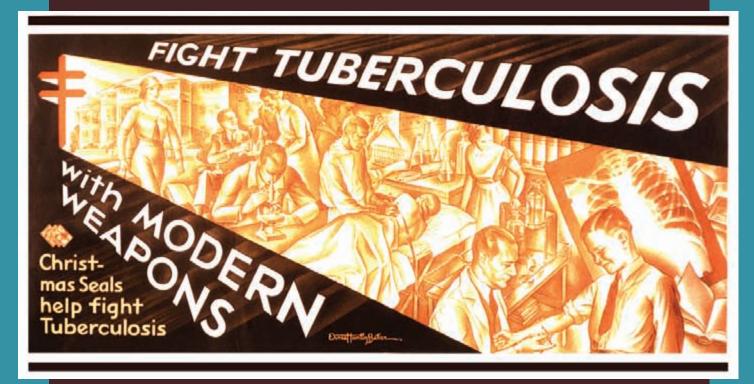
# Reported Tuberculosis in the United States, 2007



Vintage image, American Lung Association, circa 19<mark>35.</mark>





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# Reported Tuberculosis in the United States

2007

**Publication Year 2008** 

#### Reported Tuberculosis in the United States, 2007

Centers for Disease Control and Prevention Coordinating Center for Infectious Diseases National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Division of Tuberculosis Elimination

#### September 2008

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#### **Preface**

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). In January 1993, an expanded system was developed to collect additional information for each reported TB case in order to better monitor trends in TB and TB control. A software package (SURVS-TB) for data entry, analysis, and transmission of case reports to CDC was designed and implemented as part of the expanded TB surveillance system. In 1998, the Tuberculosis Information Management System (TIMS) replaced SURVS-TB.

This publication, Reported Tuberculosis in the *United States*, 2007, presents the summary data for TB cases reported to CDC, verified, and counted for 2007. It is similar to previous publications (see page xi, #19) and contains six major sections. The first section presents trends in the overall TB case counts and case rates by selected demographic and clinical characteristics. The second section presents overall case counts and case rates for the United States by selected demographic characteristics for 2007. In the third section, TB case counts and case rates are presented by state and other jurisdictions with tables of selected demographic and clinical characteristics. In the fourth section, data collected as part of the expanded system (e.g., initial drug resistance, HIV status) are presented by reporting area. Select tables report data from the Pacific and Caribbean jurisdictions. The fifth section 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. Finally, the sixth section 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 home page, which is accessible via the Internet at http://www.cdc.gov/tb/.

To help interpret the data, an Executive Commentary (page 3) and Technical Notes (page 9) have been included. In addition, the current case definition (MMWR 1997;46 [No. RR 10]:40-41) and "Recommendations for Counting Reported Tuberculosis Cases" are provided in Appendices A and B, respectively (page 119). The recommendations for counting TB cases, which update the original January 1977 recommendations, were first published in *Reported Tuberculosis in the United States*, 1996.

After the publication of updated Guidelines for Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection in April 2000<sup>1</sup>, DTBE, CDC, began receiving reports of serious adverse events (i.e., hospitalization or death) related to the use of a 2-month course of rifampin and pyrazinamide (RZ) for treatment of latent tuberculosis infection (TLTBI). Subsequently, DTBE requested and received reports and conducted on-site investigations of liver injury in persons on TLTBI, and treatment guidelines were revised accordingly.<sup>2</sup>

Severe adverse events among persons receiving TLTBI continue to be a public health concern, and data on the annual number and trends of such events are needed. To this end, DTBE organized a working group on TLTBI adverse events in September 2003. This working group was charged with the development of a national surveillance system with the following objectives:

- To assist public health officials, policy makers, and healthcare providers in the prevention of adverse events, and
- To serve as the basis for periodic evaluation of guidelines for TLTBI and revision of these guidelines as needed.

Development of the National System for Severe Adverse Events Associated with Treatment of LTBI has been implemented, and will include formal collaborations among CDC, FDA, and other participating agencies to ensure interagency notification of serious adverse events. Mechanisms for quality assurance and timely dissemination of data are also under development.

At present, DTBE urges hospices, hospitals, jails, prisons, and private medical offices to report, through their local health departments, all severe adverse events (e.g., liver injury, metabolic acidosis, anaphylaxis, seizure, severe dermatitis) leading to hospitalization or death of a person receiving TLTBI that occurred after January 1, 2004, to DTBE by telephone (404-639-8401) or e-mail (LManangan@cdc.gov).

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- 18. *Tuberculosis Statistics in the United States* (for years 1987–1992). Atlanta: CDC: 1989–1993.
- 19. Reported Tuberculosis in the United States (for years 1993–2006). Atlanta: CDC: 1994–2007.

Reports from 1999 through 2007 are available on the Internet at http://www.cdc.gov/tb/surv/default.htm.

#### State TB Statistics on the Internet\*

ΑL http://www.adph.org/tb/ AK http://www.epi.alaska.gov/id/tb.stm AR None AZhttp://www.azdhs.gov/phs/oids/tuberculosis http://ww2.cdph.ca.gov/programs/tb/Pages/default.aspx CA CO http://www.cdphe.state.co.us/dc/tb/tbhome.html CT http://www.dph.state.ct.us/bch/infectiousdise/tbstatis.htm DC None DE http://www.dhss.delaware.gov/dph/dpc/tuberculosis.html FLhttp://www.doh.state.fl.us/disease ctrl/tb/ GA http://health.state.ga.us/epi/tuber.asp http://www.hawaii.gov/health/tb HI IΑ http://www.idph.state.ia.us/adper/tb control.asp ID None http://www.idph.state.il.us/health/infect/reportdis/tb.htm  $\Pi$ IN http://www.in.gov/isdh/19662.htm KS http://www.kdheks.gov/tb/statistical information.html KY http://chfs.ky.gov/dph/tb.htm http://www.dhh.louisiana.gov/offices/?ID=273 LA MA http://www.mass.gov/dph/cdc/tb/index.htm MD http://www.edcp.org/tb/index.html ME http://www.maine.gov/dhhs/boh/ddc/tuberculosis control.htm http://www.michigan.gov/tb MI MN http://www.health.state.mn.us/divs/idepc/diseases/tb/stats.html MO http://www.ddhss.mo.gov/Tuberculosis.index.html http://www.dphhs.mt.gov/PHSD/epidemiology/commun-disease-epi-tuberculosis.shtml MT http://www.msdh.state.ms.us/msdhsite/static/14,0,125.html MS ND http://www.health.state.nd.us/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/DHHS/CDCS/LIBRARY/ Fact+Sheet/tb-reference.htm NJ http://www.state.nj.us/health/cd/tbhome.htm NM http://www.health.state.nm.us/PHD/Infectious Diseases/TB/2007 NM TB CaseRates.pdf NYC http://www.nyc.gov/html/doh/html/tb/tb-reports.shtml NV http://health.nv.gov/index.php?option=com content&task= view&id=208&Itemid=348 NY None OH http://www.odh.ohio.gov/healthstats/disease/tb/tb1.aspx OK http://www.health.ok.gov/program/tb/index.html OR http://oregon.gov/DHS/ph/tb/ PA http://www.health.state.pa.us/PHP/TB/tb.htm http://www.health.ri.gov/disease/communicable/tb/index.php RI PR http://www.salud.gov.pr/Programas/ProgramaTuberculosis/ Pages/DatosEstadisticosTuberculosis.aspx 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/idcu/disease/tb/statistics/ UT http://www.health.utah.gov/cdc/tb home.htm VA

VT None

WA http://www.doh.wa.gov/cfh/tb WI http://www.dhfs.wisconsin.gov/tb

WV http://www.wvtb.org

WY http://www.health.wyo.gov/PHSD/tb/index.html

http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/Programs/Tuberculosis/Epidemiology/

<sup>\*</sup>As reported to CDC by U.S. reporting area TB programs as of July 2008. Includes responses from the reporting areas of New York City (NYC) and Puerto Rico (PR).

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### **Executive Commentary**

#### **Executive Commentary**

#### **Highlights of 2007 Report**

Since 1953, in cooperation with state and local health departments, the Centers for Disease Control and Prevention (CDC) have 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 to CDC's Division of Tuberculosis Elimination. The following are the highlights of the 2007 report:

- 1. Updated case counts for each year from 1993 through 2006.
- 2. Case counts: 13,299 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2007, representing a 3.3% decrease from 2006 (Table 1).
  - Twenty-one states reported increased case counts from 2006 (Table 28).
  - California, Texas, New York, and Florida accounted for 48% of the national case total (Table 28).
  - For the fourth consecutive year, Hispanics (29%) exceeded all other racial or ethnic groups with the largest percentage of total cases (Table 2).
  - For the first time, Asians (26%) matched non-Hispanic blacks or African-Americans<sup>1</sup> (26%) as the second largest racial or ethnic group.
  - Blacks or African-Americans born in the United States represented 45% of TB cases in U.S.-born persons and accounted for approximately 18% of the national case total (Tables 17, 18).
  - Asians born outside the United States represented 43% of TB cases in foreign-born persons and accounted for approximately 25% of the national case total (Tables 17, 18).
- 3. Case rates: In 2007, the TB case rate declined from 4.6 to 4.4 per 100,000 persons, representing a 4.2% decrease from 2006.
  - Fifteen states and DC reported rates above the national average (Table 20).
  - Twenty-six states met the definition for low incidence, or  $\leq$ 3.5 cases per 100,000 population (Table 20).
  - The TB case rate was 2.1 per 100,000 for U.S.-born persons and 20.7 for foreign-born persons (Table 5).
  - Asians continued to have the highest case rate (26.3 per 100,000 persons) among all racial or ethnic groups (Table 2).
- 4. Burden among the foreign-born: The percentage of cases occurring in foreign-born persons continued to increase and was 58% of the national case total.
  - Foreign-born Hispanics and Asians together represented 81% of TB cases in foreign-born persons, and accounted for 47% of the national case total (Tables 17, 18).
  - In 29 states, ≥50% of TB cases occurred among foreign-born persons (Table 23).
  - In 13 states, ≥70% 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: 1.1% of reported cases, compared to 1.0% in 2006, had primary multidrug resistance, 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 2007, the number of TB cases reported (13,299) and case rate (4.4 cases per 100,000) both decreased; this represented declines of 3.3% and 4.2%, respectively, compared to 2006. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 50%. However, the trend of the declining annual case rate has slowed, from an annual average decline of 7.3% for 1993 through 2000 to an annual average decline of 3.8% for 2000 through 2007 (Table 1).

The proportion of total cases occurring in foreign-born persons has been increasing since 1993. In 2007, 58% 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 2007 was nearly 10 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths decreased by 0.6%, from 648 deaths in 2005 to 644 deaths in 2006, the latest year for which complete data are available (Table 1).

#### Age

Since 1993, TB case rates have declined annually for all age groups. TB case rates vary by well-known factors such as age, race and ethnicity, and country of origin. In 2007, TB case rates declined or remained constant for all age groups except adults aged 15 to 24 years, which increased slightly compared to 2006. The highest burden of disease continues to be among older adults. In 2007, adults aged 65 years and older had a case rate of 6.8 cases per 100,000, while children aged <14 years had the lowest rate at 1.3 cases per 100,000 (Table 4).

#### Race and Ethnicity

In 2003, the race and ethnicity category, "non-

Hispanic, Asian or Pacific Islander," was split into "non-Hispanic Asian" and "non-Hispanic Native Hawaiian or Other Pacific Islander." In 2007, Asians had the highest TB case rate at 26.3 cases per 100,000, which was a slight increase from 25.9 in 2006. In 2007, Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 23.0 cases per 100,000, which is a marked increase compared to 13.4 cases per 100,000 reported in 2006 (Table 2).

Since 1993, TB case rates have declined between 57% and 69% in these racial and ethnic groups: among Hispanic or Latinos from 19.9 to 8.5 cases per 100,000; among blacks or African-Americans from 28.5 to 9.4 cases per 100,000; and among non-Hispanic whites from 3.6 to 1.1 cases per 100,000. In 2007, the TB case rate for Asians was nearly 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 2007, the TB case rate for U.S.-born persons was 2.1 cases per 100,000, representing a 72% decrease from 7.4 cases per 100,000 in 1993. The TB case rate among foreign-born persons also declined during the same interval but was less substantial. In 2007, the TB case rate among foreign-born persons was 20.7 cases per 100,000 representing a 39% decrease from 34.0 cases per 100,000 in 1993 (Table 5).

The proportion of TB cases among persons born in the United States also has declined annually since 1993. In 2007, 42% of TB cases were among U.S-born persons compared to 69% in 1993 (Table 5). In 29 states, ≥50% of TB cases occurred among foreign-born persons. In 13 states (California, Colorado, Delaware, Massachusetts, Minnesota, Nebraska, New Hampshire, New Jersey, New York, Oregon, Rhode Island, Virginia, and Washington), ≥70% of TB cases occurred among foreign-born persons (Table 23).

