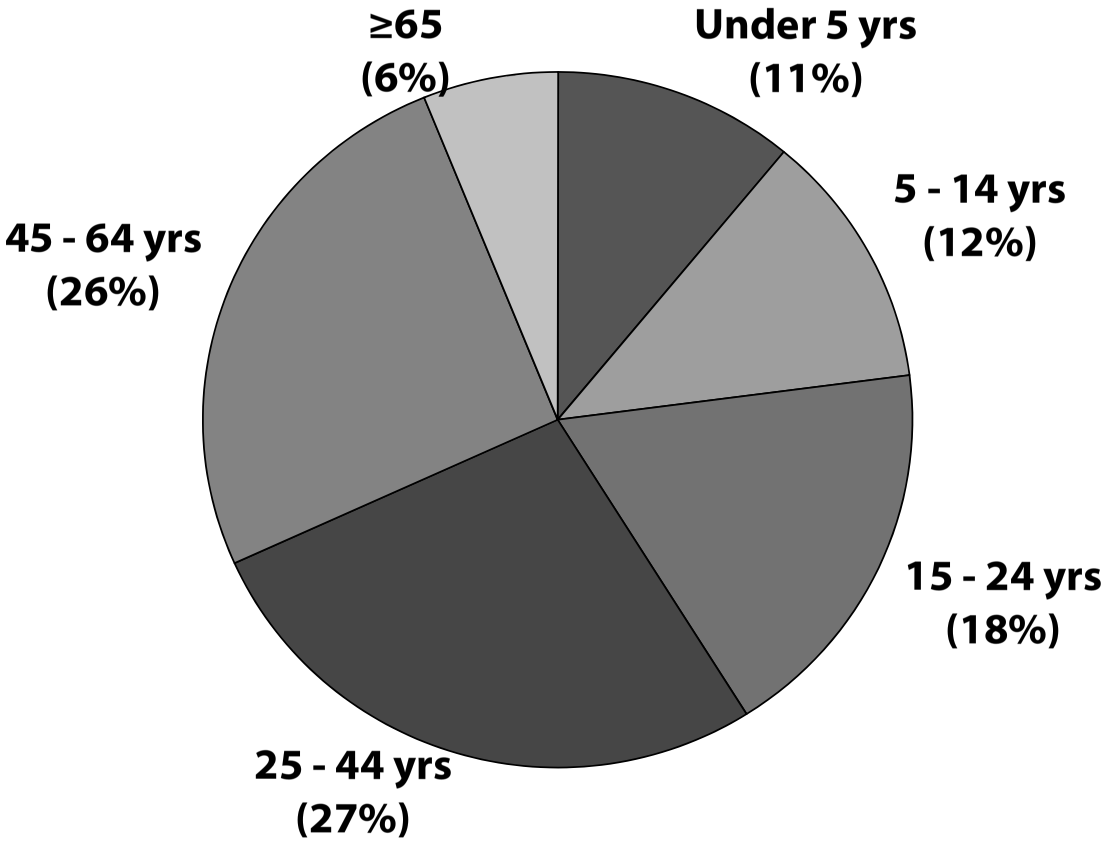
TB Case Rates, U.S.-Affiliated Pacific Islands, 2010

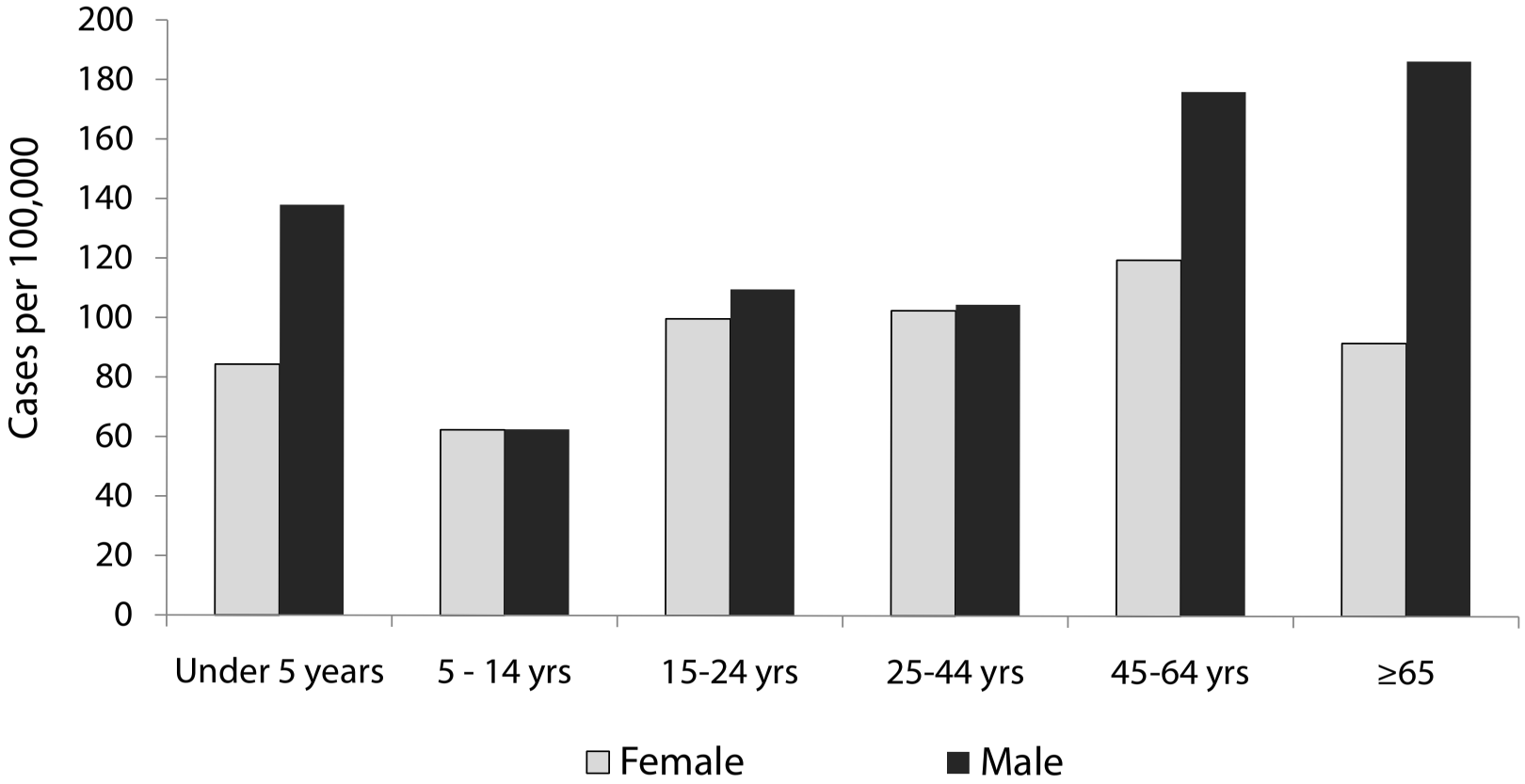


Reported TB Cases by Age Group U.S.-Affiliated Pacific Islands, 2010

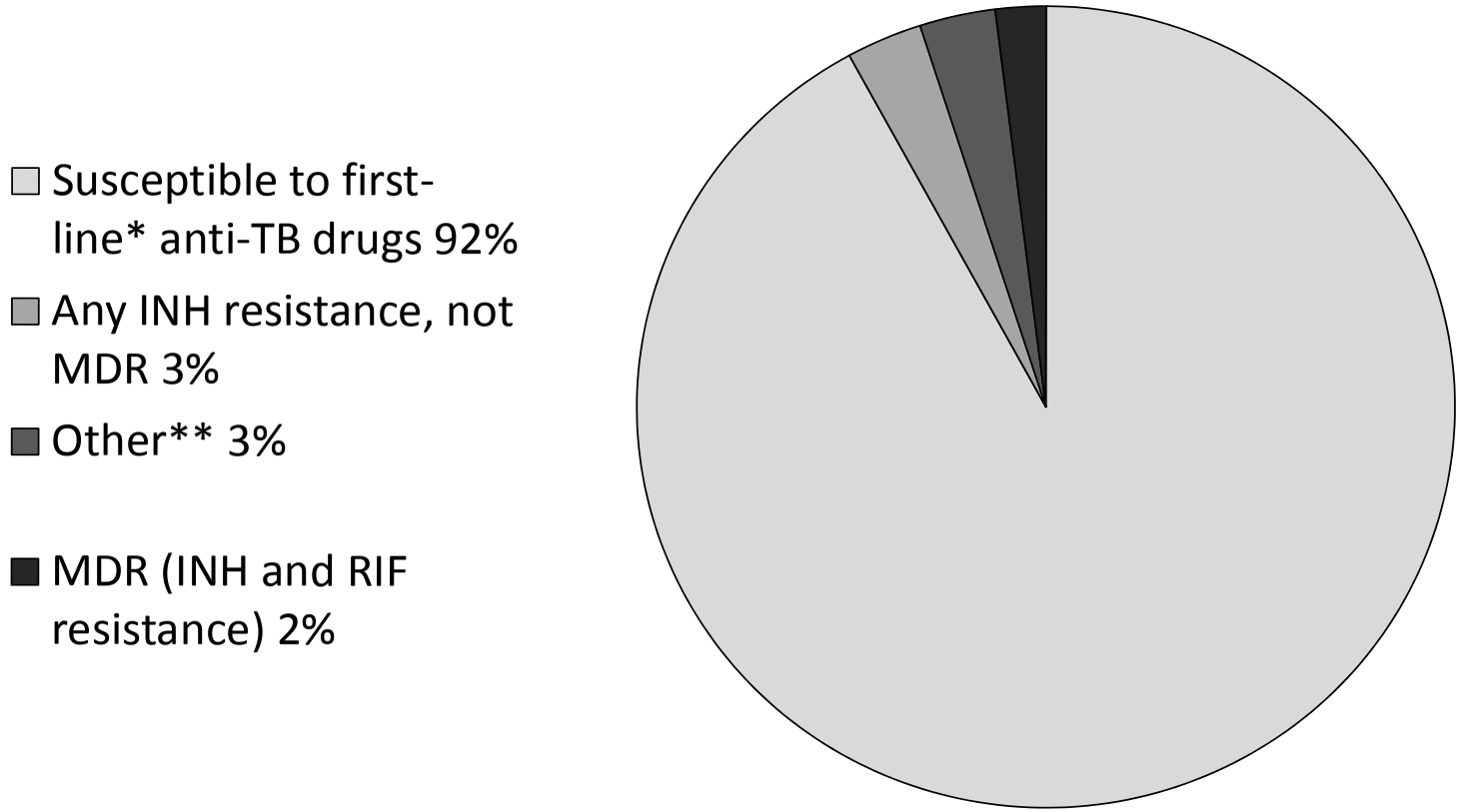


Note: Excludes missing or unknown.

TB Case Rates by Age Group and Sex U.S.-Affiliated Pacific Islands, 2010



Anti-TB Drug Susceptibility, U.S.-Affiliated Pacific Islands, 2010



*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 210 of 224 culture-positive isolates for which drug sensitivity testing results were available.

Slide Narratives for US Affiliated Pacific Islands:

Slide 1-USAPI. TB Case Rates, U.S-Affiliated Pacific Islands, 2010. This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2010. The case rate ranged from 4.5 per 100,000 persons in American Samoa to 297.6 per 100,000 persons in the Republic of the Marshall Islands with a regional case rate of 106.0 per 100,000 persons. The overall case rate for the United States (3.6 per 100,000) and for Hawaii (8.8 per 100,000) are also shown.

Slide 2-USAPI. Reported TB Cases by Age Group, U.S.-Affiliated Pacific Islands, 2010. This pie chart shows the age distribution of persons reported with TB in the U.S. Pacific Islands in 2010. Eleven percent were children under 5 years of age, 12% were children ages 5- to 14-year-olds, and 18% were 15- to 24-year-olds, whereas 27% were 25 to 44 years of age, 26% were 45- to 64-year-olds, and 6% were at least 65 years old.

Slide 3-USAPI. TB Case Rates by Age Group and Sex, U.S.-Affiliated Pacific Islands, 2010. This slide graphs the rates in 2010 of persons reported with TB in the U.S. Pacific Islands in 2010 by age group and sex. Children under 5-year-old had a rate of approximately 84 per 100,000 for females and 140 per 100,000 for males, while children in the 5- 14 year age group had lower rates (approximately 62 per 100,000 for both males and females). Among older age groups, rates fluctuated between a low of 91.8 per 100,000 (among females aged 65 years and older) to a low of 186.6 per 100,000 (among males aged 65 years and older).

Slide 4-USAPI. Anti-TB Drug Susceptibility, U.S.- Affiliated Pacific Islands, 2010. This pie chart shows the level of drug susceptibility for culture positive cases for in the U.S. Pacific Islands in 2010. Data were available for 93.75% of culture-positive cases for which drug susceptibility testing was available for 2010. Any isoniazid resistance that was not multi-drug resistance was 3%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), was 2%. Other resistance (Not MDR or INH resistant) or missing testing to at least one first-line drug was 3%.