#### **Country of Origin and World Region**

From 2001 through 2007, the top five countries of origin of foreign-born persons with TB were Mexico, Philippines, India, Vietnam, and China (Table 6). However, the changes in the distribution of TB cases by world region of origin reflect the changing immigration patterns among persons settling in the United States<sup>2</sup>. Of the 7,750 TB cases reported among foreign-born persons in 2007, 43% occurred among persons born in the Americas region, and 31% occurred among persons born in the Western Pacific region (Table 19). From 1993 to 2007, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 4.5% in 2007), the Southeast Asia region (6% in 1993) to 12% in 2007), and the African region (2% in 1993 and 7% in 2007) (Table 19).

#### **Multidrug-Resistant Tuberculosis**

Since 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, has decreased from 2.5% to 1.1% in 2007. Since 1998, the percentage of U.S.-born patients with MDR TB has remained  $\leq 0.7\%$ . However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25.5% (103 of 407) in 1993 to 80% (78 of 98) in 2007 (Table 10).

#### **Extensively Drug-Resistant Tuberculosis**

CDC has included an updated case count of extensively drug-resistant TB (XDR TB) cases from 1993 to 2007 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,

<sup>2</sup>World Health Organization (WHO). *Global Tuberculosis Control 2008: Surveillance, Planning, and Finance*. Geneva, Switzerland: World Health Organization, 2008 (WHO/HTM/TB/2008.393).

kanamycin, or capreomycin)<sup>3,4</sup>. Two cases of XDR TB were reported during 2007, compared to four cases in 2006.

#### **Tuberculosis Therapy**

The proportion of TB patients prescribed an initial treatment regimen of three or more anti-TB drugs increased annually from 72% in 1993 to 88% in 2007. The proportion of patients who completed therapy within 1 year increased from 64% in 1993 to 83% in 2005. The proportion of persons receiving directly observed therapy at least for a portion of the treatment duration also increased from 35% in 1993 to 86% in 2005, the latest year for which complete outcome data are available (Table 12).

#### **Summary**

Essential elements for controlling TB in the United States include sufficient resources, interventions targeted to populations at high risk for TB, and collaborative efforts with the international community to reduce the burden of TB globally.

During 1993 through 2007, TB case rates in the United States decreased for U.S.-born and foreign-born persons; however, the decrease among foreign-born persons continues to be less substantial. Despite the decreasing case rate among foreign-born persons, well over half of the TB cases in the United States in 2007 occurred in this population, and the case rate was more than 10 times higher than among U.S.-born persons. To address the high TB case rates among foreign-born persons, CDC is collaborating with other national and international public health organizations to: 1) improve overseas screening of immigrants and refugees by systematically monitoring and evaluating the screening process; 2) strengthen the current notification system that alerts local health departments about the arrival of immigrants or refugees who have suspected

<sup>&</sup>lt;sup>3</sup>Centers for Disease Control and Prevention (CDC). Notice to readers: revised definition of XDR-TB. *Morbid Mortal Weekly Report* 2006; 55:1176.

<sup>&</sup>lt;sup>4</sup>WHO. Extensively drug-resistant tuberculosis (XDR-TB): recommendations for prevention and control. *Weekly Epidemiol Record* 2006; 81: 430–432.

TB in order to enhance the evaluation and treatment of such persons; 3) improve coordination of TB control activities between the United States and Mexico to ensure completion of treatment among TB patients who cross the border; 4) test recent arrivals from high-incidence countries for latent TB infection and monitor treatment completion; and 5) survey foreign-born TB patients in the United States to determine opportunities for improving prevention and control interventions. In addition, CDC continues to strengthen collaborations with international partners, including the World Health Organization's Stop TB Partnership, to improve TB control in high-incidence countries.

Accelerating progress in national TB elimination activities will require broader prevention efforts among high-risk population groups such as black or African-American and Asian communities, persons who are incarcerated, persons with excess alcohol and drug use, persons with human immunodeficiency virus infection, and persons living in poverty with limited access to medical care and stable housing.

In addition, low-incidence areas in the United States require continued support to maintain the capacity and expertise needed to respond to future TB cases<sup>5</sup> especially in light of changing immigration patterns. CDC has updated the comprehensive national action plan to reflect the alignment of CDC priorities with the 2000 Institute of Medicine report on TB and to ensure that priority prevention activities are undertaken with optimal collaboration and coordination among national and international public health partners<sup>6,7</sup>.

<sup>&</sup>lt;sup>5</sup>CDC. Progressing toward tuberculosis elimination in low-incidence areas of the United States: Recommendations of the Advisory Council for the Elimination of Tuberculosis. *Morbid Mortal Weekly Report* 2002; 51 (No. RR-5): 1–20.

<sup>&</sup>lt;sup>6</sup>Institute of Medicine. *Ending Neglect: The Elimination of Tuberculosis in the United States*. Washington, DC: National Academy Press, 2000.

<sup>&</sup>lt;sup>7</sup>CDC. CDC's Response to Ending Neglect: The Elimination of Tuberculosis from the United States. Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2000.

## **Technical Notes**

#### **Technical Notes**

#### **National Surveillance for Tuberculosis**

All 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) report tuberculosis (TB) cases to CDC using a standard case report form, Report of Verified Case of Tuberculosis (RVCT). Reported TB cases are verified according to the TB case definition for public health surveillance (MMWR 1997;46[No. RR-10]:40–41).

Cases may be verified using the laboratory case definition, the clinical case definition, or a provider diagnosis. A case may be verified by the laboratory case definition either by: 1) isolation of *Mycobacterium tuberculosis* from a clinical specimen, OR 2) detection of *M. tuberculosis* nucleic acid using an FDA approved nucleic acid amplification test, OR 3) demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained.

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, 2) other signs and symptoms compatible with TB, such as an abnormal, unstable (worsening or improving) chest radiograph, or clinical evidence of current disease, 3) treatment with two or more antituberculosis medications, and 4) a completed diagnostic evaluation.

When cases of TB are diagnosed but do not meet the clinical case definition, reporting areas also have the option of verifying TB cases based on provider diagnosis. Currently, the RVCT does not collect information on results from interferon gamma release assays such as the QuantiF-ERON-TB Gold test. If this test is performed in lieu of the TST, then the RVCT should reflect that the TST was not performed. Cases without a TST that are diagnosed by a positive QuantiFERON-TB Gold result should be considered to have been confirmed by provider diagnosis.

Another example of a provider diagnosis would be in the case of anergic patients with a clinical picture consistent with TB but without laboratory evidence of *M. tuberculosis*.

In January 1993, in conjunction with state and local health departments, CDC implemented an expanded surveillance system for TB that would collect additional data to better monitor and target groups at risk for TB disease, to estimate and follow the extent of drug-resistant TB, and to evaluate outcomes of TB cases. The RVCT form for reporting TB cases was revised to collect information on occupation, the initial drug regimen, human immunodeficiency virus (HIV) test results, history of substance abuse and homelessness, and residence in correctional or long term-care facilities at the time of diagnosis. RVCT Follow Up Report-1 was added to collect drug susceptibility results for the initial M. tuberculosis isolate from patients with culture-positive disease.

To evaluate the outcomes of TB therapy, RVCT Follow Up Report-2 was added to collect information on the reason and date therapy was stopped, the type of health care provider, sputum culture conversion, the use of directly observed therapy (DOT), and the results of drug-susceptibility testing for the final *M. tuberculosis* isolate from patients with culture-positive disease.

Since 1993, RVCT data have been reported to CDC using software specifically developed for expanded TB surveillance (i.e., SURVS-TB, 1993–1997; TIMS, 1998–present). The instructions for completing the RVCT forms and the definitions for all data items were included in the software user's guide. The summary data presented in this publication for 2007 (and for 2005, Tables 39–44) and the trend data for 1993–2007 (Tables 1–14) were received at CDC by April 23, 2008.

<sup>&</sup>lt;sup>1</sup>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.

#### **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, moved, was lost) 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<sup>2</sup> 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 during therapy with the need for a longer duration of therapy was also not considered in this analysis.

In Table 41, the first column shows the total number of cases reported during 2005. 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 one 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 tuberculosis, regardless of age. In addition, tuberculosis cases under the age of 15 were not eligible to complete therapy within one 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, data were included under the category of 1 year or less of therapy indicated. Table 12 presents data only for cases where therapy of 1 year or less was 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 <365 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.

#### **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.

#### **Reporting of HIV Status**

Table 37 shows information on HIV status for persons with TB aged 25-44 years, the age group in which 73% of AIDS cases occur (CDC. HIV/AIDS Surveillance Report 2003; 15). The information on HIV status for TB cases reported in 2007 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. HIV testing is performed after a patient receives counseling and gives informed consent. 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 overrepresent or underrepresent the proportion of TB patients known to be HIV infected in a reporting area.

#### **Tabulation and Presentation of TB Data**

This report primarily presents summary data for TB cases reported to CDC in 2007. Data from the RVCT Follow Up Report-2 (i.e., completion of therapy, use of directly observed therapy, and type of health care provider) are presented for cases reported in 2005. In addition, trend data are presented in Tables 1 through 14. TB cases are tabulated by the year in which the reporting area verified that the patient had TB and included the patient in its official annual TB case count. In contrast to previous annual summaries, in which TB case counts for preceding years were not updated, the current summary reflects updated information on the numbers of cases of confirmed TB for each year from 1993 to 2006. Therefore, case counts for these years differ from those reported in the annual summaries previously published. Totals for the United States only include data from the 50 states, the District of Columbia, and New York City. 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 (see Appendix B: "Recommendations for Counting Reported Tuberculosis Cases").

Tables 46 through 50 present data by metropolitan statistical areas (MSAs) with an estimated 2007 population of 500,000 or more. MSAs are defined by the federal Office of Management and Budget (OMB), and the definitions effective as of December 2006 were used for this publication (http://www.whitehouse.gov/omb/bulletins/fy2007/b07-01.pdf). On June 6, 2003, the OMB announced new MSA definitions based on Census 2000 data and the information has been

updated annually. Some MSAs added or dropped counties and some MSAs merged. The MSA definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. MSAs are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. For example, the TB cases and case rates presented for the District of Columbia in Table 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.

#### 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 midvear (July 1) postcensal estimates from the U.S. Census Bureau. Specifically, in Tables 1 and 20, the U.S. total populations for 2000 to 2007 were obtained from the Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico (July 1, 2000–July 1, 2007).3 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 to 2007 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, 2007.4 To calculate rates for Table 4, denominators were obtained from the Annual Estimates of the Population by Sex and Five-Year Age Groups for the United States:

April 1, 2000, to July 1, 2007.<sup>5</sup> Denominators for computing 2007 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, 2007.<sup>6</sup> In 2004, the method for calculating the annual percentage change in the TB case rate was modified. In contrast to methods used in previous summaries, unrounded figures are now applied to calculate the percentage change in the case rate, providing a greater degree of precision and accuracy than in the past.

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, to July 1, 1999.<sup>7</sup> Denominators for computing the 1995–2007 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 2006 (preliminary) was obtained from the National Center for Health Statistics, National Vital Statistics Report, Vol. 56, No. 16, June 11, 2008. The number of deaths for 2007 was not available at the time of this publication.

http://www.census.gov/popest/states/tables/NST-EST2007-01.xls

<sup>&</sup>lt;sup>4</sup> http://www.census.gov/popest/national/asrh/NC-EST2007/NC-EST2007-03.xls

<sup>&</sup>lt;sup>5</sup> http://www.census.gov/popest/national/asrh/NC-EST2007/NC-EST2007-01.xls

<sup>&</sup>lt;sup>6</sup> http://www.census.gov/popest/national/asrh/files/NC-EST2007-ALLDATA-R-Files16.csv

<sup>&</sup>lt;sup>7</sup> http://www.census.gov/popest/archives/1990s/nat-nativity-sum.txt

## 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, 1953–2007

	Tub	erculosis Cas				Tuberculosis D		
			Percent 0	Change			Percent	Chang
Year	Number	Rate	Number	Rate	Number <sup>1</sup>	Rate <sup>1</sup>	Number	Rat
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.
1955	77,368	46.6	-3.0	-4.7	15,016	9.1	-9.1	-10.
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.
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
				-7.3				
1964	50,874	26.5	-5.9		8,303	4.3	-10.8	-12.
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.
1968	42,623	21.2	-6.6	-7.8	6,292	3.1	-8.8	-11.
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.′
1971	35,217	17.0	-5.2	-6.1	4,501	2.2	-13.7	-15.
1972	32,882	15.7	-6.6	-7.6	4,376	2.1	-2.8	-4.
1973	30,998	14.6	-5.7	-7.0	3,875	1.8	-11.4	-14.
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.
1979	27,669	12.3	-3.0	-3.9	2,0072	0.92	-31.1 <sup>2</sup>	-30.
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.
1982	25,520	11.0	-6.8	-2.3 -7.7	1,807	0.8	-6.7	0.0
1983	23,846	10.2	-6.6	-7.7 -7.4	1,779	0.8	-1.5	0.0
						0.7		-12.
1984	22,255	9.4	-6.7	-7.5	1,729		-2.8	
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	8.0	+9.5	+14
1989	23,495	9.5	+4.7	+3.7	1,970	8.0	+2.6	0.0
1990	25,701	10.3	+9.4	+8.2	1,810	0.7	-8.1	-12.
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.
1994	24,205	9.2	-3.6	-4.8	1,478	0.6	-9.4	0.0
1995	22,728	8.5	-6.1	-7.2	1,336	0.5	-9.6	-16.
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.
1998	18,287	6.6	-7.4	-8.5	1,112	0.4	-4.6	0.0
1999	17,501	6.3	-4.3	-5.4	930	0.3	-16.4	-25.
2000	16,309	5.8	-6.8	-7.9	776	0.3	-16.6	0.0
2000	15,946		-0.6 -2.2	-7.9	764	0.3	-10.6	0.0
		5.6						0.0
2002	15,056	5.2	-5.6	-6.5	784	0.3	+2.6	
2003	14,837	5.1	-1.5	-2.3	711	0.2	-10.2	-33.
2004	14,501	4.9	-2.3	-3.2	662	0.2	-6.9	0.0
2005	14,065	4.8	-3.0	-3.9	648	0.2	-2.1	0.0
2006	13,754	4.6	-2.2	-3.1	644	0.2	-0.6	0.0
2007	13,299	4.4	-3.3	-4.2				

<sup>&</sup>lt;sup>1</sup> Official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC, National Vital Statistics Reports.

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

Note: 1993 to 2007 tuberculosis case counts and rates updated as of April 23, 2008, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 (ftp://ftp.cdc.gov/pub/health\_statistics/nchs/datasets/nvss/bridgepop/documentationbridged-intercena1.doc) (accessed July 7, 2008) and Annual Estimates of the Population for the United States and States, and for Puerto Rico (July 1, 2000– July 1, 2007) (www.census.gov/popest/states/tables/NST-EST2007-01.xls) (accessed July 7, 2008). 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.

<sup>&</sup>lt;sup>2</sup> 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.

Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race: United States, 1993–2007

	n or g <sup>6</sup>	(%)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	Unknown or Missing <sup>6</sup>	No.	166	83	20	20	24	16	56	30	44	323	33	27	43	4	39
	<u> </u>	Rate	3.6	3.4	3.1	2.8	2.5	2.3	2.1	1.9	1.7	1.5	4.	1.3	1.3	1.2	1.1
	White	(%) R	(27)	(27)	(56)	(56)	(24)	(24)	(24)	(22)	(21)	(20)	(19)	(18)	(18)	(17)	(17)
	M	No.	6889	6561	5958	5479	4821	4473	4216	3637	3338	2958	2792	2631	2569	2391	2216
	iian ific	Rate	:	:	:	:	:	:	:	:	:	:	16.4	15.9	13.4	13.4	23.0
	Native Hawaiian or Other Pacific Islander <sup>5</sup>	(%) Ra	:	:	:	:	:	:	:	:	:	:	0	0	0)	0	(1)
	Native or Oth Isk	No.	:	:	:	÷	:	:	:	:	:	÷	64	63	24	22	96
	an	Rate	28.5	29.5	23.2	21.5	19.6	17.0	16.0	15.0	13.7	12.3	11.7	11.3	10.9	10.2	9.4
	Black or African American	(%)	(36)	(32)	(33)	(33)	(33)	(32)	(32)	(32)	(30)	(53)	(28)	(28)	(28)	(27)	(26)
0	Black Am	No.	8942	8370	7550	7091	6629	5817	5545	5145	4772	4319	4161	4070	3957	3735	3470
Non-Hispanic	ین	Rate	44.1	43.8	43.5	39.7	38.0	34.7	32.9	32.0	31.6	28.4	:	<u>'</u> ::	:	:	
Non-F	an or Pacifi Islander⁴	(%) R	(15) 4	(16) 4	(18) 4	(18)	(19) 3	(20) 3	(21) 3	(21) 3	(22) 3	(22) 2	į	:	:	:	:
	Nor-⊓is Asian or Pacific Islander⁴																
		No.	3699	3842	4000	3813	3825	3638	3607	3462	3556	3302	:	:	:	:	:
	8	Rate	:	:	:	:	:	:	:	:	:	:	29.7	27.8	26.0	25.9	26.3
	Asian³	(%)	:	÷	:	÷	÷	÷	:	÷	:	÷	(23)	(23)	(23)	(24)	(26)
		No.	:	:	:	:	:	:	:	:	:	:	3460	3336	3205	3298	3445
	ian or tive	Rate	13.9	16.4	15.7	13.6	12.3	11.5	10.7	11.0	10.7	8.4	8.2	7.1	8.9	7.3	6.3
	nerican Indian Alaska Native	(%)	(1)	£	$\Xi$	$\widehat{\Xi}$	£	£	£	£	$\Xi$	$\widehat{\Xi}$	£	£	£	£	(1)
	American Indian o Alaska Native	No.	271	327	320	286	264	254	243	232	227	180	178	157	152	164	136
	ace <sup>2</sup>	Rate	:	:	:	÷	:	÷	:	:	:	÷	1.0	0.9	1.1	0.9	0.6
	Multiple Race²	(%)	:	:	:	:	:	:	:	:	:	:	0	0	0	0	(0)
	Mult	No.	:	:	:	:	:	:	:	:	:	:	37	34	45	35	25
	.atino¹	Rate	19.9	18.6	17.2	15.2	13.7	12.6	11.4	10.7	10.8	10.3	10.3	10.2	9.2	9.2	8.5
	Hispanic or Latino¹	(%)	(20)	(21)	(21)	(21)	(21)	(22)	(22)	(23)	(22)	(26)	(28)	(29)	(29)	(30)	(29)
	Hispar	No.	5140	5016	4830	4491	4218	4089	3864	3803	4009	3974	4106	4183	4040	4062	3872
	Total	Cases	25107	24205	22728	21210	19751	18287	17501	16309	15946	15056	14837	14501	14065	13754	13299
		Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2007

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

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

<sup>&</sup>lt;sup>3</sup>Asian race first reported in 2003.

<sup>&</sup>lt;sup>4</sup>Asian or Pacific Islander race reported 1993–2002.

<sup>&</sup>lt;sup>5</sup>Native Hawaiian or Other Pacific Islander race first reported in 2003.

The higher count for unknown or missing race results for 2002 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in

popbridge/popbridge.htm) (accessed June 24, 2008). Denominators for computing 2000–2007 case rates were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or 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/about/major/dvs/ Latino Origin for the United States: April 1, 2000, to July 1, 2007 (http://www.census.gov/popest/national/asrh/NC-EST2007/NC-EST2007-03.xls) (accessed June 24, 2008).

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 April 23, 2008. 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, 1993–2007

		Mu	Multiple Race¹	ace1	Americ	American Indian or Alaska Native	ian or		Asian <sup>2</sup>		Pacif	Asian or		B ∆frica	Black or		Native Other P	Native Hawaiian or ther Pacific Islande	Native Hawaiian or Other Pacific Islander⁴		White		Unknown or	wn or
	Total						2				-		5	2011									DO IN	6
Year	Cases	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107		:	:	275	(1)	12.1	:	:	::	3743	(15)	42.5	9132	(36)	28.0	:	:		11897	(47)	5.5	09	(0.0)
1994	24205	÷	:	i	336	£	14.2	:	:	:	3870	(16)	42.1	8607	(36)	25.9	÷	i	:	11326	(47)	5.2	99	(0.0)
1995	22728	:	:	i	328	£)	13.4	÷	:	į	4027	(18)	41.9	7755	(34)	22.9	į	i	:	10549	(46)	4.8	69	(0.0)
1996	21210	:	:	:	292	£	11.5	:	:	:	3846	(18)	38.4	7286	(34)	21.2	:	:	i	9754	(46)	4.4	32	(0.0)
1997	19751	:	:	i	277	( <u>T</u> )	10.5	:	:	÷	3864	(20)	36.9	6785	(34)	19.4	į	i	i	8808	(45)	3.9	17	(0.0)
1998	18287	÷	:	i	263	£	9.6	:	:	÷	3674	(20)	33.8	2922	(33)	16.7	į	i	:	8376	(46)	3.7	19	(0.0)
1999	17501	:	:	į	254	£)	9.0	÷	:	į	3643	(21)	32.1	2656	(32)	15.6	į	i	:	2006	(45)	3.5	33	(0.0)
2000	16309	÷	:	÷	241	£	9.0	÷	:	÷	3496	(21)	31.3	5265	(32)	14.7	;	÷	:	7279	(45)	3.2	28	(0.0)
2001	15946	:	:	÷	240	(2)	8.9	:	:	÷	3591	(23)	31.0	4871	(31)	13.4	į	÷	i	7185	(45)	3.1	29	(0.0)
2002	15056	÷	:	i	198	£	7.2	÷	:	÷	3319	(22)	27.7	4405	(29)	12.0	į	i	:	6754	(45)	2.9	379	(3.0)
2003	14837	49	(0)	1.1	188	£	8.9	3507	(24)	29.5	÷	:	;	4249	(29)	11.5	99	(0)	13.4	6751	(46)	2.9	27	(0.0)
2004	14501	43	0	1.0	165	£	5.8	3368	(23)	27.5	÷	÷	÷	4185	(58)	11.2	64	0	12.7	6646	(46)	2.8	30	(0.0)
2005	14065	23	(0)	1.2	170	£	5.9	3250	(23)	25.8	÷	:	:	4075	(53)	10.8	22	0	11.1	6432	(46)	2.7	28	(0.0)
2006	13754	4	0	6.0	194	£	6.7	3323	(24)	25.6	:	:	:	3859	(28)	10.1	62	0	11.8	6252	(45)	2.6	23	(0.0)
2007	13299	28	(0)	9.0	177	(1)	0.9	3458	(56)	25.9	:	:	:	3617	(27)	9.3	100	(1)	18.6	2868	(44)	2.4	21	(0.0)
						ľ																		

'Indicates two or more races reported for a person. Category first reported in 2003.

<sup>2</sup>Asian race first reported in 2003.

<sup>3</sup>Asian or Pacific Islander race reported 1993–2002.

<sup>4</sup>Native Hawaiian or Other Pacific Islander race first reported in 2003.

ethnicity or multiple race. Data for all years updated through April 23, 2008.

Ellipses indicate data not available.

See Technical Notes (page 9).

Zero % (0) denotes <0.5%.

Hispanic or Latino Origin for the United States: April 1, 2000, to July 1, 2007 (http://www.census.gov/popest/national/asrh/NC-EST2007/NC-EST2007-03.xls) (accessed June 24, 2008). 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 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. Neviously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1993–1999 (http://www.cdc.gov/nchs/about/major/ dvs/popbridge/popbridge.htm) (accessed June 24, 2008). Denominators for computing 2000–2007 case rates were obtained from the Annual Estimates of the Population by Sex, Race, and

Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2007

	Total		0–14			15–24			25–44			45–64			≥65		Unk	.1.
Year	Cases	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	1661	(7)	2.9	1822	(7)	5.0	9588	(38)	11.5	6197	(25)	12.4	5820	(23)	17.7	19	(0)
1994	24205	1659	(7)	2.9	1833	(8)	5.0	9043	(37)	10.7	6125	(25)	11.9	5539	(23)	16.6	6	(0)
1995	22728	1536	(7)	2.6	1698	(7)	4.6	8201	(36)	9.7	5960	(26)	11.3	5328	(23)	15.8	5	(0)
1996	21210	1356	(6)	2.3	1637	(8)	4.4	7564	(36)	8.9	5572	(26)	10.2	5076	(24)	14.9	5	(0)
1997	19751	1251	(6)	2.1	1675	(8)	4.5	6884	(35)	8.0	5277	(27)	9.4	4663	(24)	13.6	1	(0)
1998	18287	1077	(6)	1.8	1542	(8)	4.1	6335	(35)	7.4	4956	(27)	8.5	4377	(24)	12.6	0	(0)
1999	17501	1039	(6)	1.7	1518	(9)	3.9	6064	(35)	7.1	4857	(28)	8.0	4020	(23)	11.6	3	(0)
2000	16309	965	(6)	1.6	1618	(10)	4.1	5575	(34)	6.6	4636	(28)	7.4	3514	(22)	10.0	1	(0)
2001	15946	929	(6)	1.5	1597	(10)	4.0	5609	(35)	6.6	4516	(28)	7.0	3293	(21)	9.3	2	(0)
2002	15056	944	(6)	1.6	1497	(10)	3.7	5288	(35)	6.3	4182	(28)	6.3	3141	(21)	8.8	4	(0)
2003	14837	912	(6)	1.5	1573	(11)	3.8	5073	(34)	6.0	4283	(29)	6.2	2993	(20)	8.3	3	(0)
2004	14501	955	(7)	1.6	1602	(11)	3.9	4938	(34)	5.9	4194	(29)	5.9	2811	(19)	7.7	1	(0)
2005	14065	855	(6)	1.4	1542	(11)	3.7	4736	(34)	5.7	4125	(29)	5.7	2807	(20)	7.6	0	(0)
2006	13754	803	(6)	1.3	1538	(11)	3.6	4698	(34)	5.6	4047	(29)	5.4	2667	(19)	7.2	1	(0)
2007	13299	779	(6)	1.3	1581	(12)	3.7	4317	(32)	5.2	4042	(30)	5.3	2578	(19)	6.8	2	(0)

<sup>&</sup>lt;sup>1</sup>Includes unknown and missing.