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Surveillance Slide Set 2010

Tuberculosis in the United States

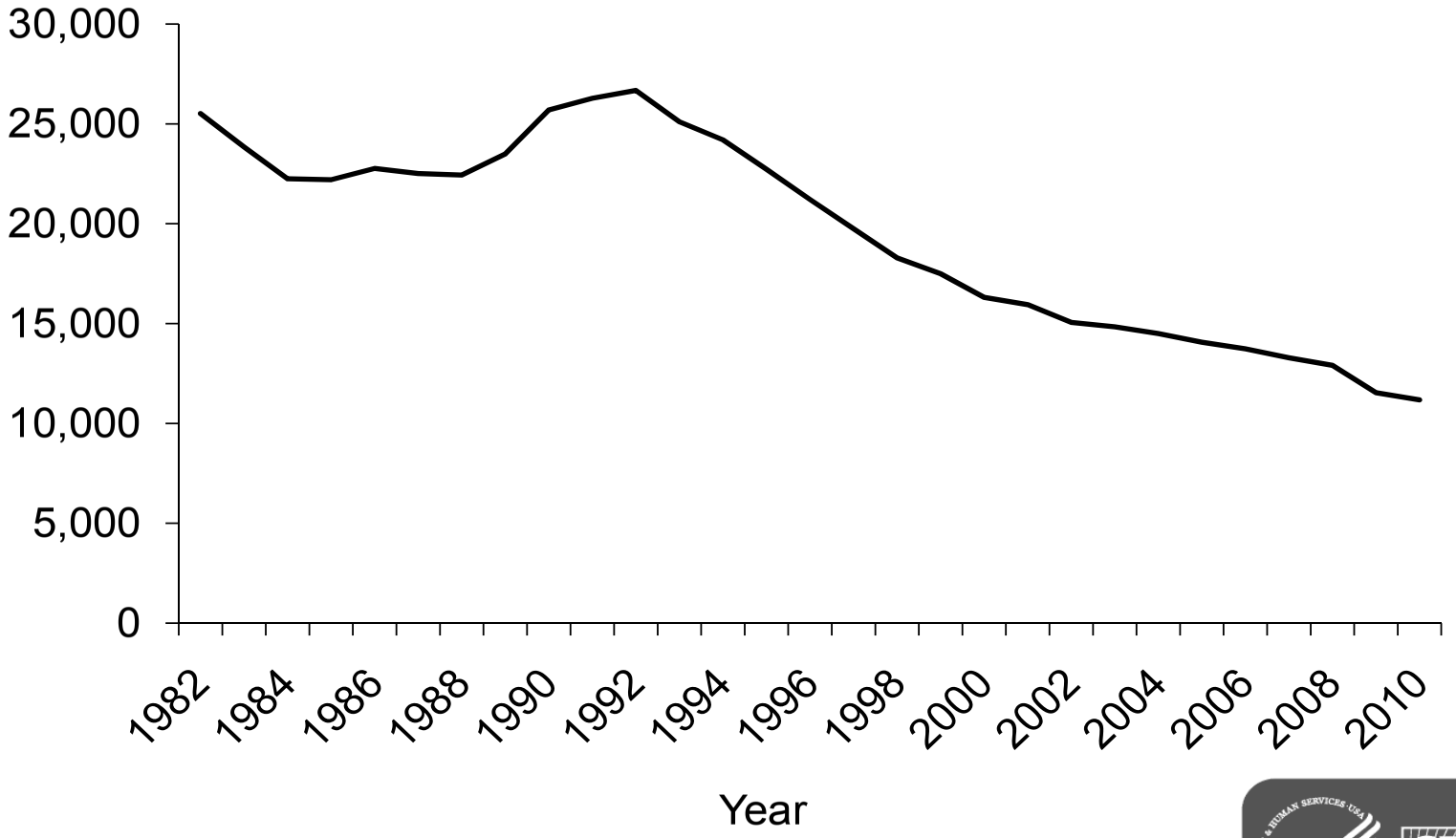
National Tuberculosis Surveillance System
Highlights from 2010

Division of Tuberculosis Elimination

Centers for Disease Control and Prevention

Surveillance Slide #2

Reported TB Cases
United States, 1982–2010*



*Updated as of July 21, 2011

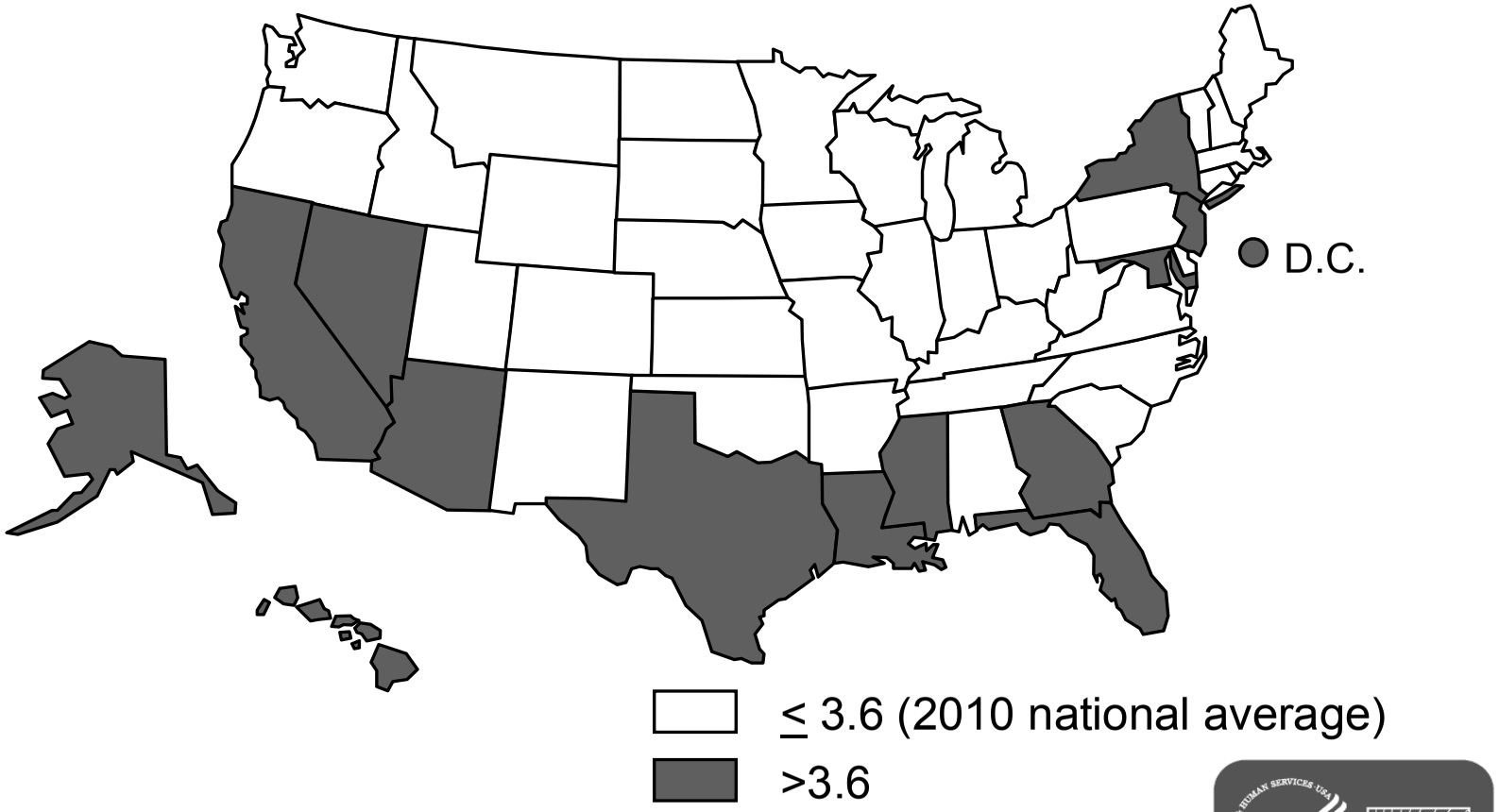
TB Morbidity
United States, 2005–2010

Year	No.	Rate*
2005	14,068	4.8
2006	13,732	4.6
2007	13,286	4.4
2008	12,905	4.2
2009	11,537	3.8
2010	11,182	3.6

*Cases per 100,000. Updated as of July 21, 2011

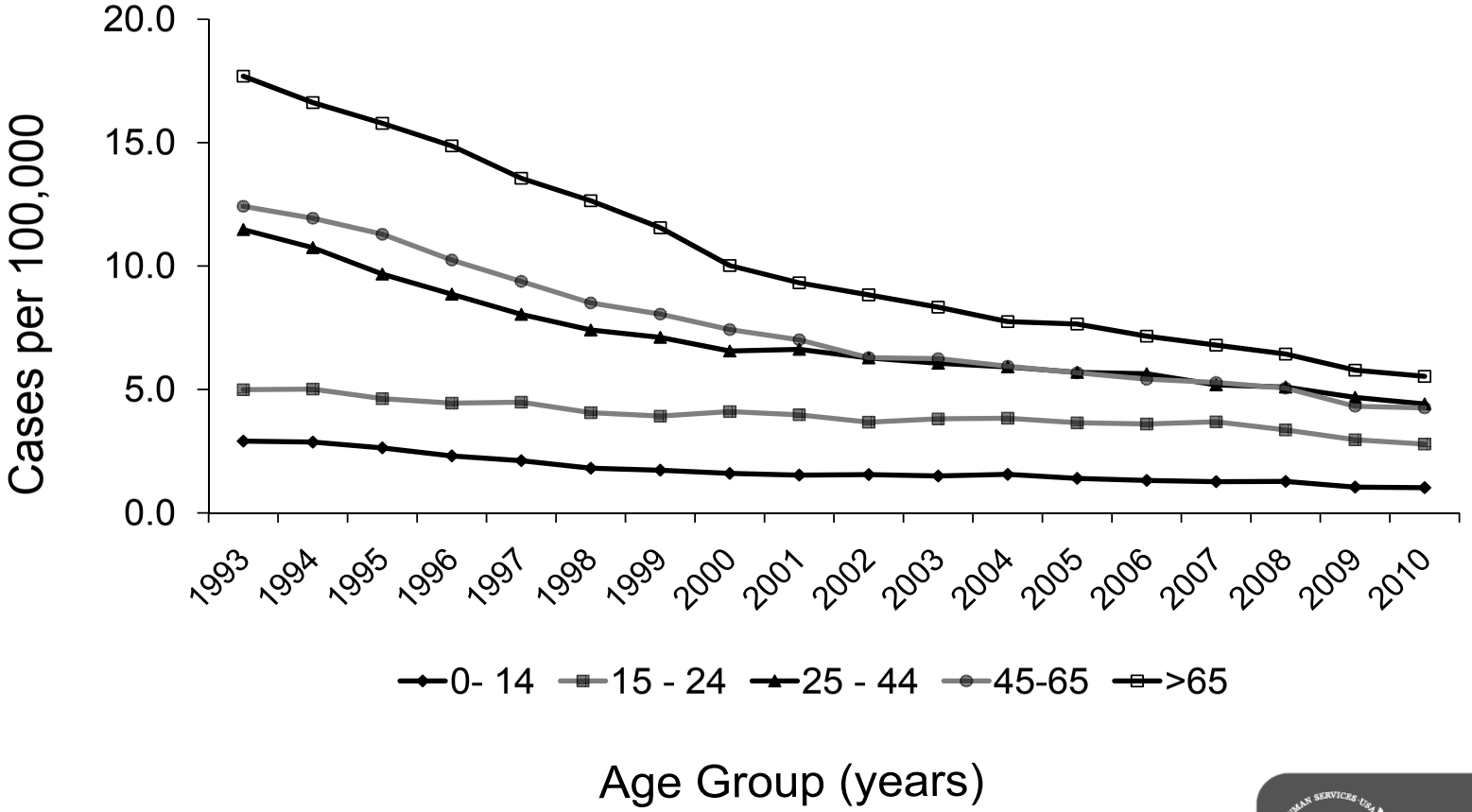
Surveillance Slide #4

TB Case Rates,* United States, 2010



*Cases per 100,000.

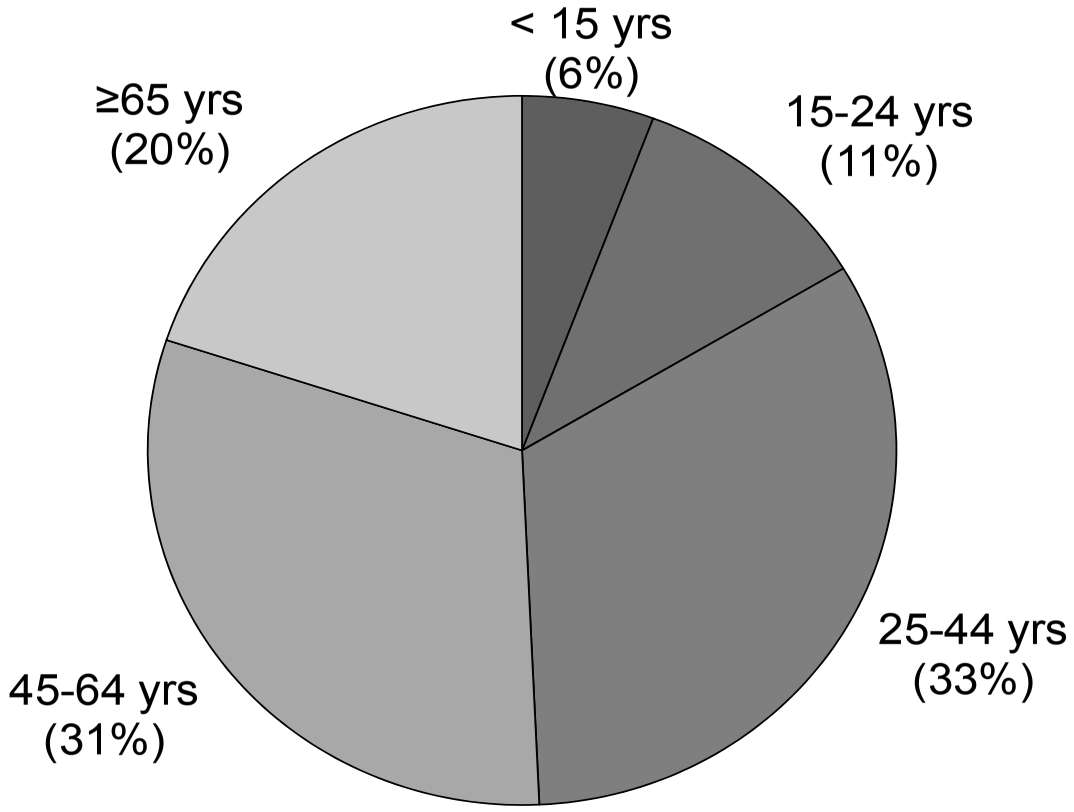
TB Case Rates* by Age Group
United States, 1993–2010