**Note:** Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates (http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm) (accessed June 24, 2008). Denominators for computing 2000–2007 case rates were obtained from the Annual Estimates of the Population by Sex and Five-Year Age Groups for the United States: April 1, 2000, to July 1, 2007 (http://www.census.gov/popest/national/asrh/NC-EST2007/NC-EST2007-03.xls) (accessed June 24, 2008). Data for all years updated through April 23, 2008.

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, 1993–2007

	Total	U.Sb	orn Perso	ons	Foreign	-born Pers	sons¹	Unknown	or Missing
Year	Cases	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	17422	(69)	7.4	7403	(29)	34.0	282	(1)
1994	24205	16171	(67)	6.8	7741	(32)	34.4	293	(1)
1995	22728	14647	(64)	6.1	7987	(35)	34.8	94	(0)
1996	21210	13315	(63)	5.6	7726	(36)	31.5	169	(1)
1997	19751	11879	(60)	4.9	7742	(39)	30.0	130	(1)
1998	18287	10632	(58)	4.4	7599	(42)	28.9	56	(0)
1999	17501	9806	(56)	4.0	7602	(43)	29.2	93	(1)
2000	16309	8648	(53)	3.5	7619	(47)	27.3	42	(0)
2001	15946	7870	(49)	3.2	8011	(50)	27.0	65	(0)
2002	15056	7281	(48)	2.9	7719	(51)	25.4	56	(0)
2003	14837	6860	(46)	2.7	7931	(53)	23.5	46	(0)
2004	14501	6633	(46)	2.6	7845	(54)	23.2	23	(0)
2005	14065	6315	(45)	2.5	7722	(55)	22.3	28	(0)
2006	13754	5902	(43)	2.3	7817	(57)	22.0	35	(0)
2007	13299	5493	(41)	2.1	7750	(58)	20.7	56	(0)

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

**Note:** Denominators for computing rates for years 1993–1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990–July 1, 1999, located at http://www.census.gov/population/estimates/nation/nativity/fbtab001.txt (accessed June 24, 2008). Denominators for computing the 1995–2007 rates are based on the U.S. Census Bureau, Current Population Survey (March Supplement). Data for all years updated through April 23, 2008.

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<sup>1</sup> by the Top 30 Countries<sup>2</sup> of Origin of Birth: United States, 2003–2007

					Ye	ear				
	20	007	20	006	2	005	20	004	20	03
Country of Origin	No.	(%)								
Total Cases	7,750	(100)	7,817	(100)	7,722	(100)	7,845	(100)	7,931	(100)
Mexico	1,848	(24)	1,934	(25)	1,959	(25)	2,003	(26)	2,034	(26)
Philippines	955	(12)	860	(11)	830	(11)	830	(11)	913	(12)
Vietnam	573	(7)	631	(8)	576	(7)	622	(8)	662	(8)
India	624	(8)	547	(7)	561	(7)	561	(7)	609	(8)
China	386	(5)	374	(5)	397	(5)	351	(4)	374	(5)
Haiti	177	(2)	211	(3)	241	(3)	247	(3)	264	(3)
Guatemala	248	(3)	230	(3)	211	(3)	190	(2)	174	(2)
Korea, Republic of	154	(2)	204	(3)	176	(2)	219	(3)	194	(2)
Ethiopia	178	(2)	202	(3)	150	(2)	170	(2)	142	(2)
Peru	141	(2)	160	(2)	154	(2)	159	(2)	157	(2)
Somalia	177	(2)	197	(3)	148	(2)	140	(2)	105	(1)
Honduras	180	(2)	164	(2)	165	(2)	112	(1)	125	(2)
Ecuador	115	(1)	117	(1)	156	(2)	158	(2)	159	(2)
El Salvador	153	(2)	145	(2)	143	(2)	124	(2)	116	(1)
Cambodia	95	(1)	99	(1)	106	(1)	107	(1)	118	(1)
Dominican Republic	90	(1)	113	(1)	76	(1)	104	(1)	96	(1)
Pakistan	78	(1)	80	(1)	78	(1)	89	(1)	91	(1)
Lao, PDR	78	(1)	60	(1)	83	(1)	88	(1)	73	(1)
Kenya	68	(1)	75	(1)	66	(1)	68	(1)	79	(1)
Thailand	45	(1)	55	(1)	72	(1)	60	(1)	45	(1)
Colombia	56	(1)	45	(1)	37	(0)	68	(1)	58	(1)
Liberia	47	(1)	52	(1)	64	(1)	56	(1)	30	(0)
Indonesia	52	(1)	43	(1)	57	(1)	37	(0)	54	(1)
Cuba	41	(1)	42	(1)	54	(1)	56	(1)	49	(1)
Nigeria	43	(1)	36	(0)	37	(0)	52	(1)	57	(1)
Nepal	53	(1)	46	(1)	33	(0)	48	(1)	39	(0)
Burma	65	(1)	40	(1)	39	(1)	41	(1)	31	(0)
Bangladesh	56	(1)	41	(1)	34	(0)	38	(0)	29	(0)
Russia	41	(1)	47	(1)	43	(1)	28	(0)	30	(0)
Taiwan	39	(1)	39	(0)	37	(0)	29	(0)	36	(0)
All Others <sup>3</sup>	894	(12)	928	(13)	939	(12)	990	(13)	988	(12)

<sup>&</sup>lt;sup>1</sup>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: Zero (0) denotes <0.5%.

Data for all years updated through April 23, 2008.

<sup>&</sup>lt;sup>2</sup>The top 30 countries were selected based on their ranked 5-year average number of TB cases.

<sup>&</sup>lt;sup>3</sup> Includes Not Specified for Country of Origin. Excludes missing.

Table 7. Tuberculosis Cases and Percentages Among Adult¹ Foreign-born Persons² by Country of Origin and Years in the United States Before TB Diagnosis, Top 30 Countries: United States, 2007 and 1997

				2007	77									19	1997				
			2	No. of Years in U.	irs in U.	\$. 4.							Į Š	No. of Years in U.S. <sup>4</sup>	s in U.S	S.			
	Total Cases	7	<1 Year	1–4 Years	ears	≥5 Years	ars	Unknown	Wn		Total Cases	<1 Year	ear	1–4 Years	3rs	≥5 Years	LS IS	Unknown	N N
Country of Origin <sup>3</sup>	No.	No.	(%)	Š.	(%)	No.	(%)	S S	(%)	Country of Origin <sup>3</sup>	No.	Š.	(%)	Š.	(%)	Š	(%)	No.	(%)
Mexico	1799	226	(13)	363	(20)	991	(22)	219	(12)	Mexico	1614	205	(13)	261	(16)	764	(47)	384	(24)
Philippines	940	272	(58)	111	(12)	450	(48)	107	(11)	Philippines	1020	307	(30)	147	(14)	352	(32)	214	(21)
India	617	140	(23)	163	(26)	247	(40)	29	(11)	Viet Nam	801	112	(14)	175	(22)	327	(41)	187	(23)
Viet Nam	568	89	(16)	71	(13)	339	(09)	69	(12)	India	472	94	(20)	105	(22)	159	(34)	114	(24)
China	377	29	(18)	20	(19)	202	(54)	38	(10)	China	377	46	(12)	45	(12)	186	(49)	100	(27)
Guatemala	238	43	(18)	86	(41)	74	(31)	23	$\overline{}$	Haiti	277	23	(8)	31	(11)	117	(42)	106	(38)
Honduras	175	42	(24)	73	(42)	51	(53)	<b>О</b>	(2)	Korea, Rep of	253	30	(12)	39	(12)	137	(54)	47	(19)
Haiti	170	39	(23)	21	(12)	96	(99)	14	<del>-</del> (8)	El Salvador	133	12	(6)	19	(14)	77	(28)	22	(19)
Somalia	164	22	(34)	62	(38)	41	(22)	9	<u>4</u>	Dominican Republic	128	14	(11)	21	(16)	63	(49)	30	(23)
Ethiopia	159	39	(22)	69	(43)	44	(28)	7		Guatemala	126	7	(6)	33	(56)	48	(38)	34	(27)
El Salvador	153	56	(17)	38	(22)	9/	(20)	13	<del>-</del> (8)	Peru	122	16	(13)	28	(23)	41	(34)	37	(30)
Korea, Rep of	152	12	(8)	15	(10)	102	(67)	23	(15)	Cambodia	120	7	(6)	9	(2)	62	(25)	41	(34)
Peru	140	15	(11)	38	(27)	20	(20)	17		Ecuador	117	17	(15)	34	(53)	36	(31)	30	(26)
Ecuador	115	13	(11)	33	(53)	24	(47)	15	_	Laos	110	∞	()	9	(2)	48	(44)	48	(44)
Cambodia	94	13	(14)	7	<u>(</u> )	29	(63)	15		Ethiopia	104	27	(56)	28	(27)	21	(20)	28	(27)
Dominican Republic	88	14	(16)	15	(17)	44	(49)	16		Somalia	88	38	(43)	24	(27)	က	(3)	24	(27)
Laos	78	3	(4)	က	<u>4</u>	29	(92)	13	(17)	Pakistan	87	12	(14)	16	(18)	35	(40)	24	(28)
Pakistan	77	17	(22)	23	(30)	31	(40)	9	(8)	Honduras	84	12	(14)	16	(19)	28	(33)	28	(33)
Kenya	64	19	(30)	21	(33)	22	(34)	7		Cuba	82	4	(2)	7	(2)	33	(40)	43	(52)
Burma	09	34	(22)	7	(12)	16	(22)	က	(2)	Taiwan	73	18	(22)	2	(2	34	(47)	16	(22)
Bangladesh	55	10	(18)	19	(32)	22	(40)	4	<u>-</u>	Colombia	64	4	(9)	12	(19)	28	(44)	20	(31)
Colombia	22	4	(2)	12	(22)	33	(09)	9		Russia	51	15	(53)	∞	(16)	15	(53)	13	(22)
Indonesia	51	4	(8)	19	(37)	23	(42)	2	(10)	Kenya	46	22	(24)	7	(24)	က	<u>(</u>	7	(15)
Nepal	51	16	(31)	20	(38)	10	(20)	2	(10)	Jamaica	42	က	6	7	(2)	28	(67)	6	(21)
Thailand	43	10	(23)	9	(14)	23	(23)	4		Hong Kong	38	7	(18)	9	(16)	18	(47)	7	(18)
Cuba	41	4	(10)	က	()	31	(92)	က		Bosnia/Herzegovina	36	22	(69)	7	(19)	_	(3)	က	(8)
Liberia	41	13	(32)	17	(41)	10	(24)	_		Nigeria	36	10	(28)	6	(22)	80	(22)	6	(25)
Nigeria	40	6	(23)	14	(32)	15	(38)	7	(2)	Korea, DPR	35	∞	(23)	7	(9)	20	(22)	2	(14)
Taiwan	39	9	(15)	က	(8)	22	(64)	2	_	Poland	35	0	0	က	(6)	17	(49)	15	(43)
Russia	35	4	(11)	10	(53)	18	(21)	က		Nicaragua	34	4	(12)	က	(6)	13	(38)	14	(41)
All Others <sup>5</sup>		149	(17)	157	(18)	465		93	i	All Others <sup>5</sup>	848	137	(16)	146	(17)	303	(36)	262	(31)
Total	7544	1407	(19)	1581	(21)	3743	(20)	813	(11)	Total	7454	1255	(17)	1250	(11)	3025	(41)	1924	(26)
A																			

Includes persons ≥15 years of age.
Includes persons ≥15 years of age.
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.

<sup>3</sup>Ranked by total case count.

<sup>&</sup>lt;sup>4</sup>Among foreign-born persons, the number of years since arrival in the United States before diagnosis with tuberculosis. <sup>5</sup>Includes Not Specified for Country of Origin. Excludes missing.

Note: Data for all years updated through April 23, 2008.

Table 8. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2007

				\	/erification	on Criterio	1 <sup>1</sup>				Site of D	isease4	
		Posi	tive	Pos	sitive	Clir	nical	Pro	vider			Ext	ra-
	Total	Cult	ure	Sm	near	Case D	efinition	Diag	nosis	Pulmo	nary <sup>2</sup>	pulmo	nary³
Year	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	25107	20307	(81)	185	(1)	3085	(12)	1530	(6)	21158	(84)	3940	(16)
1994	24205	19506	(81)	189	(1)	2899	(12)	1611	(7)	20318	(84)	3885	(16)
1995	22728	18267	(80)	189	(1)	2727	(12)	1545	(7)	18888	(83)	3835	(17)
1996	21210	17154	(81)	131	(1)	2599	(12)	1326	(6)	17387	(82)	3814	(18)
1997	19751	15979	(81)	155	(1)	2405	(12)	1212	(6)	16239	(82)	3509	(18)
1998	18287	14790	(81)	155	(1)	2252	(12)	1090	(6)	14801	(81)	3484	(19)
1999	17501	13995	(80)	172	(1)	2101	(12)	1233	(7)	14067	(80)	3431	(20)
2000	16309	13013	(80)	148	(1)	1950	(12)	1198	(7)	13087	(80)	3210	(20)
2001	15946	12751	(80)	123	(1)	1886	(12)	1186	(7)	12725	(80)	3217	(20)
2002	15056	11976	(80)	104	(1)	1819	(12)	1157	(8)	11902	(79)	3148	(21)
2003	14837	11682	(79)	115	(1)	1782	(12)	1258	(8)	11808	(80)	3019	(20)
2004	14501	11327	(78)	79	(1)	1826	(13)	1269	(9)	11524	(79)	2973	(21)
2005	14065	10952	(78)	98	(1)	1796	(13)	1219	(9)	11133	(79)	2932	(21)
2006	13754	10771	(78)	92	(1)	1626	(12)	1265	(9)	10876	(79)	2873	(21)
2007	13299	10426	(78)	79	(1)	1461	(11)	1333	(10)	10590	(80)	2697	(20)

<sup>&</sup>lt;sup>1</sup>Based on the public health surveillance case definition for tuberculosis: CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997:46(No. RR-10):40–41. See Appendix A.

Note: See Technical Notes (page 9) for a description of national TB surveillance.

Data for all years updated through April 23, 2008.

Table 9. Pulmonary Tuberculosis Cases and Percentages by Sputum Smear and Sputum Culture Results: United States, 1993–2007

				Sputum Sn	near Resu	lt			Sp	utum Cultu	re Resul	t	
	Total Pulmonary	Pos	sitive	Neg	ative	Not Do Unkn		Posi	tive	Negati	ve	Not Do	
Year	Cases <sup>1</sup>	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	18888	8093	(43)	7713	(41)	3082	(16)	13282	(70)	2626	(14)	2980	(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	14067	6275	(45)	5662	(40)	2130	(15)	9820	(70)	2097	(15)	2150	(15)
2000	13087	5884	(45)	5346	(41)	1857	(14)	9251	(71)	1948	(15)	1888	(14)
2001	12725	5651	(44)	5322	(42)	1752	(14)	8905	(70)	2010	(16)	1810	(14)
2002	11902	5440	(46)	4792	(40)	1670	(14)	8332	(70)	1838	(15)	1732	(15)
2003	11808	5369	(45)	4880	(41)	1559	(13)	8208	(70)	1980	(17)	1620	(14)
2004	11524	5275	(46)	4898	(43)	1351	(12)	8046	(70)	2049	(18)	1429	(12)
2005	11133	5134	(46)	4747	(43)	1252	(11)	7704	(69)	2077	(19)	1352	(12)
2006	10876	5140	(47)	4579	(42)	1157	(11)	7701	(71)	1930	(18)	1245	(11)
2007	10590	4864	(46)	4524	(43)	1202	(11)	7366	(70)	1878	(18)	1346	(13)

<sup>1</sup>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 April 23, 2008.

<sup>&</sup>lt;sup>2</sup>Includes cases among persons with both pulmonary and extrapulmonary disease and cases of miliary TB.

<sup>&</sup>lt;sup>3</sup>Includes cases among persons with extrapulmonary TB disease only.

<sup>&</sup>lt;sup>4</sup>Excludes missing and unknowns.

Table 10. Tuberculosis Cases and Percentages, by Resistance to INH or Multidrug Resistance<sup>1</sup> in Persons with No Previous History of TB, by Origin of Birth: United States, 1993–2007

		Res	sistance	to Isonia	zid²			Resistanc	e to Ison	iazid and	Rifampin	2
	Total C	ases <sup>3,4</sup>	U.S	-born	Foreig	n-born <sup>5,6</sup>	Total C	Cases <sup>3,4</sup>	U.S.	-born	Foreigr	n-born <sup>5,6</sup>
Year	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	1399	(8.4)	804	(6.8)	579	(12.4)	407	(2.5)	301	(2.6)	103	(2.2)
1994	1360	(8.3)	711	(6.5)	635	(12.0)	353	(2.2)	238	(2.2)	110	(2.1)
1995	1174	(7.3)	555	(5.4)	618	(11.0)	254	(1.6)	169	(1.6)	85	(1.5)
1996	1137	(7.4)	495	(5.2)	639	(11.3)	207	(1.3)	105	(1.1)	101	(1.8)
1997	1079	(7.5)	435	(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	891	(7.5)	268	(4.4)	620	(11.0)	120	(1.0)	38	(0.6)	82	(1.5)
2001	806	(7.0)	243	(4.4)	562	(9.6)	118	(1.0)	34	(0.6)	84	(1.4)
2002	823	(7.6)	206	(4.1)	616	(10.8)	130	(1.2)	36	(0.7)	94	(1.7)
2003	821	(7.7)	215	(4.5)	603	(10.4)	92	(0.9)	24	(0.5)	68	(1.2)
2004	802	(7.6)	213	(4.5)	589	(10.2)	102	(1.0)	26	(0.6)	76	(1.3)
2005	764	(7.6)	188	(4.3)	571	(10.1)	98	(1.0)	19	(0.4)	78	(1.4)
2006	764	(7.8)	170	(4.2)	592	(10.4)	94	(1.0)	17	(0.4)	77	(1.4)
2007	686	(7.4)	165	(4.4)	520	(9.4)	98	(1.1)	20	(0.5)	78	(1.4)

<sup>&</sup>lt;sup>1</sup>Resistance to at least isoniazid and rifampin.

Note: Data for all years updated through April 23, 2008.

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<sup>1</sup> in Persons with Previous History of TB, by Origin of Birth: United States, 1993–2007

		Res	sistance	to Isonia	zid²			Resistan	ce to Isc	niazid and	Rifampir	1 <sup>2</sup>
,	Total C	Cases <sup>3,4</sup>	U.S	born	Foreig	gn-born <sup>5,6</sup>	Total	Cases <sup>3,4</sup>	U.S	Sborn	Foreig	n-born <sup>5,6</sup>
Year	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)	67	(12.0)	74	(24.4)	43	(5.0)	20	(3.6)	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	82	(13.0)	22	(6.1)	60	(22.2)	24	(3.8)	2	(0.6)	22	(8.1)
2001	85	(13.6)	28	(8.6)	57	(19.0)	31	(4.9)	7	(2.2)	24	(8.0)
2002	79	(13.9)	23	(7.6)	56	(21.3)	25	(4.4)	3	(1.0)	22	(8.4)
2003	65	(12.5)	16	(6.4)	49	(18.1)	20	(3.8)	2	(0.8)	18	(6.6)
2004	62	(11.6)	15	(5.5)	47	(18.0)	25	(4.7)	4	(1.5)	21	(8.0)
2005	70	(13.8)	19	(8.0)	51	(19.0)	22	(4.4)	2	(0.8)	20	(7.5)
2006	68	(13.9)	9	(4.5)	58	(20.2)	22	(4.5)	1	(0.5)	21	(7.3)
2007	68	(14.2)	14	(7.1)	54	(19.3)	19	(4.0)	3	(1.5)	16	(5.7)

<sup>&</sup>lt;sup>1</sup>Resistance to at least isoniazid and rifampin

Note: Data for all years updated through April 23, 2008.

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.

<sup>&</sup>lt;sup>2</sup>Isolates may be resistant to other drugs.

<sup>&</sup>lt;sup>3</sup>All cases were culture positive, and initial drug susceptibility testing done.

<sup>&</sup>lt;sup>4</sup>Includes persons of unknown country of birth.

<sup>&</sup>lt;sup>5</sup>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.

<sup>&</sup>lt;sup>6</sup>Includes Not Specified for Country of Origin. Excludes missing.

<sup>&</sup>lt;sup>2</sup>Isolates may be resistant to other drugs.

<sup>&</sup>lt;sup>3</sup>All cases were culture positive, and initial drug susceptibility testing done.

<sup>&</sup>lt;sup>4</sup>Includes persons of unknown country of birth.

<sup>&</sup>lt;sup>5</sup>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.

<sup>&</sup>lt;sup>6</sup> Includes Not Specified for Country of Origin. Excludes missing.

Table 12. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2007

					Directly C	bserved Therapy <sup>3</sup>		
		Initial Dru	g Regimen <sup>1,2</sup>			Both DOT and Self-	Therapy ≤1 Yea	ar Indicated4
Year	IR	IRZ	IRZ, E/S	IRZE	DOT Only	Administered	COT ≤1 Year	COT
1993	(12.9)	(31.2)	(40.9)	(40.3)	(21.3)	(14.1)	(64.1)	(87.5)
1994	(7.0)	(23.3)	(56.3)	(55.7)	(26.8)	(19.6)	(69.0)	(87.9)
1995	(5.2)	(20.3)	(63.4)	(62.7)	(36.1)	(20.8)	(73.9)	(89.6)
1996	(4.2)	(17.5)	(67.9)	(67.3)	(41.5)	(21.9)	(76.4)	(90.5)
1997	(3.2)	(15.1)	(72.4)	(71.9)	(45.9)	(23.3)	(78.2)	(91.3)
1998	(2.6)	(12.9)	(74.7)	(74.3)	(46.8)	(26.1)	(80.6)	(92.5)
1999	(2.2)	(11.2)	(77.2)	(76.9)	(48.5)	(27.1)	(80.8)	(92.3)
2000	(2.0)	(10.4)	(78.6)	(78.5)	(51.8)	(25.5)	(81.5)	(92.6)
2001	(1.7)	(9.6)	(80.1)	(79.8)	(52.7)	(27.0)	(81.5)	(92.5)
2002	(1.8)	(8.9)	(80.5)	(80.3)	(54.4)	(27.3)	(82.1)	(92.3)
2003	(1.4)	(8.1)	(81.5)	(81.3)	(55.8)	(28.1)	(82.8)	(92.7)
2004	(1.5)	(6.3)	(82.5)	(82.4)	(57.5)	(27.0)	(82.8)	(91.7)
2005	(1.2)	(5.5)	(83.8)	(83.7)	(56.8)	(29.4)	(82.7)	(91.9)
2006	(1.2)	(4.8)	(83.2)	(83.1)				
2007	(1.1)	(4.7)	(83.3)	(83.3)				

<sup>&</sup>lt;sup>1</sup>Includes persons alive at diagnosis.

Note: Ellipses indicate data not available.

Data for all years updated through April 23, 2008.

See Surveillance Slides #25 and #26.

Table 13. Tuberculosis Cases and Percentages in Persons with HIV Test Results<sup>1</sup> and with HIV Coinfection by Age Group: United States, 1993–2006

		25–44	Years Old			All Aç	ges	
		Test	LIN/ Day	- 141		Test	110/15	
	Res	sults	HIV Pos	sitive	Res	sults	HIV Po	ositive
Year	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	4377	(46)	2790	(29)	7455	(30)	3682	(15)
1994	4443	(49)	2669	(30)	7886	(33)	3601	(15)
1995	4277	(52)	2172	(26)	8179	(36)	3038	(13)
1996	4366	(58)	1856	(25)	8832	(42)	2615	(12)
1997	4142	(60)	1473	(21)	8771	(44)	2092	(11)
1998	3862	(61)	1240	(20)	8292	(45)	1831	(10)
1999	3812	(63)	1175	(19)	8420	(48)	1726	(10)
2000	3524	(63)	955	(17)	8112	(50)	1464	(9)
2001	3566	(64)	911	(16)	8041	(50)	1407	(9)
2002	3486	(66)	845	(16)	7946	(53)	1389	(9)
2003	3422	(67)	807	(16)	8106	(55)	1320	(9)
2004	3344	(68)	681	(14)	8231	(57)	1188	(8)
2005	3269	(69)	611	(13)	8222	(58)	1043	(7)
2006	3265	(69)	558	(12)	8234	(60)	960	(7)

¹Includes 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 did not report AIDS test results for 2005. Rhode Island did not report HIV test results for years 1993–1997.