* Updated as of July 21, 2011

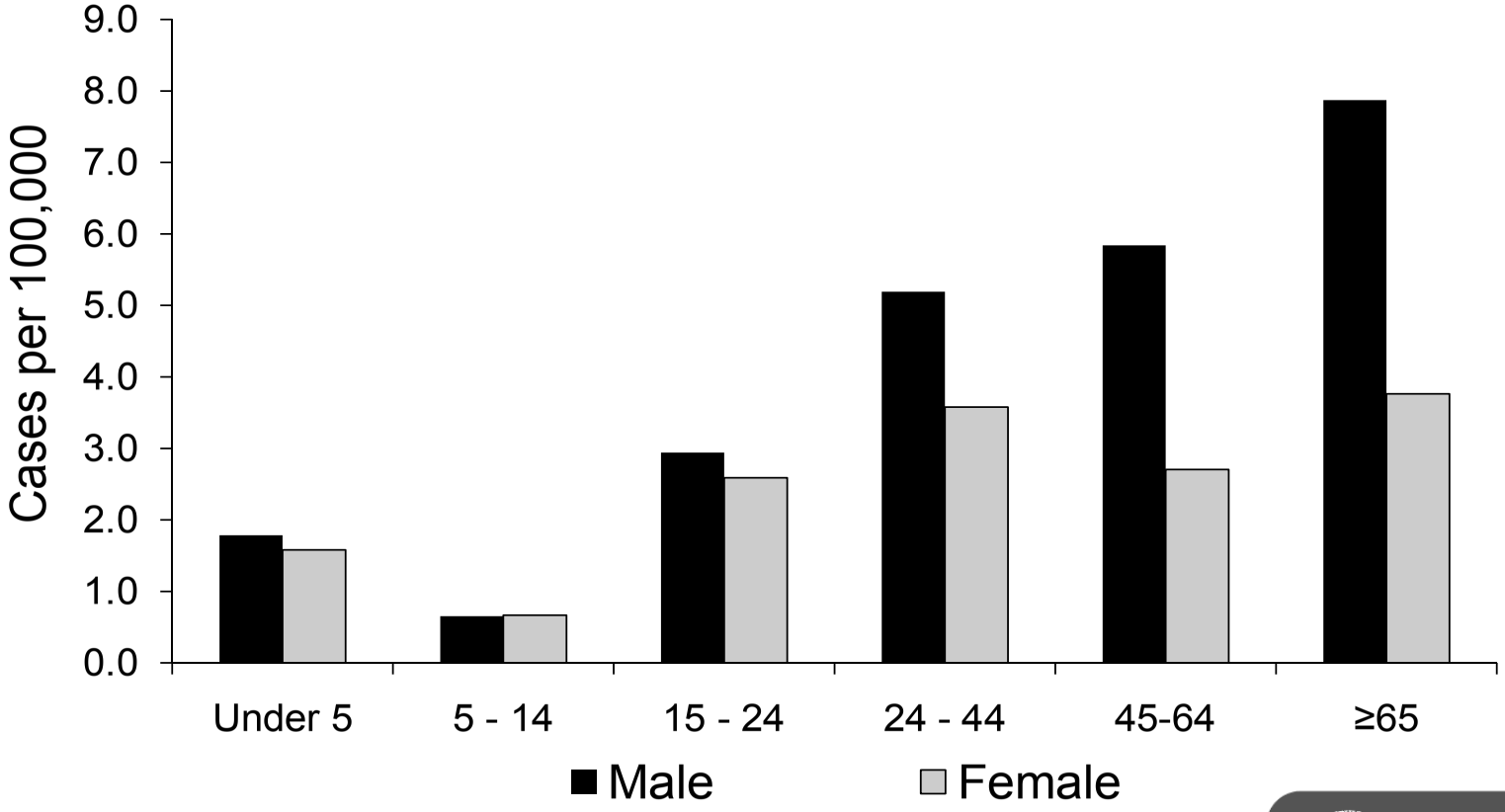
Surveillance Slide #6

Reported TB Cases by Age Group, United States, 2010

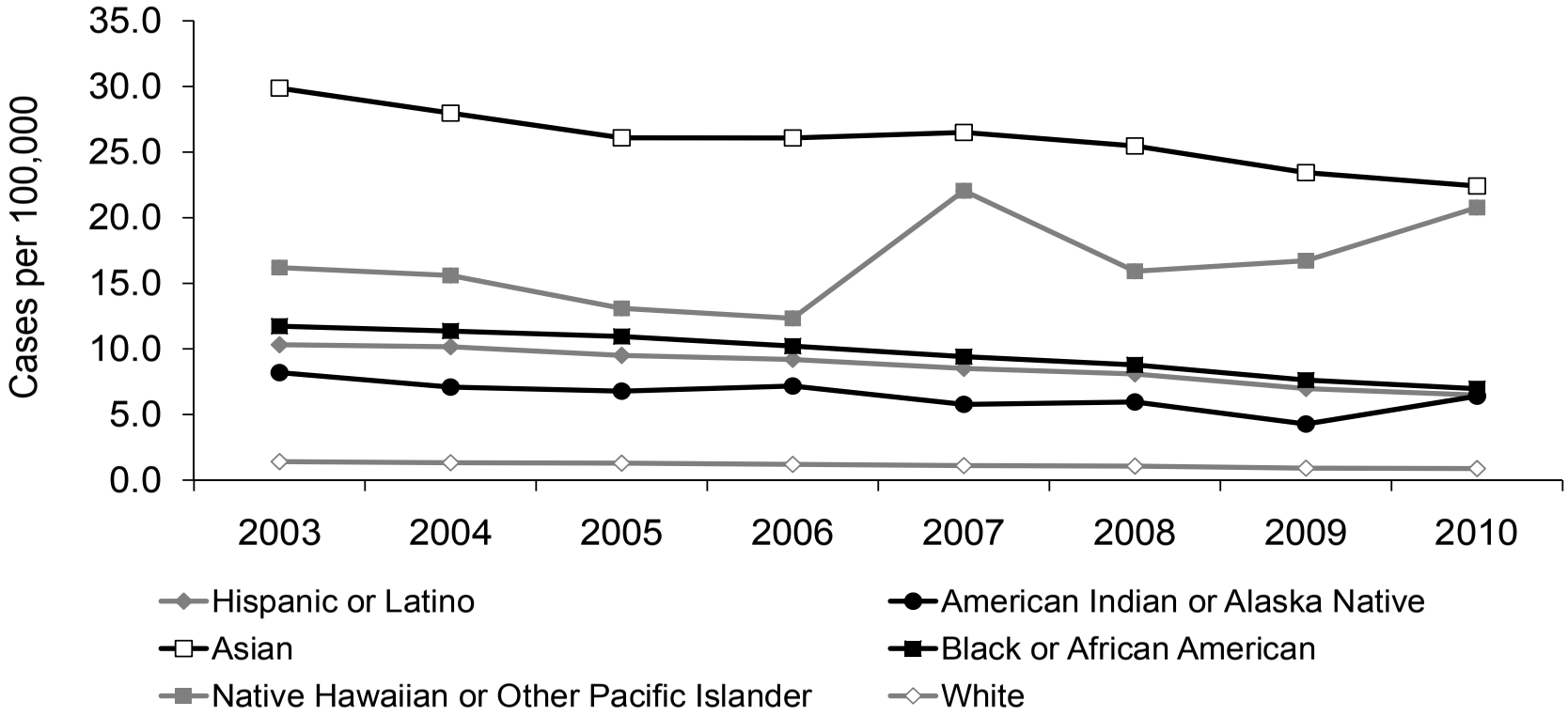


Surveillance Slide #7

TB Case Rates by Age Group and Sex, United States, 2010

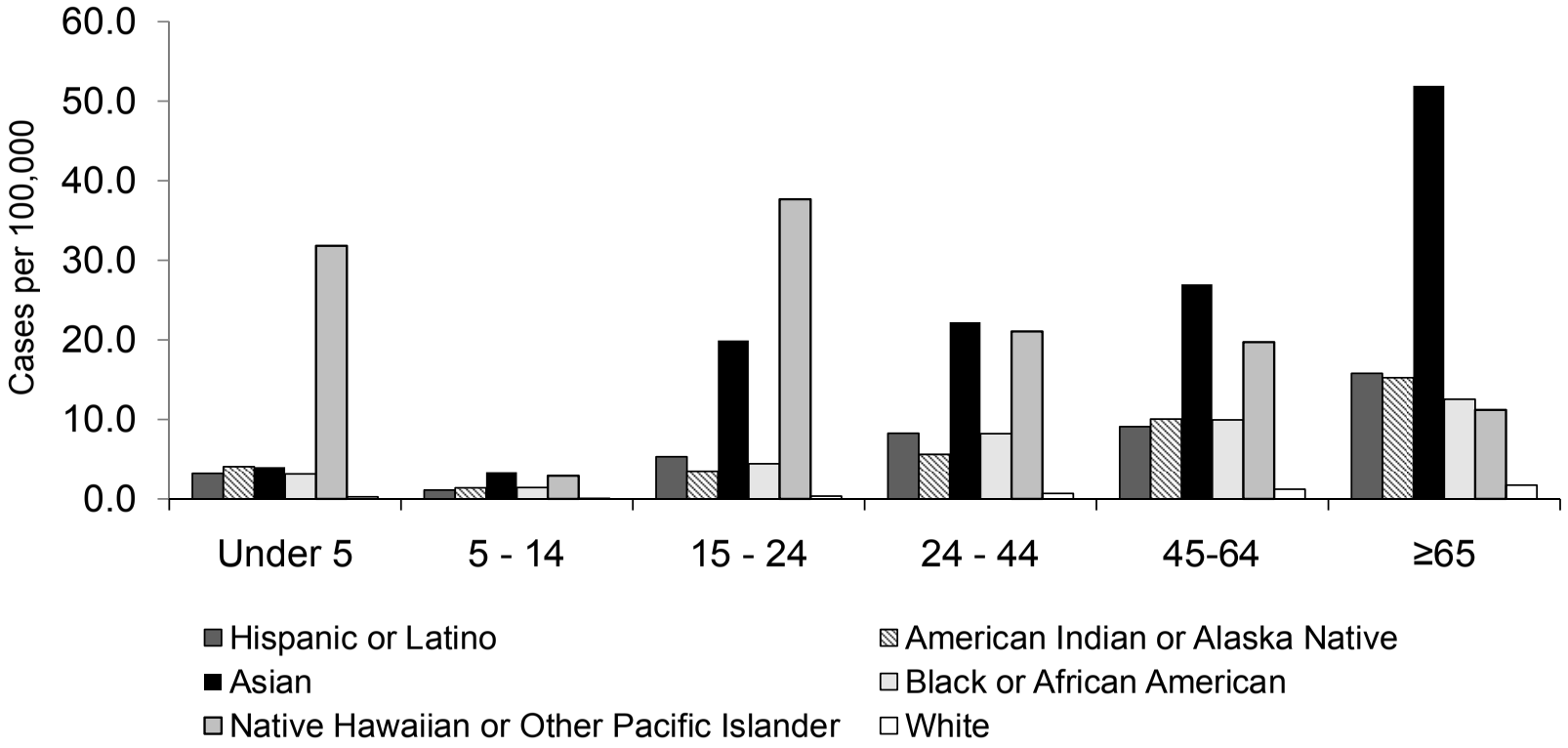


TB Case Rates by Race/Ethnicity*
United States, 2003–2010**



*All races are non-Hispanic.
**Updated as of July 21, 2011.

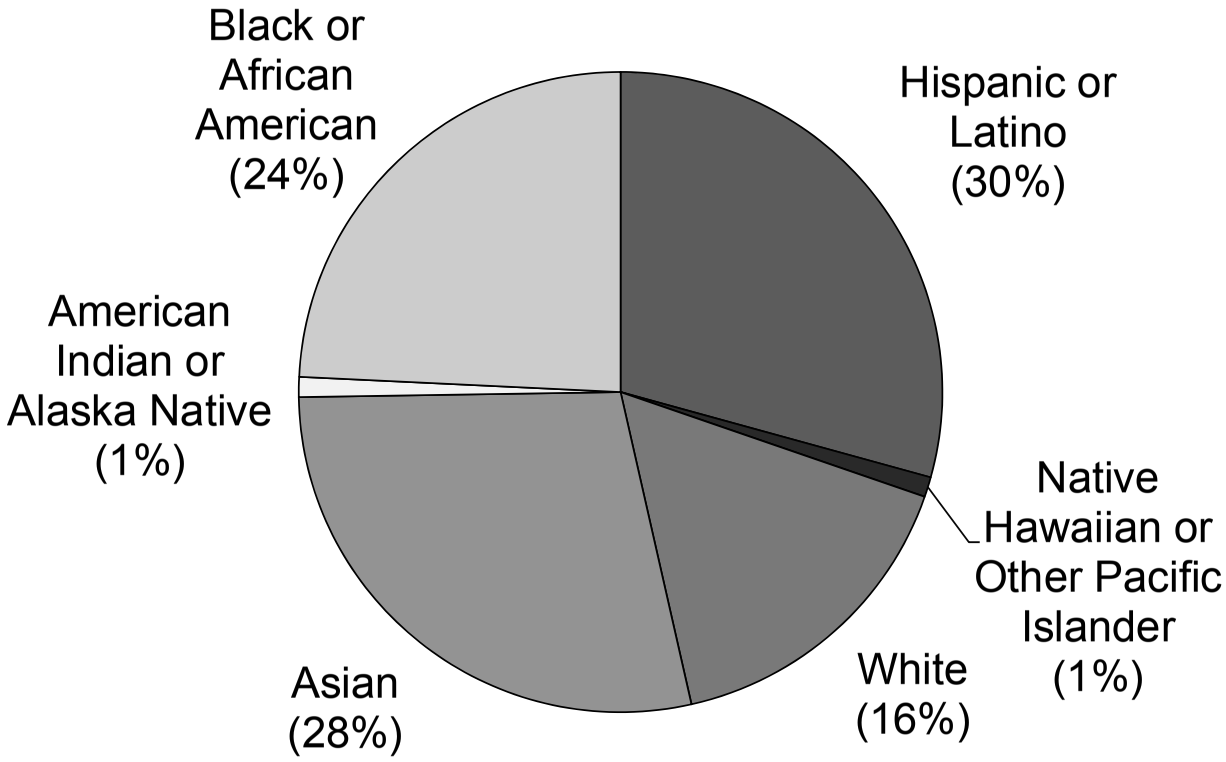
TB Case Rates by Age Group and Race/Ethnicity* United States, 2010



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

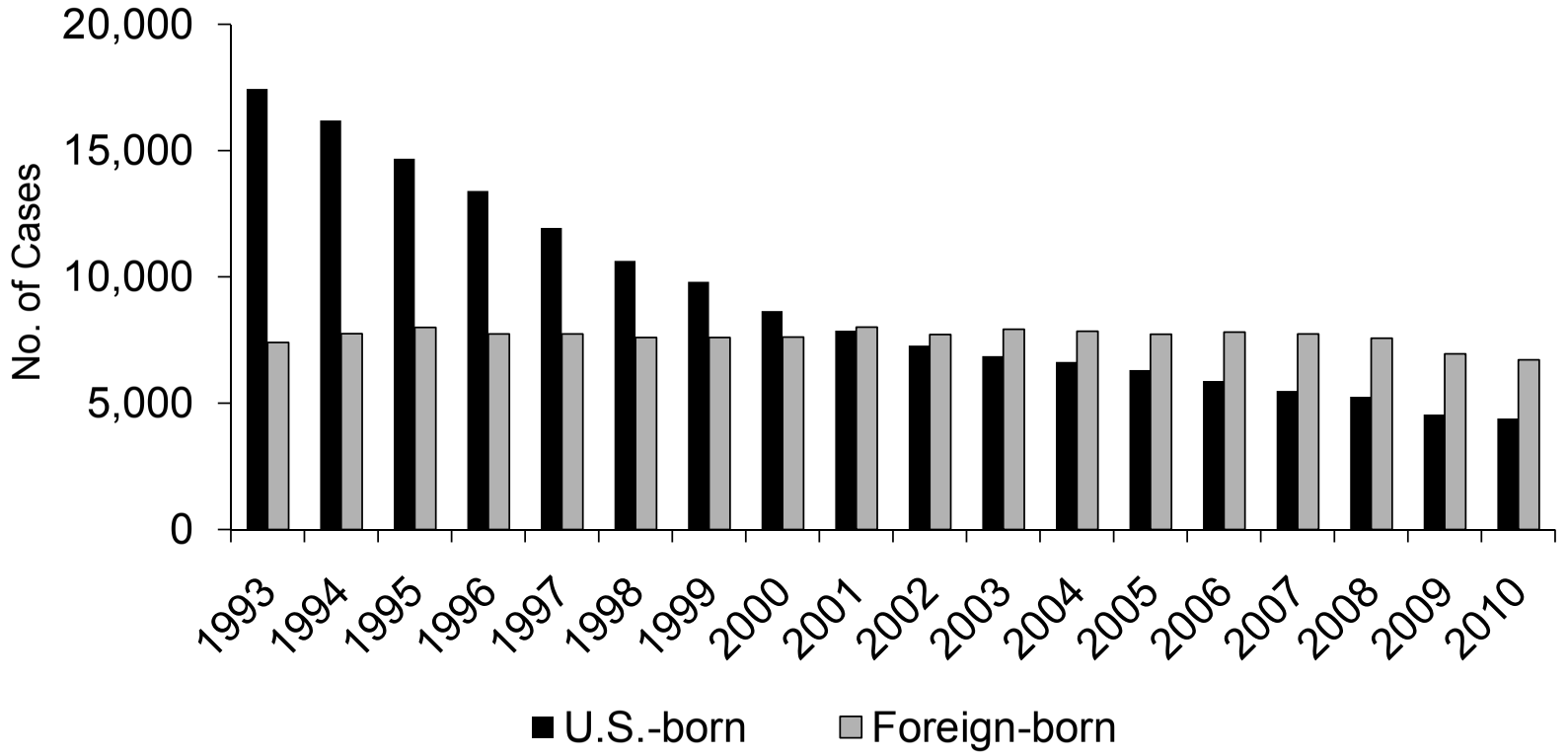
Surveillance Slide #10

Reported TB Cases by Race/Ethnicity*
United States, 2010



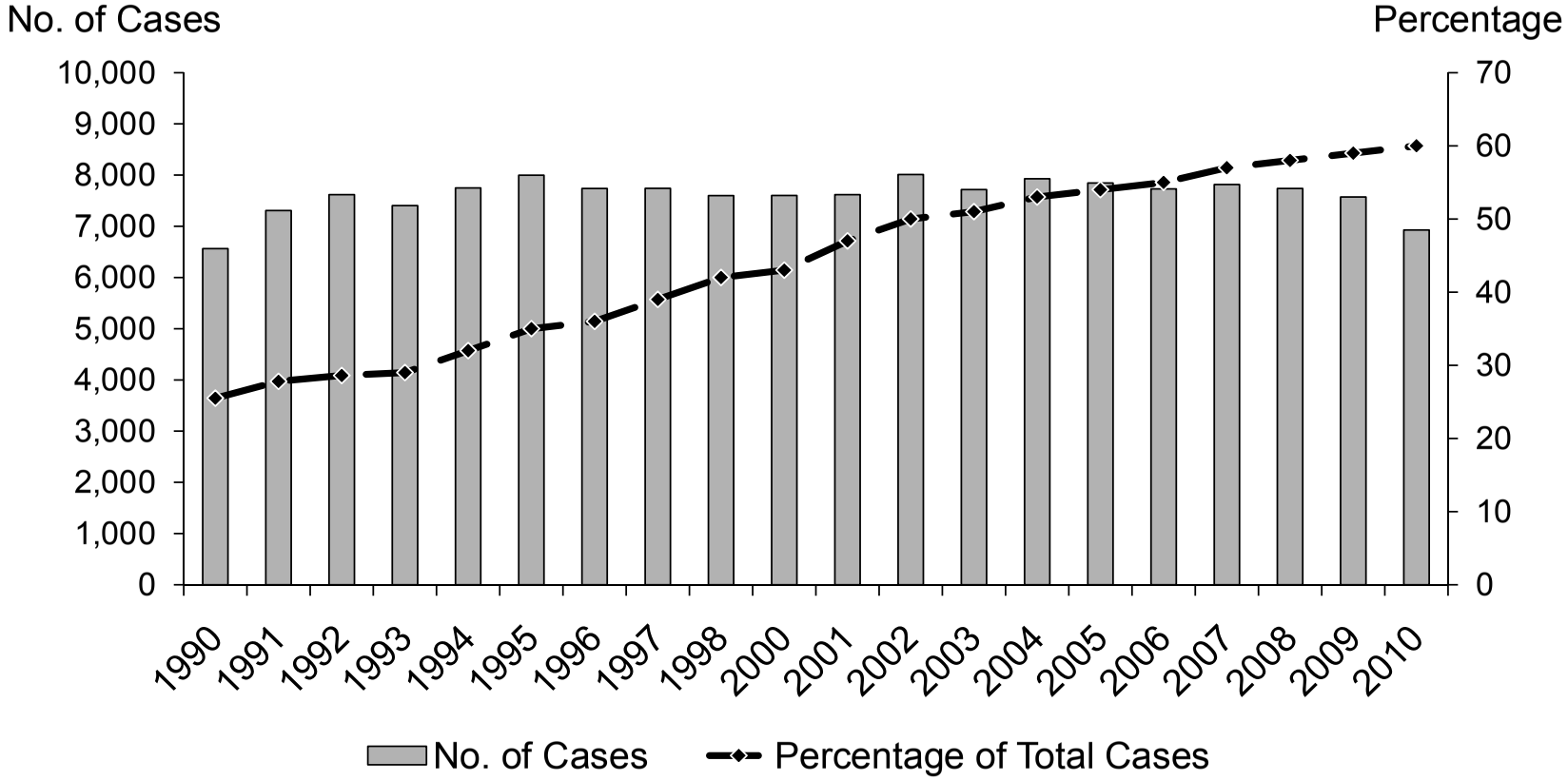
*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

Number of TB Cases in U.S.-born vs. Foreign-born Persons United States, 1993–2010*



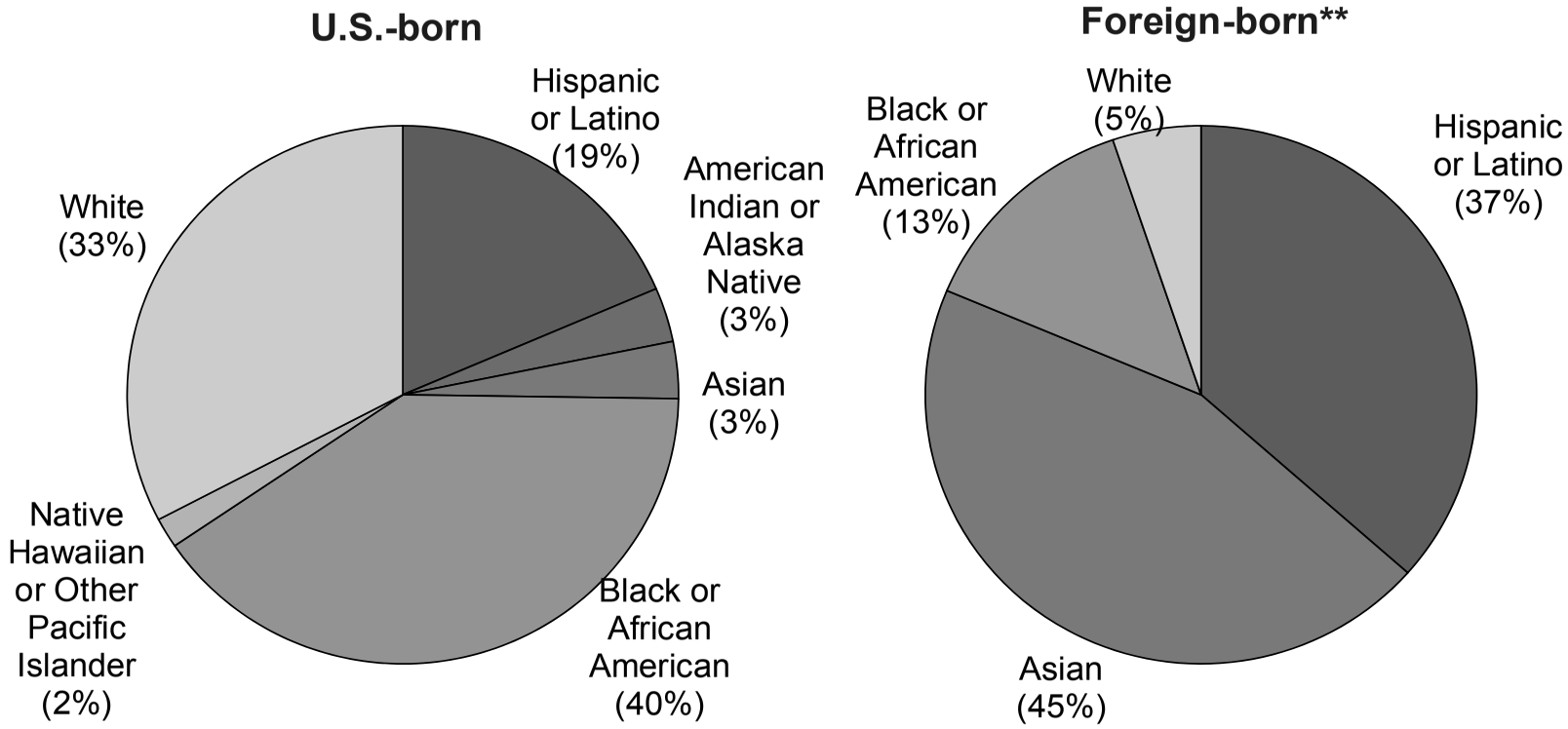
*Updated as of July 21, 2011

Trends in TB Cases in Foreign-born Persons United States, 1990 – 2010*



*Updated as of July 21, 2011

Reported TB Cases by Origin and Race/Ethnicity,* United States, 2010

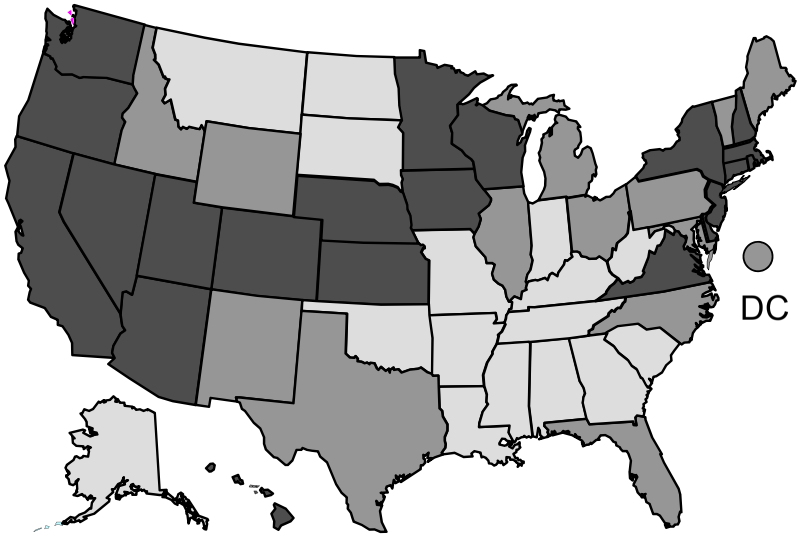


*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

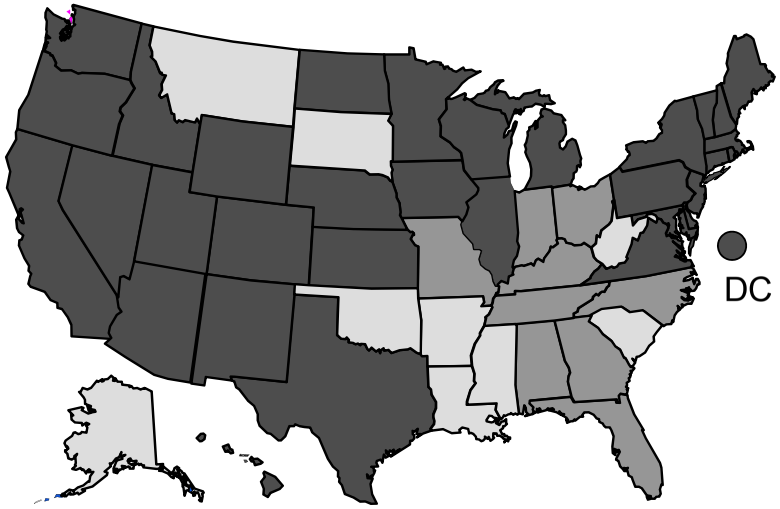
** American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