Note: Data for all years updated through April 23, 2008.

See Surveillance Slides #24 and #25.

<sup>&</sup>lt;sup>2</sup>l=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin. Excludes cases with no information on initial drug regimen; 0.74% received no initial drug therapy, 0.16% were started on one drug, and 9.65% had an initial multidrug regimen other than IR, IRZ, or IRZ.E/S.

<sup>&</sup>lt;sup>3</sup>Includes persons alive at diagnosis with initial drug regimen of one or more drugs prescribed.

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 resistant to rifampin and pediatric (aged <15) cases with meningeal, bone or joint, or miliary disease. See Technical Notes (page 9) for description of COT calculation.

Table 14. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: **United States, 1993–2005** 

	Total Cases <sup>1</sup>	Complete	d Therapy	Mov	ved	Lo	st	Ref	fused	Di	ed <sup>2</sup>	Unkn	own <sup>3</sup>
Year	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	23741	18042	(76.0)	1120	(4.7)	1087	(4.6)	223	(0.9)	3052	(12.9)	217	(0.9)
1994	23051	17763	(77.1)	1194	(5.2)	739	(3.2)	183	(8.0)	2743	(11.9)	429	(1.9)
1995	21712	17285	(79.6)	969	(4.5)	566	(2.6)	156	(0.7)	2391	(11.0)	345	(1.6)
1996	20297	16510	(81.3)	783	(3.9)	520	(2.6)	156	(8.0)	1992	(9.8)	336	(1.7)
1997	18930	15654	(82.7)	667	(3.5)	435	(2.3)	119	(0.6)	1755	(9.3)	300	(1.6)
1998	17584	14763	(84.0)	534	(3.0)	400	(2.3)	104	(0.6)	1578	(9.0)	205	(1.2)
1999	16863	14219	(84.3)	456	(2.7)	356	(2.1)	104	(0.6)	1436	(8.5)	292	(1.7)
2000	15786	13399	(84.9)	408	(2.6)	392	(2.5)	112	(0.7)	1294	(8.2)	181	(1.1)
2001	15410	13195	(85.6)	375	(2.4)	364	(2.4)	98	(0.6)	1115	(7.2)	263	(1.7)
2002	14559	12430	(85.4)	336	(2.3)	364	(2.5)	86	(0.6)	1071	(7.4)	272	(1.9)
2003	14381	12391	(86.2)	312	(2.2)	359	(2.5)	85	(0.6)	989	(6.9)	245	(1.7)
2004	14078	11998	(85.2)	341	(2.4)	331	(2.4)	82	(0.6)	960	(6.8)	366	(2.6)
2005	13662	11629	(85.1)	336	(2.5)	317	(2.3)	88	(0.6)	974	(7.1)	318	(2.3)

<sup>&</sup>lt;sup>1</sup>Includes all cases in persons reported as alive at diagnosis and taking one or more TB drugs.

Data complete through 2005 only. See Technical Notes (page 9) for details.

<sup>&</sup>lt;sup>2</sup>Died = died of any cause (not only TB).

<sup>&</sup>lt;sup>3</sup>Includes cases in persons reporting reason therapy stopped = Other, Missing, or Unknown. **Note:** Data for all years are updated through April 23, 2008.

## Morbidity Tables United States, 2007

Table 15. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2007

				Age Group				Not
Race/Ethnicity and Sex	All Ages	Under 5	5–14	15–24	25–44	45–64	<u>≥</u> 65	Stated
Total Cases	13,299	466	313	1,581	4,317	4,042	2,578	2
Male	8,111	245	143	915	2,557	2,747	1,502	2
Female	5,186	221	170	666	1,759	1,294	1,076	0
Unknown	2	0	0	0	1	1	0	0
Hispanic or Latino <sup>1</sup>	3,872	234	120	664	1,489	863	501	1
Male .	2,537	121	56	460	1,017	590	292	1
Female	1,333 2	113 0	64	204 0	471	272	209	0
Unknown	2	U	0	U	1	1	0	0
Non-Hispanic								
American Indian or Alaska Native	136	5	4	9	28	56	34	0
Male	80	1	2	3	19	36	19	0
Female	56	4	2	6	9	20	15	0
Unknown	0	0	0	0	0	0	0	0
Asian	3,445	49	56	370	1,163	1,028	779	0
Male	1,891	30	28	182	584	610	457	0
Female	1,554	19	28	188	579	418	322	0
Unknown	0	0	0	0	0	0	0	0
Cimiemi	v	v	U	J	· ·	J	· ·	•
Black or African American	3,470	126	97	425	1,135	1,213	474	0
Male	2,101	68	44	218	652	849	270	0
Female	1,369	58	53	207	483	364	204	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	96	7	5	19	31	21	13	0
Male	46	4	3	11	16	9	3	0
Female	50	3	2	8	15	12	10	0
Unknown	0	0	0	0	0	0	0	0
White	2,216	42	30	88	452	838	765	1
Male	1,422	19	10	37	261	641	453	1
Female	794	23	20	51	191	197	312	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>2</sup>	25	3	0	2	5	9	6	0
Male	14	2	0	1	2	6	3	0
Female	11	1	0	1	3	3	3	0
Unknown	0	0	0	0	0	0	0	0
Unknown	39	0	1	4	14	14	6	0
Male	20	0	0	3	6	6	5	0
Female	19	0	1	1	8	8	1	0
Unknown	0	0	0	0	0	0	0	0

<sup>&</sup>lt;sup>1</sup>Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

**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.

<sup>&</sup>lt;sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

Table 16. Tuberculosis Case Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2007

			Age	e Group			
Race/Ethnicity and Sex	All Ages	Under 5	5–14	15–24	25–44	45 –64	≥65
Total Rate	4.4	2.2	0.8	3.7	5.2	5.3	6.8
Male	5.5	2.3	0.7	4.2	6.0	7.4	9.4
Female	3.4	2.2	0.9	3.2	4.2	3.3	4.9
Hispanic or Latino <sup>1</sup>	8.5	4.8	1.5	8.9	9.9	11.6	19.9
Male	10.8	4.8	1.3	11.8	12.5	15.9	27.2
Female	6.1	4.7	1.6	5.8	6.8	7.3	14.5
American Indian or Alaska Native	5.9	2.8	1.1	2.2	4.4	10.7	18.4
Male	7.1	1.1	1.1	1.4	6.0	14.4	23.4
Female	4.8	4.5	1.2	3.0	2.8	7.3	14.5
Asian	26.3	5.6	3.5	22.4	25.2	32.9	63.7
Male	29.8	6.6	3.5	21.5	25.9	41.8	87.0
Female	23.1	4.4	3.6	23.4	24.5	25.1	46.1
Black or African American	9.4	4.3	1.7	6.8	10.7	14.7	15.1
Male	11.9	4.5	1.5	6.9	12.9	22.5	22.3
Female	7.1	4.0	1.8	6.7	8.7	8.1	10.5
Native Hawaiian or Other Pacific Islander	23.0	25.0	8.2	27.2	22.4	23.4	43.1
Male	21.9	27.2	9.6	30.5	22.9	20.2	22.0
Female	24.2	22.6	6.7	23.6	22.0	26.6	60.6
White	1.1	0.4	0.1	0.3	0.9	1.5	2.5
Male	1.5	0.3	0.1	0.3	1.0	2.3	3.5
Female	0.8	0.4	0.2	0.4	0.7	0.7	1.8
Multiple Race <sup>2</sup>	0.6	0.5	0.0	0.3	0.5	1.4	2.6
Male	0.7	0.7	0.0	0.3	0.4	2.0	3.1
Female	0.5	0.3	0.0	0.3	0.6	0.9	2.3

<sup>&</sup>lt;sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

**Note:** Denominators for computing case rates were obtained from the U.S. Census Bureau Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin: July 1, 2007 (http://www.census.gov/popest/national/asrh/files/NC-EST2007-ALLDATA-R-File16.csv) (Accessed May 5, 2008).

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 Slides #7 and #10.

<sup>&</sup>lt;sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

Table 17. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2007

				Age G	roup			Not
Race/Ethnicity and Sex	All Ages	Under 5	5–14	15–24	25–44	45–64	<u>≥</u> 65	Stated
Total Cases	5,493	397	176	425	1,286	1,993	1,214	2
Male	3,502	205	83	226	766	1,476	744	2
Female	1,991	192	93	199	520	517	470	0
Unknown	0	0	0	0	0	0	0	0
Hispanic or Latino <sup>1</sup>	881	210	76	98	202	171	123	1
Male	546	110	37	60	131	122	85	1
Female	335	100	39	38	71	49	38	0
Unknown	0	0	0	0	0	0	0	0
Non-Hispanic								
American Indian or Alaska Native	130	5	3	7	26	56	33	0
Male	77	1	1	2	18	36	19	0
Female	53	4	2	5	8	20	14	0
Unknown	0	0	0	0	0	0	0	0
Asian	132	30	22	34	20	8	18	0
Male	70	16	14	16	9	5	10	0
Female	62	14	8	18	11	3	8	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	2,460	106	49	204	685	1,008	408	0
Male	1,558	57	21	109	405	729	237	0
Female	902	49	28	95	280	279	171	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	73	6	5	18	21	17	6	0
Male	38	3	3	11	11	7	3	0
Female	35	3	2	7	10	10	3	0
Unknown	0	0	0	0	0	0	0	0
White	1,788	37	20	64	325	724	617	1
Male	1,195	16	7	28	188	572	383	1
Female	593	21	13	36	137	152	234	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>2</sup>	11	3	0	0	1	2	5	0
Male	7	2	0	0	0	2	3	0
Female	4	1	0	0	1	0	2	0
Unknown	0	0	0	0	0	0	0	0
Unknown	18	0	1	0	6	7	4	0
Male	11	0	0	0	4	3	4	0
Female	7	0	1	0	2	4	0	0
Unknown	0	0	0	0	0	0	0	0

<sup>&</sup>lt;sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

**Note:** Case counts for race categories (American Indian or Álaska 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.

<sup>&</sup>lt;sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

See Technical Notes (page 9).

See Surveillance Slide #13.

Table 18. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2007

				Age Gro	up			Not
Race/Ethnicity and Sex	All Ages	Under 5	5–14	15–24	25–44	45–64	<u>≥</u> 65	Stated
Total Cases	7,750	69	137	1,152	3,012	2,031	1,349	0
Male	4,571	40	60	687	1,777	1,260	747	0
Female	3,177	29	77	465	1,234	770	602	0
Unknown	2	0	0	0	1	1	0	0
Hispanic or Latino <sup>2</sup>	2,974	24	44	565	1,279	689	373	0
Male	1,977	11	19	399	879	466	203	0
Female	995	13	25	166	399	222	170	0
Unknown	2	0	0	0	1	1	0	0
Non-Hispanic								
American Indian or Alaska Native	5	0	1	1	2	0	1	0
Male	3	0	1	1	1	0	0	0
Female	2	0	0	0	1	0	1	0
Unknown	0	0	0	0	0	0	0	0
Asian	3,305	19	34	336	1,139	1,018	759	0
Male	1,814	14	14	166	571	603	446	0
Female	1,491	5	20	170	568	415	313	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	1,004	20	48	220	449	202	65	0
Male	539	11	23	109	247	117	32	0
Female	465	9	25	111	202	85	33	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	23	1	0	1	10	4	7	0
Male	8	1	0	0	5	2	0	0
Female	15	0	0	1	5	2	7	0
Unknown	0	0	0	0	0	0	0	0
White	414	5	10	24	125	108	142	0
Male	219	3	3	9	72	66	66	0
Female	195	2	7	15	53	42	76	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>3</sup>	14	0	0	2	4	7	1	0
Male	7	0	0	1	2	4	0	0
Female	7	0	0	1	2	3	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	11	0	0	3	4	3	1	0
Male	4	0	0	2	0	2	0	0
Female	7	0	0	1	4	1	1	0
Unknown	0	0	0	0	0	0	0	0

<sup>1</sup>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:** Case counts for race categories (American Indian or Álaska 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.

<sup>&</sup>lt;sup>2</sup>Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>&</sup>lt;sup>3</sup>Indicates two or more races reported for a person. Category first reported in 2003.

See Technical Notes (page 9).

See Surveillance Slide #13.