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

2000



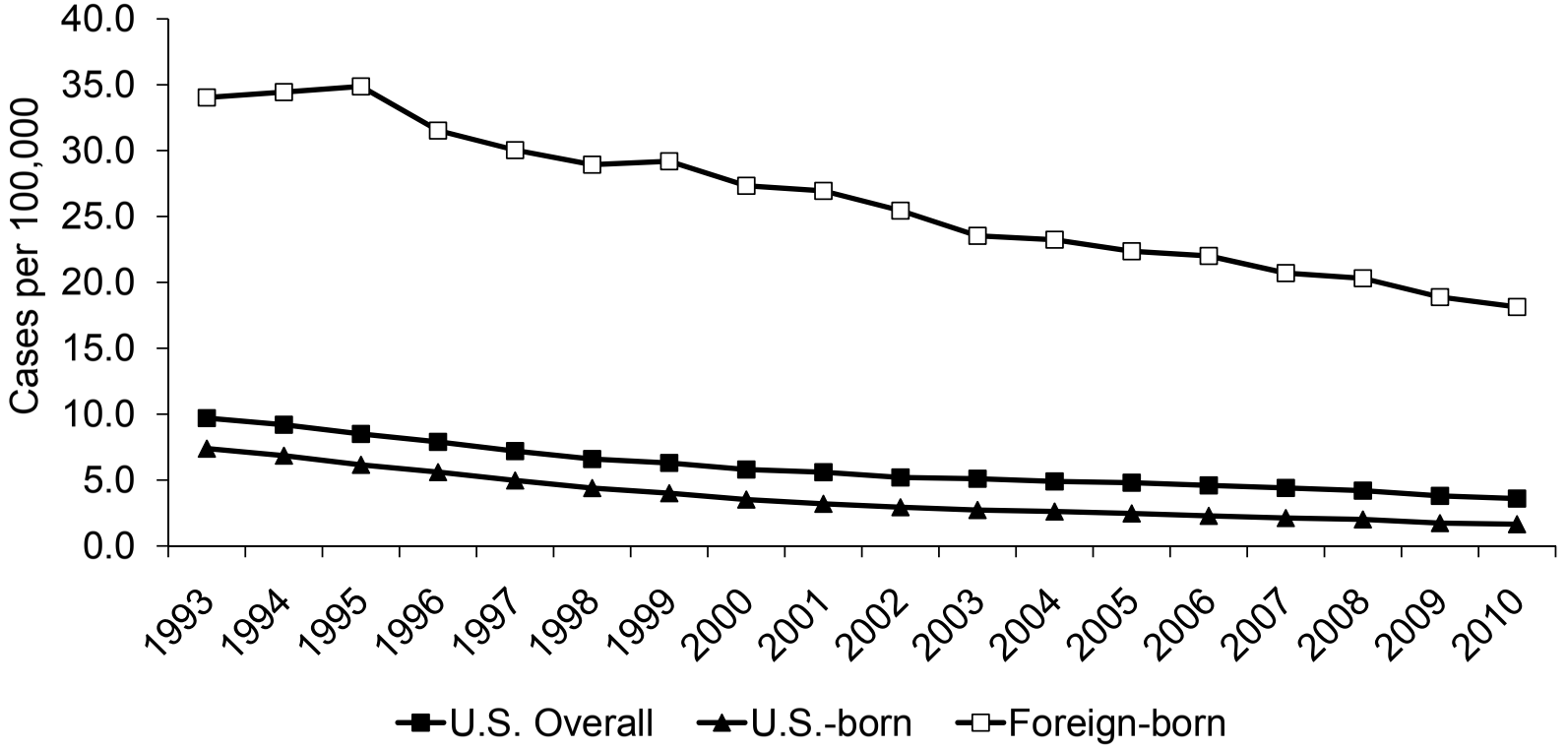
2010



≥50%
25%–49%
<25%

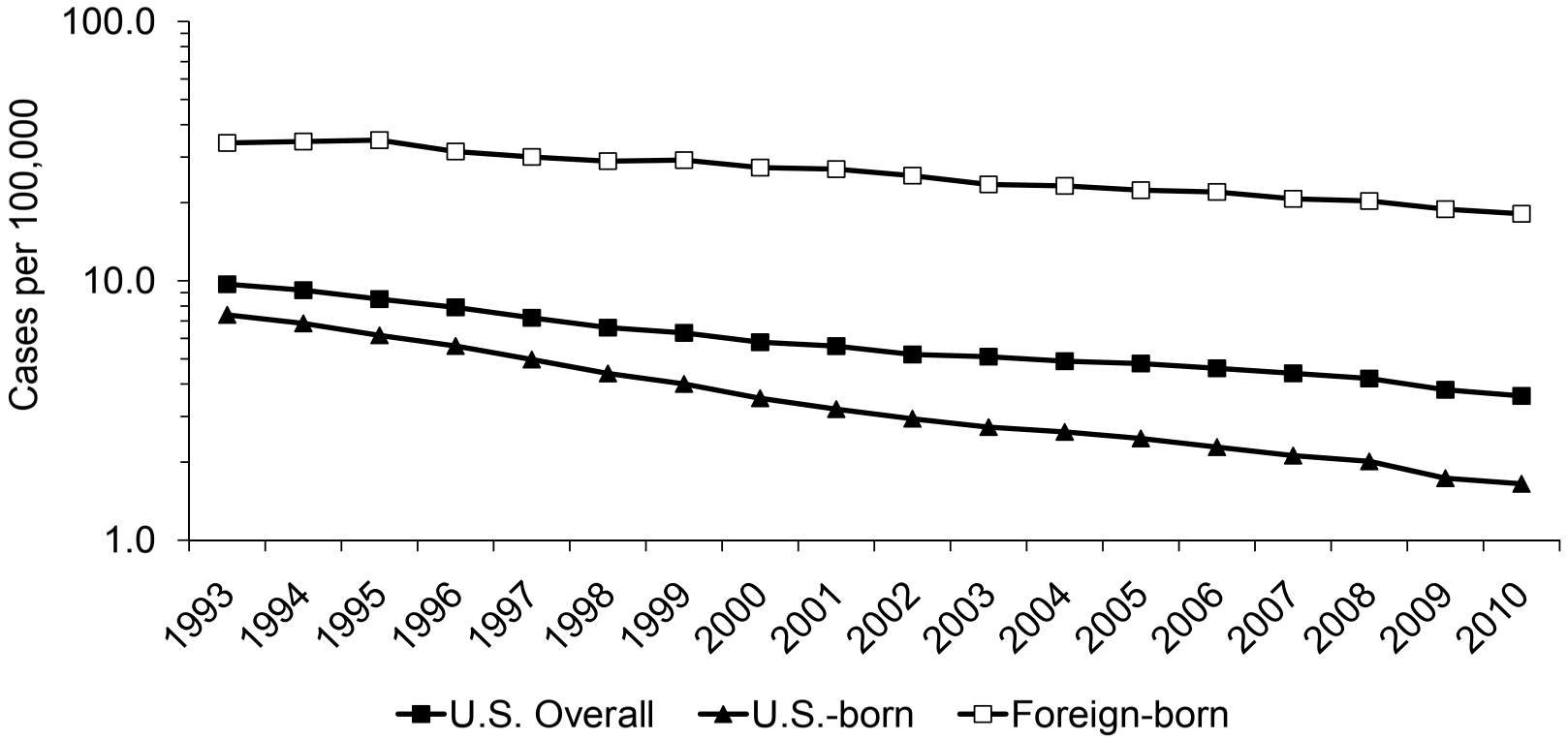
*Updated as of July 21, 2011

TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2010*



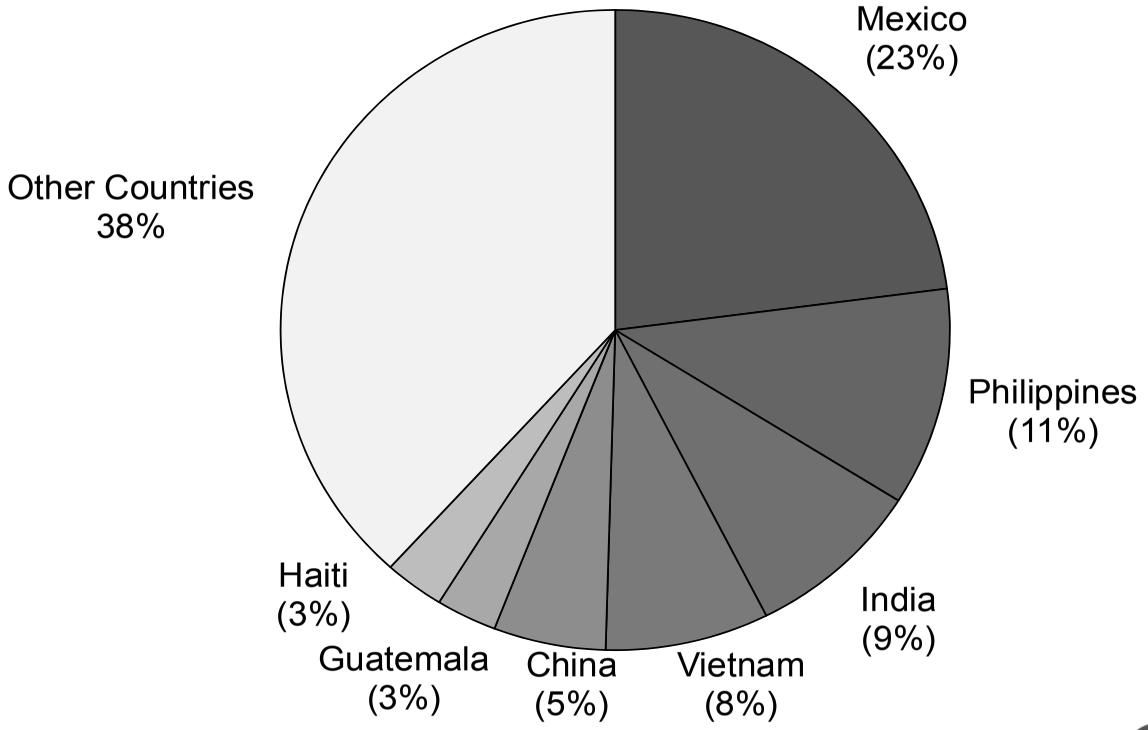
*Updated as of July 21, 2011

TB Case Rates in U.S.-born vs. Foreign-born Persons, United States*, 1993 – 2010**

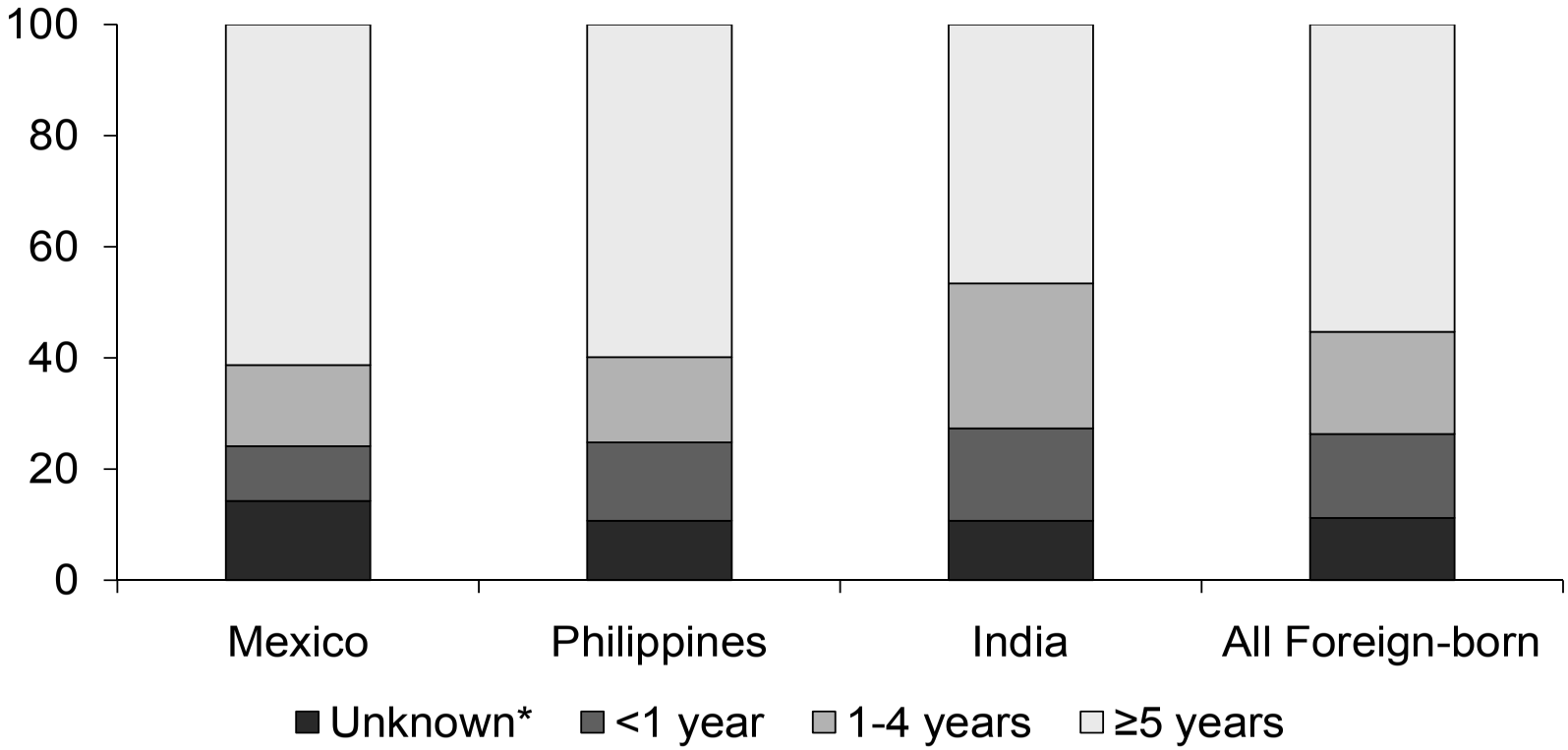


*Includes the same data as slide 15, but rates presented on a logarithmic scale.
**Updated as of July 21, 2011

Countries of Birth of Foreign-born Persons Reported with TB, United States, 2010

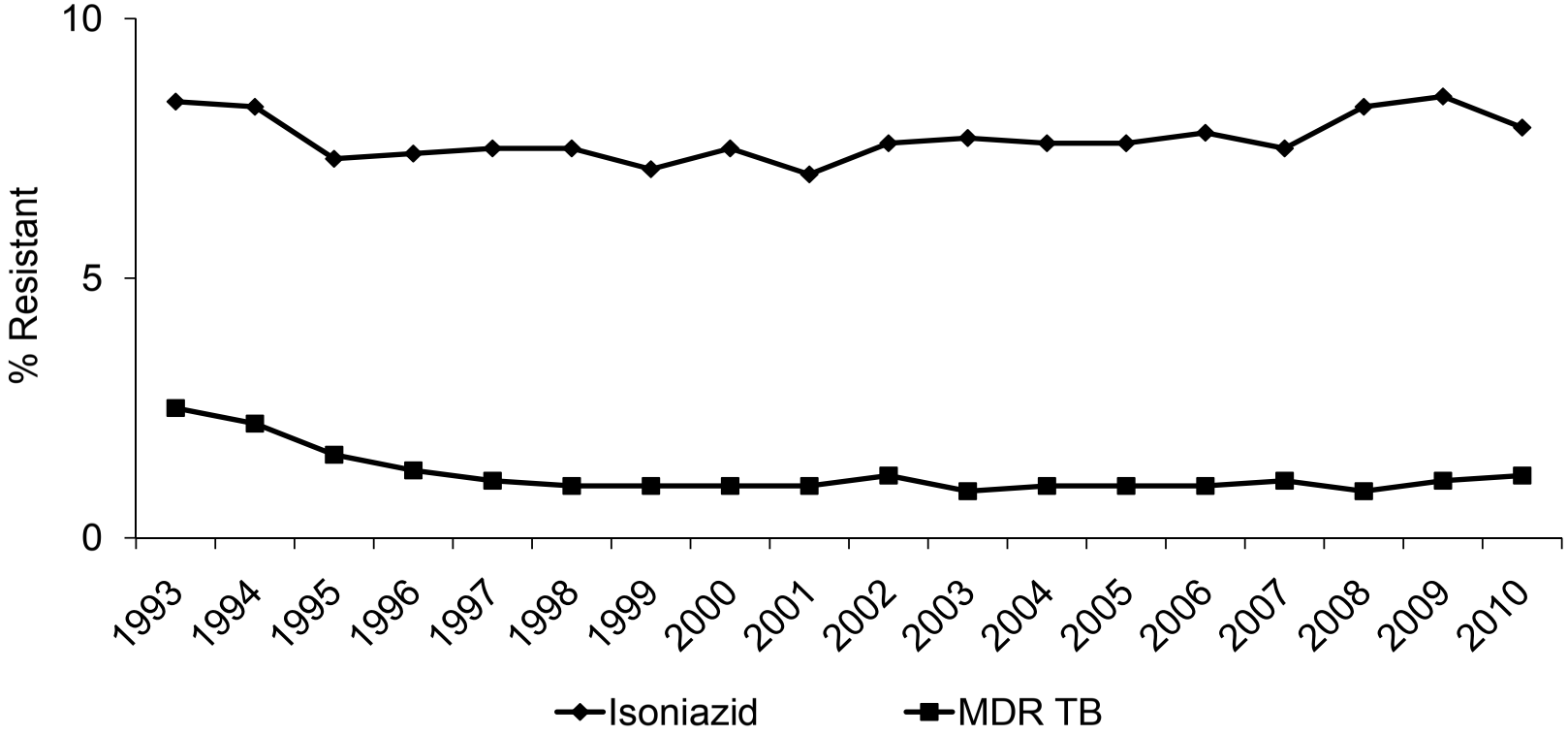


Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2010



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

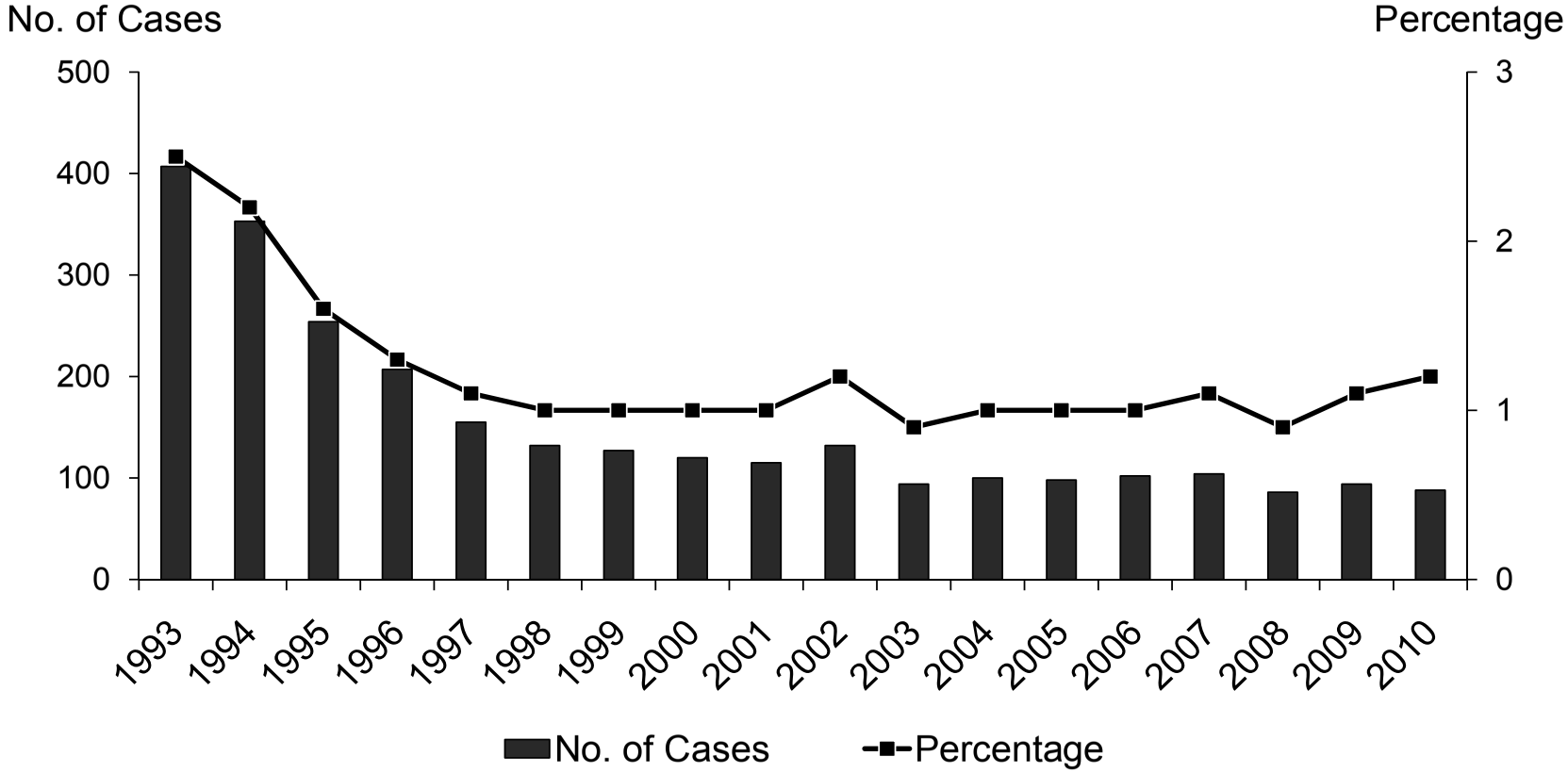
Primary Anti-TB Drug Resistance
United States, 1993 – 2010*



*Updated as of July 21, 2011

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

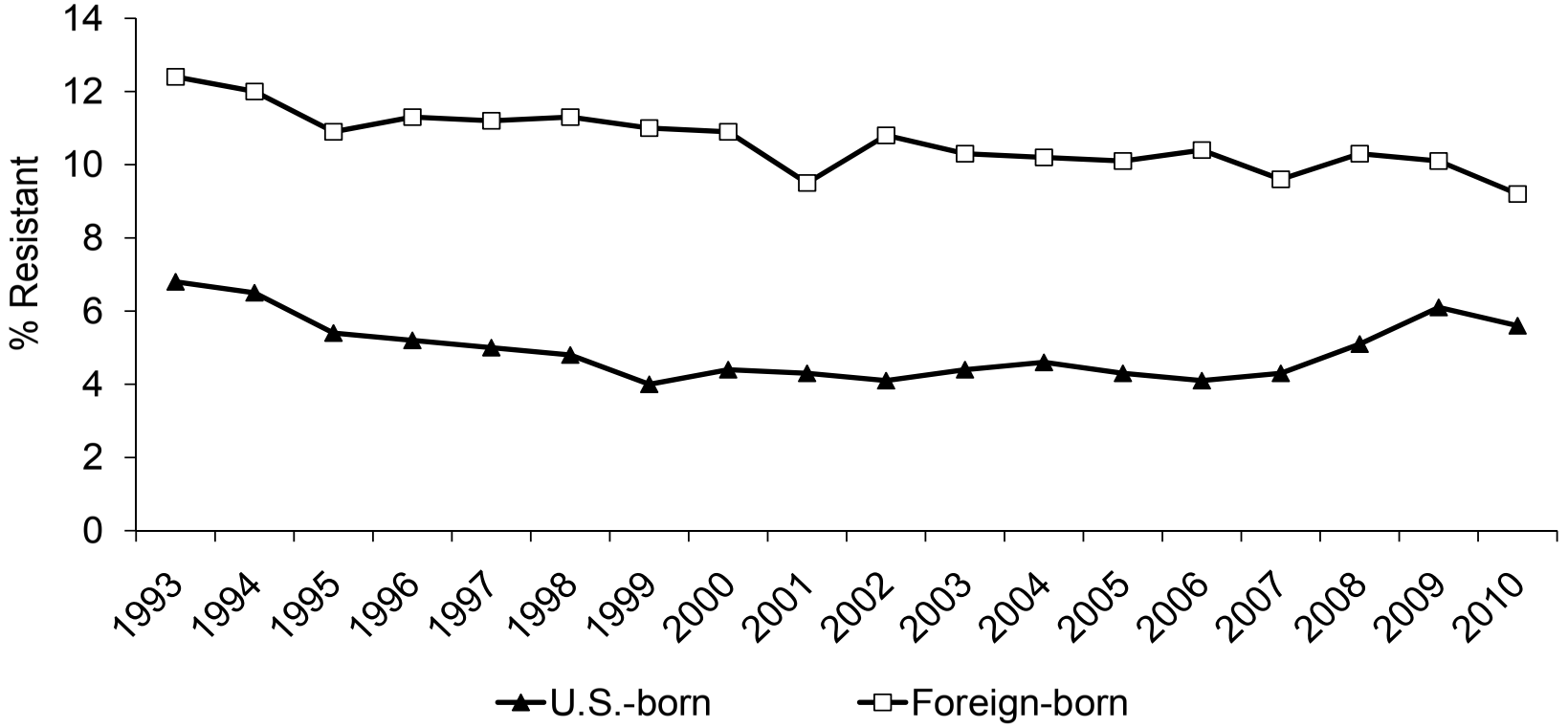
Primary MDR TB
United States, 1993 – 2010*



*Updated as of July 21, 2011

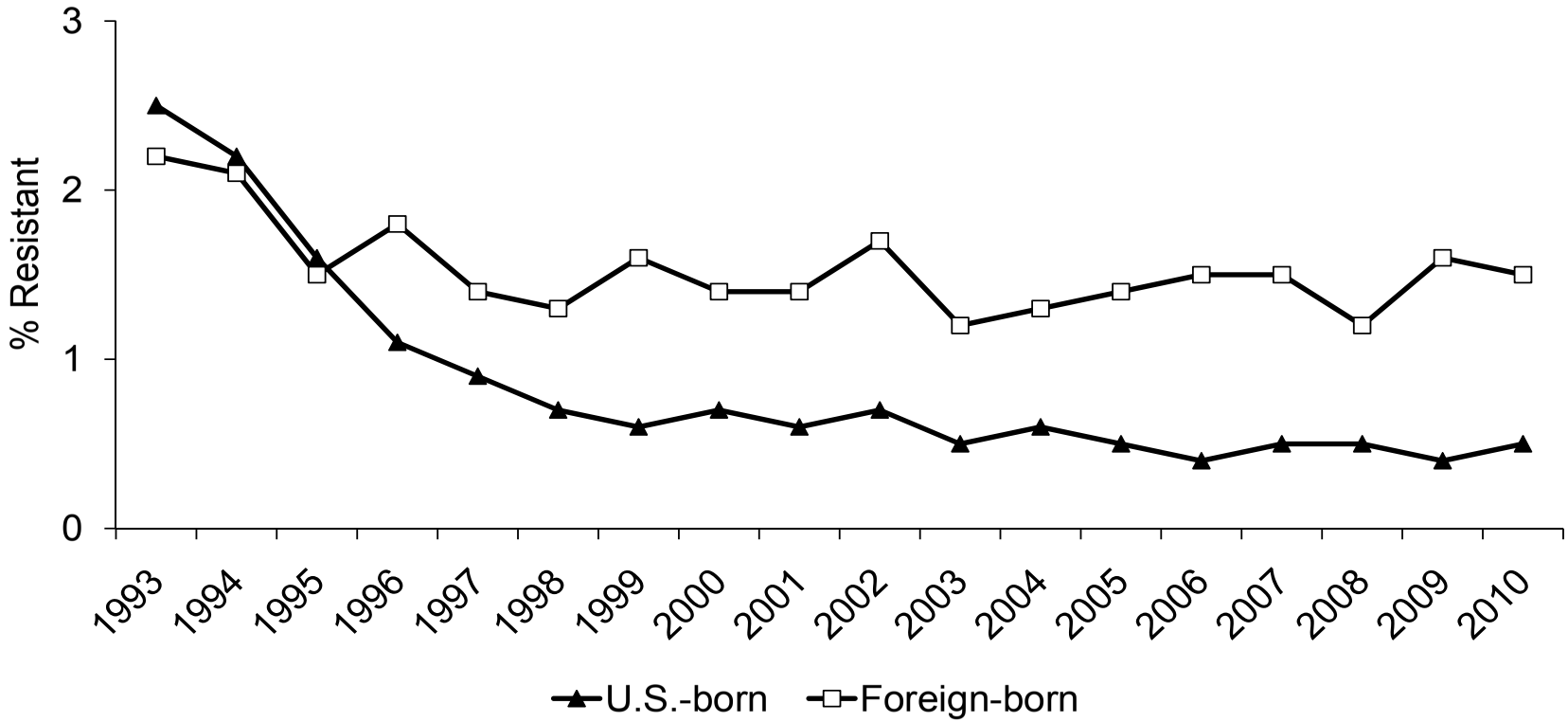
Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons United States, 1993 – 2010*



*Updated as of July 21, 2011
Note: Based on initial isolates from persons with no prior history of TB.