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Table 19. Tuberculosis Cases by Country of Origin¹: United States, 2007

African	Region
Total Cas	ses = 547

Algeria	0	Ethiopia	178	Niger	0
Angola	3	Gabon	0	Nigeria	43
Benin	0	Gambia	9	Rwanda	3
Botswana	1	Ghana	14	Sao Tome and Principe	1
Burkina Faso	3	Guinea	19	Senegal	5
Burundi	6	Guinea-Bissau	1	Seychelles	1
Cameroon	15	Kenya	68	Sierra Leone	18
Cape Verde	5	Lesotho	0	South Africa	19
Central African Republic	2	Liberia	47	Swaziland	1
Chad	4	Madagascar	0	Tanzania, UR	8
Comoros	0	Malawi	1	Togo	2
Congo, Republic of	5	Mali	3	Uganda	13
Côte d'Ivoire	8	Mauritania	7	Zambia	11
DR Congo	1	Mauritius	0	Zimbabwe	9
Equatorial Guinea	1	Mozambique	0		
Eritrea	10	Namibia	2		

#### Americas Region Total Cases = 8,683

Anguilla	0	Cuba	41	Panama	6
Antigua and Barbuda	0	Dominica	2	Paraguay	0
Argentina	5	Dominican Republic	90	Peru	141
Bahamas	5	Ecuador	115	Puerto Rico	70
Barbados	1	El Salvador	153	St. Kitts and Nevis	0
Belize	5	Grenada	4	St. Lucia	2
Bermuda	0	Guatemala	248	St. Vincent & Grenadines	1
Bolivia	33	Guyana	14	Suriname	1
Brazil	29	Haiti	177	Trinidad and Tobago	13
British Virgin Islands	1	Honduras	180	Turks and Caicos Islands	0
Canada	11	Jamaica	27	Uruguay	3
Cayman Islands	0	Mexico	1,848	U.S. Virgin Islands	2
Chile	3	Montserrat	0	United States of America	5,353
Colombia	56	Netherland Antilles	0	Venezuela	8
Costa Rica	4	Nicaragua	31		

#### Eastern Mediterranean Region Total Cases = 356

Afghanistan	18	Lebanon	3	Sudan	27
Bahrain	0	Libyan Arab Jamahiriya	0	Syrian Arab Republic	4
Djibouti	0	Morocco	7	Tunisia	1
Egypt	7	Oman	0	United Arab Emirates	0
Iran, Islamic Republic of	13	Pakistan	78	West Bank and Gaza	0
Iraq	4	Qatar	0	Yemen	8
Jordan	5	Saudi Arabia	3		
Kuwait	1	Somalia	177		

Table 19. (Cont'd) Tuberculosis Cases by Country of Origin¹: United States, 2007

		European Region Total Cases = 288			
Albania	5	Germany	8	Norway	C
Andorra	0	Greece	6	Poland	26
Armenia	7	Hungary	8	Portugal	18
Austria	0	Iceland	1	Romania	18
Azerbaijan	3	Ireland	3	Russian Federation	41
Belarus	0	Israel	2	San Marino	C
Belguim	2	Italy	12	Serbia	2
Bosnia and Herzegovina	22	Kazakhstan	0	Slovakia	C
Bulgaria	3	Kyrgyzstan	1	Slovenia	2
Croatia	5	Latvia	2	Spain	1
Cyprus	0	Lithuania	2	Sweden	3
Czech Republic	1	Luxembourg	0	Switzerland	0
Czechoslovakia	1	Macedonia, TFYR	2	Tajikistan	3
Denmark	1	Malta	0	Turkey	12
Estonia	1	Moldova, Republic of	1	Turkmenistan	0
Finland	1	Monaco	0	Ukraine	36
France	3	Montenegro	0	United Kingdom	11
Georgia	2	Netherlands	2	Uzbekistan	3
				Yugoslavia	5
Bangladesh Bhutan	56 3	Total Cases = 935  Korea, DPR Maldives	28 1	Sri Lanka Thailand	8 45
India	624	Myanmar	65	Timor-Leste	0
Indonesia	52	Nepal	53	Timor-Leste	0
		Western Pacific Region Total Cases = 2,384			
American Samoa	6	Korea, Rep.	154	Philippines	955
Australia	0	Lao, PDR	78	Samoa	1
Brunei Darussalam	0	Malaysia	6	Singapore	(
Cambodia	95	Marshall Islands, Republic of	34	Solomon Islands	C
China	386	Micronesia, Federated States of	16	Tokelau 	(
China, Hong Kong SAR	24	Mongolia	9	Tonga	5
China, Macao SAR	0	Nauru	0	Tuvalu	(
Cook Islands	0	New Caledonia	0	Vanuatu	
	6	New Zealand	3	Vietnam	573
	^	Niue	0	Wallis and Futuna	(
French Polynesia	0				
French Polynesia Guam	7	N. Mariana Islands, Commonwealth of	2		
Fiji French Polynesia Guam Japan Kiribati		N. Mariana Islands, Commonwealth of Palau, Republic of Papua New Guinea	2 0 1		

### Other<sup>2</sup> Total Cases = 50

### Unknown Total Cases = 56

**Note:** Regional composition of countries based on WHO 2008 Report *Global Tuberculosis Control, Surveillance, Planning, Financing, World Health Organization (WHO/HTM/TB/2008.393*) (http://www.who.int/tb/publications/global\_report/en/).

<sup>&</sup>lt;sup>1</sup>Country as reported by patient.

<sup>&</sup>lt;sup>2</sup>Includes country codes currently reported via the National Tuberculosis Surveillance System that are not represented by WHO member states.

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# Morbidity Tables States, 2007

Table 20. Tuberculosis Cases and Case Rates per 100,000 Population: States, 2007 and 2006

	Case	es	Case	Rates	Rank Accord	ding to Rate	Population Estimate
State	2007	2006	2007	2006	2007	2006	July 1, 2007
United States	13,299	13,754	4.4	4.6			301,621,157
Alabama	175	196	3.8	4.3	23	16	4,627,851
Alaska	51	70	7.5	10.3	2	1	683,478
Arizona	304	314	4.8	5.1	12	10	6,338,755
Arkansas	106	102	3.7	3.6	24	24	2,834,797
California	2,726	2,778	7.5	7.7	3	3	36,553,215
Colorado	111	124	2.3	2.6	30	28	4,861,515
Connecticut	108	89	3.1	2.5	26	29	3,502,309
Delaware	19	29	2.2	3.4	34	25	864,764
District of Columbia <sup>1</sup>	60	72	10.2	12.3			588,292
Florida	989	1,033	5.4	5.7	6	7	18,251,243
Georgia	474	507	5.0	5.4	9	8	9,544,750
Hawaii	122	114	9.5	8.9	1	2	1,283,388
daho	9	20	0.6	1.4	48	42	1,499,402
llinois	521	562	4.1	4.4	18	14	12,852,548
	128	124	2.0	2.0	37	36	
ndiana					-		6,345,289
owa	43	40	1.4	1.3	41	44	2,988,046
Kansas	59	82	2.1	3.0	35	26	2,775,997
Kentucky	120	84	2.8	2.0	27	35	4,241,474
_ouisiana	218	207	5.1	4.9	8	11	4,293,204
Maine	19	16	1.4	1.2	40	48	1,317,207
Maryland	270	252	4.8	4.5	11	13	5,618,344
Massachusetts	224	259	3.5	4.0	25	21	6,449,755
⁄lichigan	226	221	2.2	2.2	31	33	10,071,822
Minnesota	238	217	4.6	4.2	14	18	5,197,621
Mississippi	137	115	4.7	4.0	13	23	2,918,785
Missouri	119	104	2.0	1.8	36	37	5,878,415
Montana	11	13	1.1	1.4	45	41	957,861
Nebraska	25	25	1.4	1.4	42	40	1,774,571
Nevada	102	101	4.0	4.1	20	20	2,565,382
New Hampshire	11	17	0.8	1.3	47	46	1,315,828
New Jersey	467	508	5.4	5.9	7	6	8,685,920
New Mexico	51	48	2.6	2.5	28	30	1,969,915
New York	1,175	1,263	6.1	6.6	5	5	19,297,729
North Carolina	345	374	3.8	4.2	21	17	9,061,032
North Dakota	7	10	1.1	1.6	46	39	639,715
Ohio	252	239	2.2	2.1	33	34	11,466,917
Oklahoma	149	144	4.1	4.0	17	22	3,617,316
Oregon	94	81	2.5	2.2	29	32	3,747,455
Pennsylvania	276	342	2.2	2.8	32	27	12,432,792
Rhode Island	45	26	4.3	2.4	16	31	1,057,832
South Carolina	218	222	4.9	5.1	10	9	4,407,709
South Dakota	13	14	1.6	1.8	38	38	796,214
ennessee	234	277	3.8	4.6	22	12	6,156,719
Texas	1,510	1,583	6.3	6.8	4	4	
	39		1.5	1.3	39	4 45	23,904,380
Jtah /armant	_	34					2,645,330
/ermont	3	8	0.5	1.3	49	47	621,254
/irginia	309	332	4.0	4.3	19	15	7,712,091
Vashington	291	261	4.5	4.1	15	19	6,468,424
Vest Virginia	24	22	1.3	1.2	43	49	1,812,035
Visconsin	70	75	1.2	1.3	44	43	5,601,640
Vyoming	2	4	0.4	0.8	50	50	522,830
American Samoa <sup>1,2</sup>	3	2	5.2	3.5			57,663
ed. States of Micronesia <sup>1,2</sup>	66	71	61.2	65.7			107,848
Guam <sup>1,2</sup>	92	54	53.0	31.6			173,456
Marshall Islands1,2	117	27	189.3	44.7			61,815
N. Mariana Islands <sup>1,2</sup>	41	46	48.5	55.8			84,546
Puerto Rico <sup>1,2</sup>	98	112	2.5	2.9			3,941,459
Republic of Palau <sup>1,2</sup>	11	9	52.8	43.7			20,842
J.S. Virgin Islands <sup>1,2</sup>							108,448

<sup>1</sup>Not ranked with the states. See Table 28, page 50, for District of Columbia ranking among states. <sup>2</sup>Not included in U.S. totals.

Note: Denominators for computing 2006 and 2007 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: April 1, 2000–July 1, 2007 (NST-EST2006-01) (accessed June 25, 2008) (http://www.census.gov/popest/states/tables/NST-EST2007-01.xls); 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, 2007