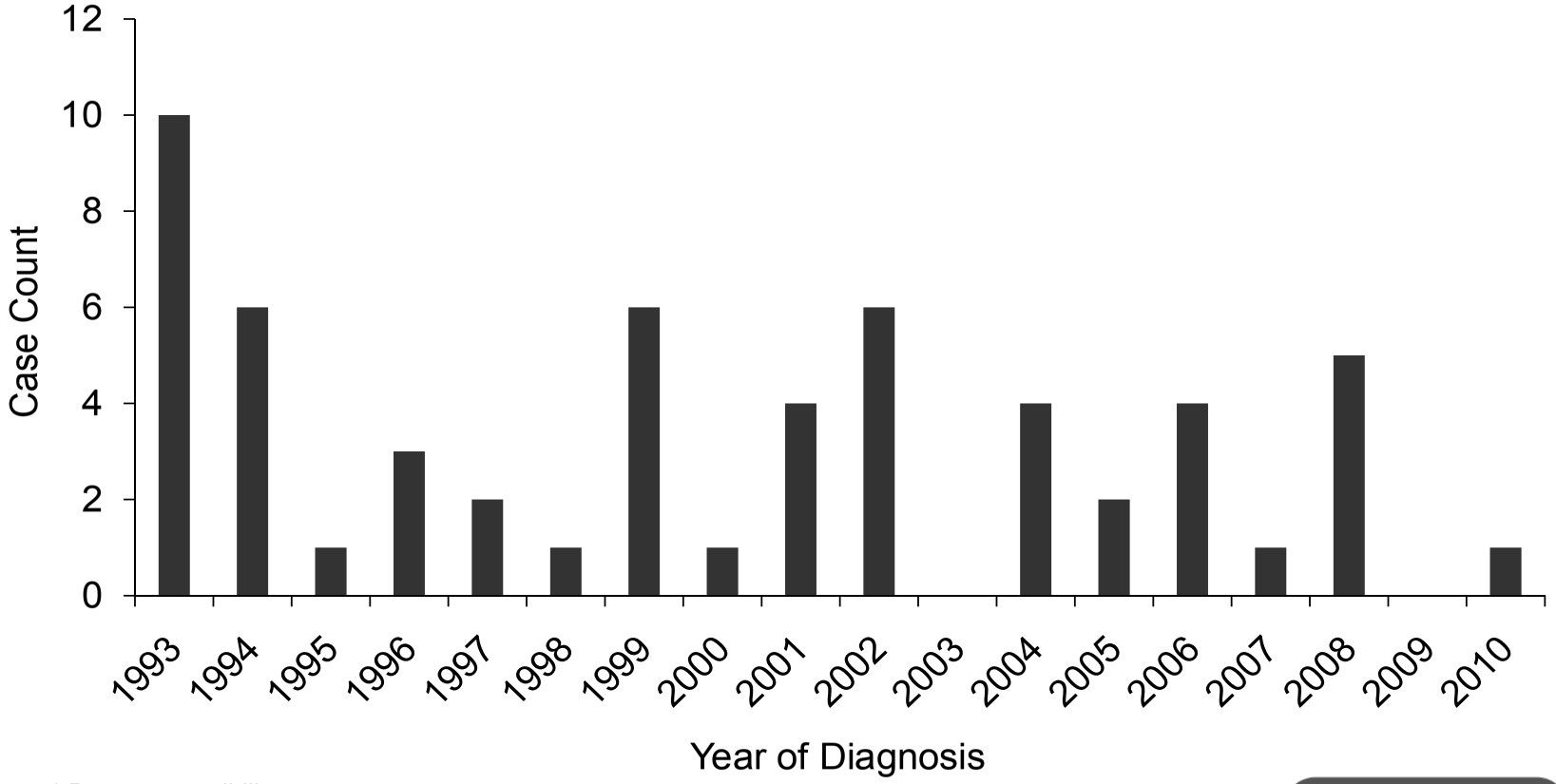
Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2010*



*Updated as of July 21, 2011

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 – 2010**

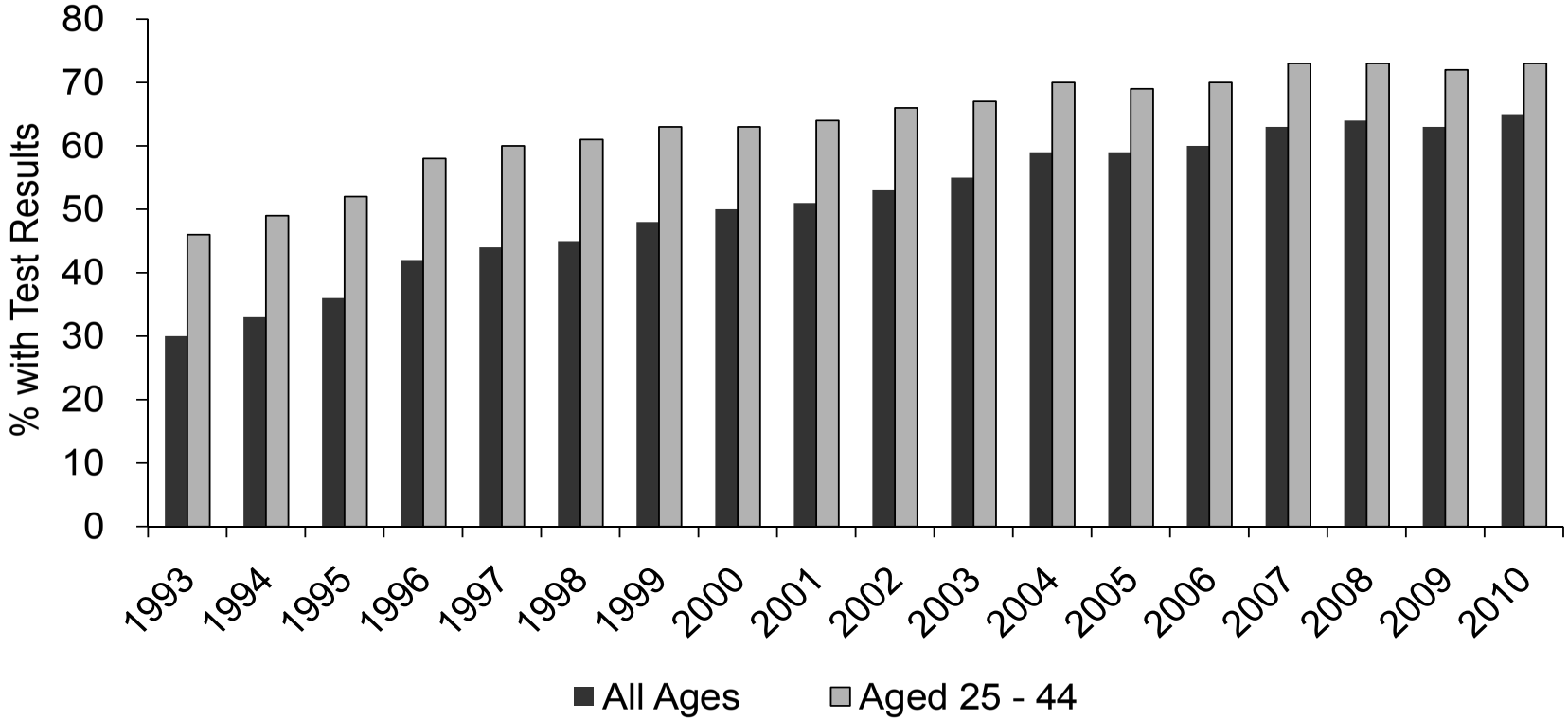


* Drug susceptibility test

** Updated as of July 21, 2011

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

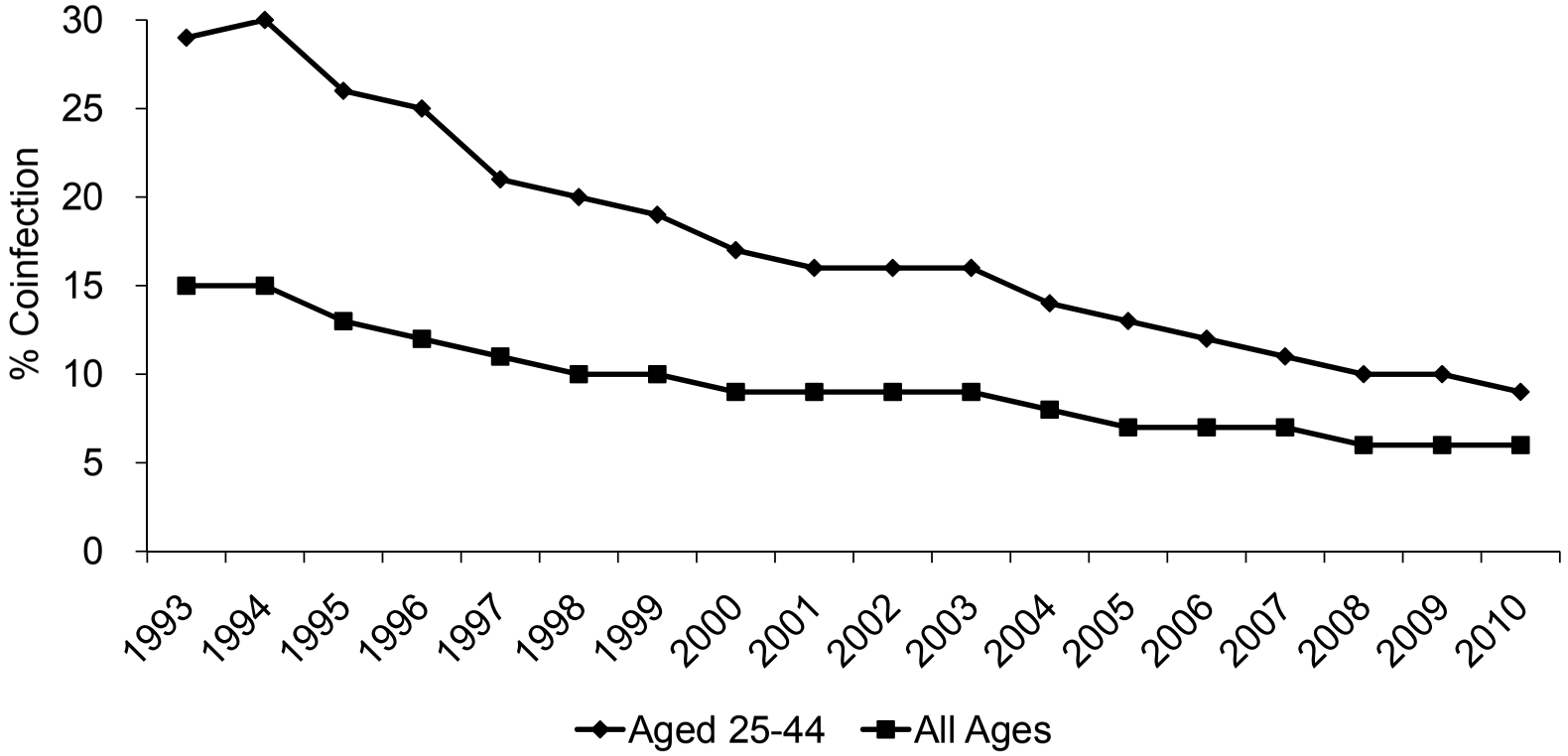
Reporting of HIV Test Results in Persons with TB by Age Group United States, 1993 – 2010*



*Updated as of July 21, 2011

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.

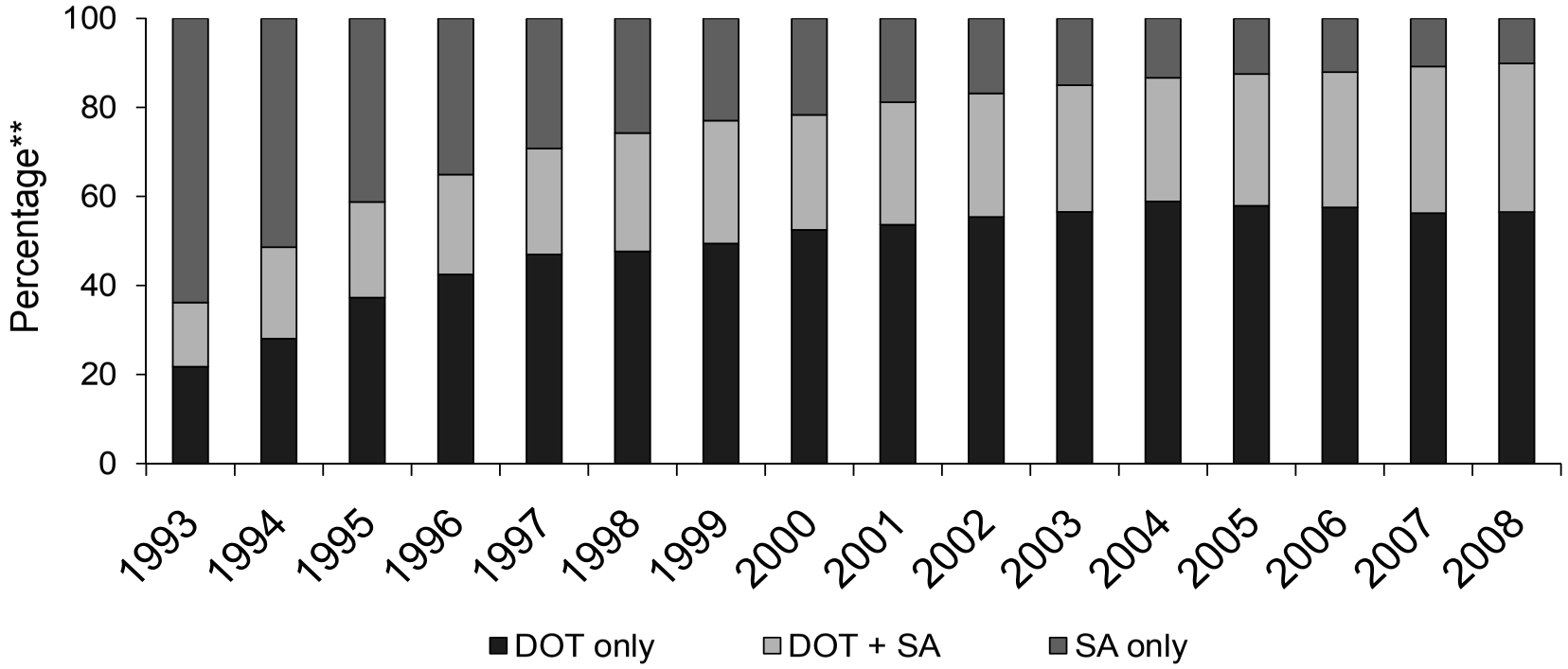
Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2010*



*Updated as of July 21, 2011

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

Mode of Treatment Administration in Persons Reported with TB United States, 1993 – 2008*

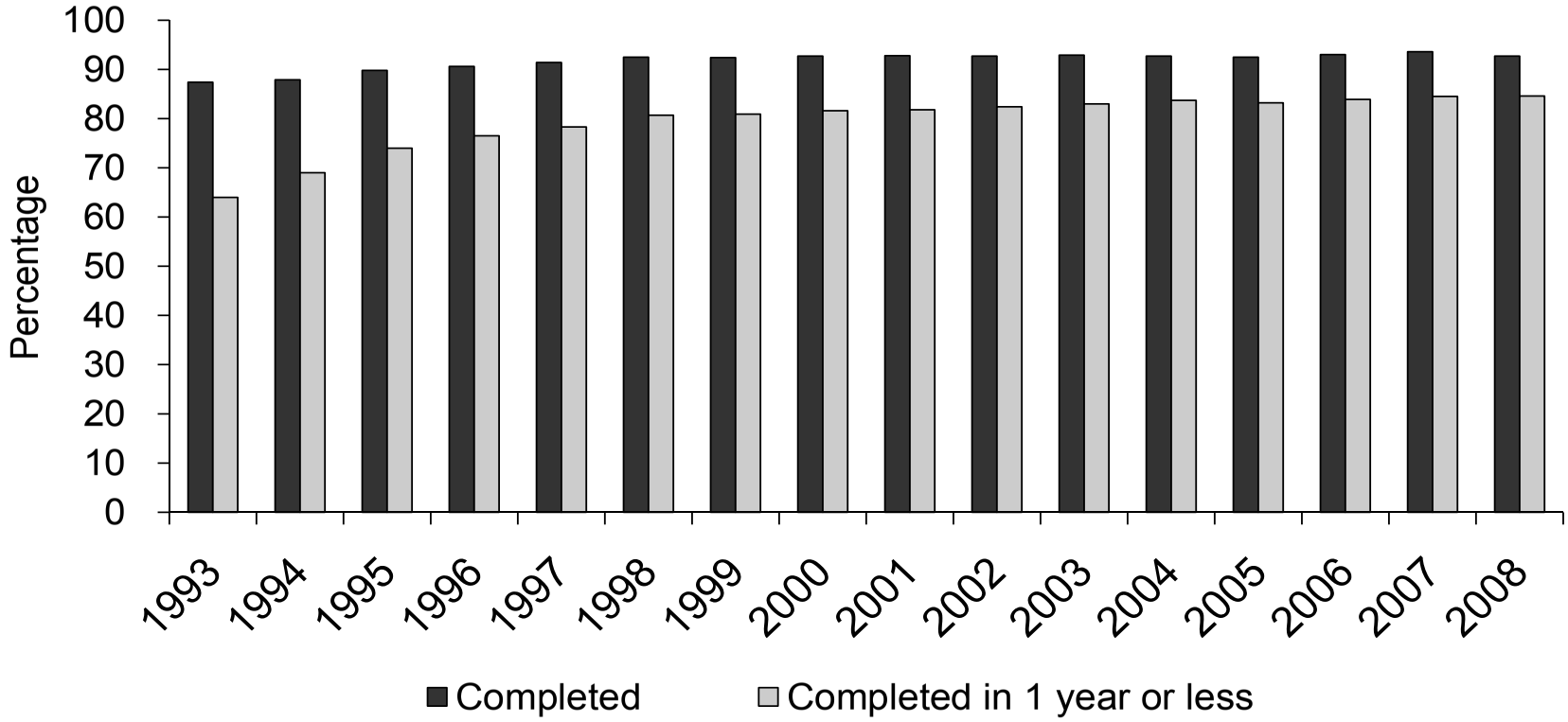


*Updated as of July 21, 2011. Data available through 2008 only.

**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 – 2008*



* Updated as of July 21, 2011. Data available through 2008 only.

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

Tuberculosis in the United States

National Tuberculosis Surveillance System Highlights from 2010

Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2010. 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 2010. 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 July 21, 2010. All case counts and rates for years 1993–2009 have been updated..

Slide 2. Reported TB Cases, United States, 1982–2010. 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 2010 marked the eighteenth 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%. In 2010, a total of 11,182 cases were reported from the 50 states and the District of Columbia (DC). This represents a decline of 3.1% from 2009 and of approximately 58.1% from 1992.

Slide 3. TB Morbidity, United States, 2005-2010. 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 14,068 in 2005 to 11,182 in 2010, and the TB rate decreased from 4.8 in 2005 to 3.6 in 2010.

Slide 4. TB Case Rates, United States, 2010. This map shows TB rates for 2010. Thirty-seven states reported a rate less than 3.6 TB cases per 100,000, the 2010 national average. Thirteen states and DC reported a rate above 3.6 TB cases per 100,000; these accounted for 67% of the national total in 2010 and have experienced substantial overall decreases in cases and rates from 1992 through 2010.

Slide 5. TB Case Rates by Age Group, United States, 1993–2010. This slide shows the last 18 years' declining trend in TB rates by age group. Declines of more than 50% occurred in the following age groups: persons 65 years and older (from 17.7 per 100,000 in 1993 to 5.5 in 2010); adults aged 45 to 64 years (from 12.4 to 4.3); adults aged 25 to 44 years (from 11.5 to 4.4); and in children under 15 years of age (from 2.9 to 1.0). The rate declined by 44% in those 15 to 24 years of age (from 5.0 to 2.8).

Slide 6. Reported TB Cases by Age Group, United States, 2010. This pie chart shows the age distribution of persons reported with TB in 2010. Six percent were children under 15 years of age, 11% were age 15 to 24, 33% were age 25 to 44, 31% were age 45 to 64, and 20% were at least 65 years old.

Slide 7. TB Case Rates by Age Group and Sex, United States, 2010. This slide graphs the TB rates in 2010 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 7.9 per 100,000 in men 65 years and older. The rates in men 45 years and older were approximately twice those in same-age women.

Slide 8. TB Case Rates by Race/Ethnicity, United States, 2003–2010. This slide shows the declining trend in TB rates by race/ethnicity during the last 8 years. Asians had the highest TB rates, which declined from 29.9 per 100,000 in 2003 to 22.4 in 2010, and had a percent decline over the time period of 25%. Rates also declined in the following racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 11.7 in 2003 to 7.0 in 2010 (-40%); among Hispanics, from 10.3 to 6.5 (-37%); among American Indians and Alaska Natives, from 8.2 to 6.4 (-22%); and among non-Hispanic whites, from 1.4 to 0.9 (-36%). Rates increased

among Native Hawaiian or Other Pacific Islanders from 16.2 in 2003 to 20.8 in 2010 (28%).

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, 2010. This slide presents TB rates in 2010 by age group and race/ethnicity. Risk increased with age across all but one racial and ethnic group, and 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, 94% of cases in the Asian group occurred in foreign-born persons, compared with 75% of cases in Hispanics and 34% 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, 2010. In 2010, 84% of all reported TB cases occurred in racial and ethnic minorities (29% in Hispanics, 28% in Asians, 24% 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 seventh year that Hispanics have constituted the single largest percentage of TB cases among all racial/ethnic groups and the third year that Asians have surpassed non-Hispanic blacks or African Americans as the second largest percentage of TB cases among all racial/ethnic groups.

Slide 11. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2010. This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2010. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 60% in 2010. 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 trend continued in 2010 with the number of foreign-born cases dropping to 6,720. The number in U.S.-born persons decreased from more than 17,000 in 1993 to 4,393 in 2010**.**

Slide 12. Trends in TB Cases in Foreign-born Persons, United States, 1989–2010. This slide shows trends in TB cases in foreign-born persons in the United States from 1990 through 2010. The percentage of TB cases accounted for by foreign-born persons increased from 26% in 1990 to 60% in 2010.

Slide 13. Reported TB Cases by Origin and Race/Ethnicity, United States, 2010. Among U.S.-born persons with TB in 2010, 40% 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, 45% were Asian, 37% 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, 2000 and 2010. The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 2000 and 2010 in these side-by-side maps. The number of states with less than 25% of their TB cases among the foreign-born decreased from 16 states in 2000 to 9 states in 2010. The number of states with at least 25-49% of cases among the foreign-born decreased from 14 states in 2000 to 9 states in 2010. However, the number of states that had 50% or more of their cases among the foreign-born increased from 21 states in 2000 to 33 states in 2010.

Slide 15. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2010. TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2010, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 1.6, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 18.1.

Slide 16. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2010. 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, 2010. This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2010, 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 2010 the seven top countries accounted for 62% of the total, with Mexico accounting for 23%; the Philippines, 11%; India, 9%; Vietnam, 8%; China, 5%; Guatemala, 3%; and Haiti, 3%. Persons from more than 135 other countries each accounted for 2% or less of the total, but altogether accounted for 38% 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, 2010. The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2010 is shown in these stacked bars. Overall, 15% had been in the United States for less than 1 year, 18% between 1 and 4 years, and 55% for at least 5 years. The distribution is also shown for the top three countries of birth: Mexico, the Philippines, and India. Among persons born in Mexico, 10% had been in the United States for less than 1 year, 15% between 1 and 4 years, and 61% for at least 5 years. Among persons born in the Philippines, 14% had been in the United States for less than 1 year, 15% between 1 and 4 years, and 60% for at least 5 years. Among persons born in India, 17% had been in the United States for less than 1 year, 26% between 1 and 4 years, and 47% for at least 5 years.

Slide 19. Primary Anti-TB Drug Resistance, United States, 1993–2010. Primary drug resistance is shown for the past 18 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%. However, 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 % up to 2009 when it increased to 1.1%. In 2010, it increased again to 1.2%.

Slide 20. Primary MDR TB, United States, 1993–2010. 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 2010. 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 88 to 132 cases, with 88 cases reported for 2010. Primary MDR TB, shown by the line, decreased from 2.5% in 1993 to approximately 1.1% in 1997, and remained approximately at 1.0% up to 2010 when it increased to 1.2%.

Slide 21. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2010. 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 9.2% in 2010. In U.S.-born persons, the percentage decreased from 6.8% in 1993 to 5.6% in 2010.

Slide 22. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2010. 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, 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 82% in 2010 (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 2009 and was 0.5% in 2010. The percentage among foreign-born persons has fluctuated year by year, while averaging approximately 1.5% from 1999 through 2010.

Slide 23. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2010. This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993-2010, reported as of July 21, 2010; 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. One case of XDR TB was reported in 2010. 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, 1993–2010. This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2010. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 65% in 2010. Among adults aged 25–44 years, the percentage increased from 46% in 1993 to 73% in 2010. The numerator includes TB patients with positive, negative, or indeterminate HIV test results and persons from California reported with AIDS (HIV test results are not reported to CDC from California).

Slide 25. Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2010. This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2010. 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 9% in persons aged 25 to 44 years during this period.

Slide 26. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2008. 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 56.5% in 2008, the latest year with available data. There was also an increase in 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). In 2008, 89.9% of patients received at least some portion of their treatment as DOT.

Slide 27. Completion of TB Therapy, United States, 1993–2008. 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 has remained at approximately 92-93% from 1998 through 2008. Completion in 1 year or less increased from 64% in 1993 to 85% in 2008, the latest year with available data. The current DHHS Healthy People 2010 objective is completion of therapy in 1 year or less in 90% 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 Surveillance[1]
(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.

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*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. 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. canetii, M. caprae, and M. pinnipedii*. Although *M. microti, M. canetii, 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. canetii, 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.

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*

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)

AND

- Current treatment with two or more anti-TB medications

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 Visitors[3]

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. canetii, M. caprae, and M. pinnipedii*. Although *M. microti, M. canetii, 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 waiver[3]

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

Class B1 TB, Pulmonary[3]

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, Extrapulmonary[3]

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

Class B2 TB, Latent TB Infection (LTBI) Evaluation[3]

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 Evaluation[3]

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 USCIS[2] 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.

Waivers[3] **-** A provision allows applicants undergoing pulmonary or laryngeal tuberculosis treatment to petition for a Class A TB with waiver. Waivers should be pursued for any immigrant or refugee who has a complicated clinical course and would benefit from receiving treatment of their tuberculosis in the United States. Applicants diagnosed with tuberculosis disease who are both smear- and culture-negative and will be traveling to the United States prior to start of treatment do not need to complete the waiver process.

References

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

Appendix C

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

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

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

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

References

1. ATS/CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. Am J Respir Crit Care Med 2000;161:S221-S247.

2. American Thoracic Society/CDC. Update: Adverse event data and revised American Thoracic Society/CDC recommendations against the use of rifampin and pyrazinamide for treatment of latent tuberculosis infection—United States, 2003. *MMWR* 2003;52(31):735-9.

3. ATS. An official ATS statement: hepatoxicity of antituberculosis therapy. Am J Respir Crit Care Med 2006;174:935–52.

4. CDC. Severe isoniazid-associated liver injuries among persons being treated for latent tuberculosis infection — United States, 2004–2008. MMWR 2010;59(8):224–9.

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