			•		•		•								
	- 1	Under 5	er 5	5–14	4	15–24	4	25-44	4	45–64		59₹	5	Unknown or Missing	wn sing
States	Cases	Š	(%)	No.	(%)	Š.	(%)	No.	(%)	No.	(%)	No.	(%)	Š.	(%)
United States	13,299	466	(3.5)	313	(2.4)	1,581	(11.9)	4,317	(32.5)	4,042	(30.4)	2578	(19.4)	7	(0.0)
Alabama	175	4	(2.3)	က	(1.7)	20	(11.4)	4	(23.4)	64	(36.6)	43	(24.6)	0	(0.0)
Alaska	51	ო	(5.9)	-	(2.0)	9	(11.8)	9	(11.8)	23	(45.1)	12	(23.5)	0	(0.0)
Arizona	304	17	(2.6)	80	(5.6)	37	(12.2)	100	(32.9)	75	(24.7)	99	(21.7)	_	(0.3)
Arkansas	106	80	(7.5)	က	(2.8)	19	(17.9)	19	(17.9)	29	(27.4)	28	(26.4)	0	(0.0)
California	2,726	88	(3.2)	46	(1.7)	291	(10.7)	787	(28.9)	861	(31.6)	653	(24.0)	0	(0.0)
Colorado	111	4	(3.6)	က	(2.7)	16	(14.4)	29	(26.1)	25	(22.5)	34	(30.6)	0	(0.0)
Connecticut	108	2	(1.9)	7	(6.0)	17	(15.7)	47	(43.5)	27	(25.0)	41	(13.0)	0	(0.0)
Delaware	19	_	(2.3)	0	(0.0)	2	(10.5)	14	(73.7)	2	(10.5)	0	(0.0)	0	(0.0)
District of Columbia	09	2	(3.3)	0	(0.0)	က	(2.0)	20	(33.3)	24	(40.0)	11	(18.3)	0	(0.0)
Florida	686	41	(4.1)	20	(2.0)	103	(10.4)	332	(33.6)	337	(34.1)	156	(15.8)	0	(0.0)
Georgia	474	25	(5.3)	1	(2.3)	22	(12.0)	170	(35.9)	139	(29.3)	71	(15.0)	_	(0.2)
Hawaii	122	_	(0.8)	7	(1.6)	14	(11.5)	24	(19.7)	45	(36.9)	36	(29.5)	0	(0.0)
Idaho	<u></u>	0	(0.0)	0	(0.0)	~	(11.1)	4	(44.4)	2	(22.2)	2	(22.2)	0	(0.0)
Illinois	521	10	(1.9)	7	(1.3)	44	(8.4)	159	(30.5)	179	(34.4)	122	(23.4)	0	(0.0)
Indiana	128	4	(3.1)	_	(0.8)	20	(15.6)	47	(36.7)	36	(28.1)	20	(15.6)	0	(0.0)
lowa	43	0	(0.0)	_	(2.3)	2	(11.6)	20	(46.5)	10	(23.3)	7	(16.3)	0	(0.0)
Kansas	29	_	(1.7)	က	(5.1)	12	(20.3)	1	(18.6)	23	(39.0)	6	(15.3)	0	(0.0)
Kentucky	120	7	(1.7)	7	(1.7)	15	(12.5)	35	(29.2)	34	(28.3)	32	(26.7)	0	(0.0)
Louisiana	218	9	(2.8)	2	(2.3)	24	(11.0)	65	(29.8)	91	(41.7)	27	(12.4)	0	(0.0)
Maine	19	_	(2.3)	-	(5.3)	3	(15.8)	2	(26.3)	2	(26.3)	4	(21.1)	0	(0.0)
Maryland	270	7	(5.6)	9	(2.2)	43	(15.9)	92	(35.2)	73	(27.0)	46	(17.0)	0	(0.0)
Massachusetts	224	4	(1.8)	7	(4.9)	23	(10.3)	74	(33.0)	73	(32.6)	39	(17.4)	0	(0.0)
Michigan	226	7	(4.9)	10	(4.4)	27	(11.9)	61	(27.0)	09	(26.5)	22	(25.2)	0	(0.0)
Minnesota	238	2	(2.1)	17	(7.1)	54	(22.7)	92	(38.7)	41	(17.2)	59	(12.2)	0	(0.0)
Mississippi	137	9	(4.4)	က	(2.2)	16	(11.7)	39	(28.5)	51	(37.2)	22	(16.1)	0	(0.0)
Missouri	119	4	(3.4)	0	(0.0)	15	(12.6)	34	(28.6)	40	(33.6)	56	(21.8)	0	(0.0)
Montana	7	0	(0.0)	0	(0.0)	0	(0.0)	2	(18.2)	2	(45.5)	4	(36.4)	0	(0.0)
Nebraska	25	0	(0.0)	7	(8.0)	က	(12.0)	80	(32.0)	6	(36.0)	8	(12.0)	0	(0.0)
Nevada	102	9	(2.9)	က	(5.9)	15	(14.7)	25	(24.5)	36	(35.3)	17	(16.7)	0	(0.0)
New Hampshire	7	0	(0.0)	0	(0.0)	0	(0.0)	က	(27.3)	4	(36.4)	4	(36.4)	0	(0.0)
New Jersey	467	19	(4.1)	11	(2.4)	58	(12.4)	174	(37.3)	122	(26.1)	83	(17.8)	0	(0.0)

Table 21. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2007

	- - -	Under	er 5	5–14	4	15–24	4	25–44	_	45–64	94	>65	2	Unknown or Missing	wn sing
States	lotal Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	51	2	(3.9)	0	(0.0)	3	(2.9)	11	(21.6)	18	(35.3)	17	(33.3)	0	(0.0)
New York	1,175	24	(2.0)	18	(1.5)	149	(12.7)	452	(38.5)	315	(26.8)	217	(18.5)	0	(0.0)
North Carolina	345	18	(5.2)	7	(2.0)	45	(13.0)	122	(35.4)	88	(25.8)	64	(18.6)	0	(0.0)
North Dakota	7	0	(0.0)	0	(0.0)	0	(0.0)	င	(42.9)	2	(28.6)	2	(28.6)	0	(0.0)
Ohio	252	œ	(3.2)	2	(2.0)	31	(12.3)	80	(31.7)	20	(27.8)	28	(23.0)	0	(0.0)
Oklahoma	149	12	(8.1)	6	(0.9)	11	(7.4)	36	(24.2)	09	(40.3)	21	(14.1)	0	(0.0)
Oregon	94	4	(4.3)	က	(3.2)	11	(11.7)	37	(39.4)	28	(29.8)	1	(11.7)	0	(0.0)
Pennsylvania	276	14	(5.1)	13	(4.7)	28	(10.1)	79	(28.6)	98	(31.2)	26	(20.3)	0	(0.0)
Rhode Island	45	7	(15.6)	1	(2.2)	3	(6.7)	4	(31.1)	12	(26.7)	80	(17.8)	0	(0.0)
South Carolina	218	7	(3.2)	9	(2.8)	31	(14.2)	29	(27.1)	72	(33.0)	43	(19.7)	0	(0.0)
South Dakota	13	0	(0.0)	0	(0.0)	0	(0.0)	~	(7.7)	œ	(61.5)	4	(30.8)	0	(0.0)
Tennessee	234	4	(1.7)	9	(5.6)	20	(8.5)	82	(35.0)	89	(29.1)	54	(23.1)	0	(0.0)
Texas	1,510	62	(4.1)	42	(2.8)	171	(11.3)	524	(34.7)	497	(32.9)	214	(14.2)	0	(0.0)
Utah	39	_	(5.6)	_	(5.6)	10	(25.6)	13	(33.3)	œ	(20.5)	9	(15.4)	0	(0.0)
Vermont	3	0	(0.0)	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	_	(33.3)	0	(0.0)
Virginia	309	∞	(5.6)	10	(3.2)	45	(14.6)	127	(41.1)	74	(23.9)	45	(14.6)	0	(0.0)
Washington	291	7	(3.8)	7	(3.8)	46	(15.8)	101	(34.7)	69	(23.7)	53	(18.2)	0	(0.0)
West Virginia	24	0	(0.0)	0	(0.0)	2	(8.3)	7	(29.2)	9	(25.0)	<b>o</b>	(37.5)	0	(0.0)
Wisconsin	20	2	(5.9)	0	(0.0)	12	(17.1)	24	(34.3)	4	(20.0)	18	(25.7)	0	(0.0)
Wyoming	2	0	(0.0)	0	(0.0)	0	(0.0)	_	(20.0)	_	(20.0)	0	(0.0)	0	(0.0)
American Samoa¹	က	0	(0.0)	0	(0.0)	_	(33.3)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)
Fed. States of Micronesia1	99	9	(9.1)	∞	(12.1)	56	(39.4)	14	(21.2)	80	(12.1)	-	(1.5)	က	(4.5)
Guam¹	92	18	(19.6)	13	(14.1)	9	(6.5)	19	(20.7)	28	(30.4)	œ	(8.7)	0	(0.0)
Marshall Islands¹	117	7	(9.4)	13	(11.1)	23	(19.7)	30	(25.6)	32	(27.4)	∞	(8.8)	0	(0.0)
N. Mariana Islands¹	41	0	(0.0)	0	(0.0)	က	(7.3)	23	(56.1)	13	(31.7)	2	(4.9)	0	(0.0)
Puerto Rico1	86	က	(3.1)	-	(1.0)	7	(7.1)	25	(25.5)	39	(39.8)	23	(23.5)	0	(0.0)
Republic of Palau <sup>1</sup>	11	0	(0.0)	0	(0.0)	0	(0.0)	3	(27.3)	9	(54.5)	2	(18.2)	0	(0.0)
U.S. Virgin Islands¹	:	ŧ	ŧ	÷	:	:	:	÷	ŧ	ŧ	:	÷	:	÷	÷

¹Not included in U.S. totals. Data for 2006 are interim as of April 23, 2008. Note: Ellipses indicate data not available.

Table 22. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2007

				•				,		_		•	)				
	Total	Hisp or L	Hispanic or Latino¹	American Indian or Alaska Native	וndian ו Native	As	Asian	Blac African A	Black or African American	Native Ison Orthe Isla	Native Hawaiian or Other Pacific Islander	W	White	Multiple	Multiple Race²	Unknown or Missing	wn or sing
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	13,299	3,872	(29.1)	136	(1.0)	3,445	(25.9)	3,470	(26.1)	96	(0.7)	2,216	(16.7)	25	(0.2)	39	(0.3)
Alabama	175	21	(12.0)	0	(0.0)	4	(8.0)	82	(46.9)	_	(0.6)	22	(32.6)	0	(0.0)	0	(0.0)
Alaska	51	-	(2.0)	31	(80.8)	7	(13.7)	-	(2.0)	0	(0.0)	7	(13.7)	-	(2.0)	က	(5.9)
Arizona	304	172	(26.6)	22	(7.2)	49	(16.1)	18	(6.9)	0	(0.0)	42	(13.8)	_	(0.3)	0	(0.0)
Arkansas	106	14	(13.2)	0	(0.0)	6	(8.5)	35	(33.0)	2	(4.7)	35	(33.0)	_	(6.0)	7	(9.9)
California	2,726	993	(36.4)	2	(0.2)	1,243	(45.6)	215	(7.9)	17	(0.6)	236	(8.7)	4	(0.1)	13	(0.5)
Colorado	111	21	(45.9)	-	(6.0)	26	(23.4)	16	(14.4)	0	(0.0)	16	(14.4)	0	(0.0)	-	(6.0)
Connecticut	108	33	(30.6)	0	(0.0)	33	(30.6)	19	(17.6)	0	(0.0)	23	(21.3)	0	(0.0)	0	(0.0)
Delaware	19	9	(31.6)	0	(0.0)	7	(36.8)	9	(31.6)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
District of Columbia	09	15	(25.0)	0	(0.0)	4	(6.7)	40	(66.7)	0	(0.0)	_	(1.7)	0	(0.0)	0	(0.0)
Florida	686	290	(29.3)	2	(0.2)	102	(10.3)	382	(38.6)	_	(0.1)	209	(21.1)	က	(0.3)	0	(0.0)
Georgia	474	97	(20.5)	0	(0.0)	65	(13.7)	240	(20.6)	_	(0.2)	70	(14.8)	0	(0.0)	<b>—</b>	(0.2)
Hawaii	122	-	(0.8)	0	(0.0)	87	(71.3)	0	(0.0)	56	(21.3)	80	(9.9)	0	(0.0)	0	(0.0)
Idaho	6	က	(33.3)	0	(0.0)	_	(11.1)	0	(0.0)	0	(0.0)	2	(25.6)	0	(0.0)	0	(0.0)
Illinois	521	130	(25.0)	0	(0.0)	149	(28.6)	154	(29.6)	0	(0.0)	83	(15.9)	~	(0.2)	4	(0.8)
Indiana	128	34	(26.6)	0	(0.0)	18	(14.1)	28	(21.9)	0	(0.0)	48	(37.5)	0	(0.0)	0	(0.0)
lowa	43	6	(20.9)	0	(0.0)	13	(30.2)	2	(11.6)	-	(2.3)	15	(34.9)	0	(0.0)	0	(0.0)
Kansas	29	17	(28.8)	_	(1.7)	15	(25.4)	15	(25.4)	2	(3.4)	6	(15.3)	0	(0.0)	0	(0.0)
Kentucky	120	22	(20.8)	0	(0.0)	2	(4.2)	24	(20.0)	0	(0.0)	99	(22.0)	0	(0.0)	0	(0.0)
Louisiana	218	26	(11.9)	0	(0.0)	14	(6.4)	126	(57.8)	0	(0.0)	52	(23.9)	0	(0.0)	0	(0.0)
Maine	19	7	(10.5)	0	(0.0)	4	(21.1)	9	(31.6)	0	(0.0)	7	(36.8)	0	(0.0)	0	(0.0)
Maryland	270	39	(14.4)	0	(0.0)	79	(29.3)	126	(46.7)	0	(0.0)	56	(9.6)	0	(0.0)	0	(0.0)
Massachusetts	224	35	(15.6)	0	(0.0)	73	(32.6)	69	(30.8)	0	(0.0)	47	(21.0)	0	(0.0)	0	(0.0)
Michigan	226	19	(8.4)	_	(0.4)	42	(18.6)	105	(46.5)	0	(0.0)	99	(24.8)	_	(0.4)	2	(6.0)
Minnesota	238	27	(11.3)	7	(0.8)	49	(20.6)	145	(6.09)	0	(0.0)	15	(6.3)	0	(0.0)	0	(0.0)
Mississippi	137	12	(8.8)	က	(2.2)	2	(3.6)	85	(62.0)	0	(0.0)	32	(23.4)	0	(0.0)	0	(0.0)
Missouri	119	10	(8.4)	0	(0.0)	27	(22.7)	39	(32.8)	-	(0.8)	41	(34.5)	~	(0.8)	0	(0.0)
Montana	7	0	(0.0)	2	(18.2)	က	(27.3)	0	(0.0)	0	(0.0)	9	(54.5)	0	(0.0)	0	(0.0)
Nebraska	22	12	(48.0)	0	(0.0)	9	(24.0)	က	(12.0)	-	(4.0)	7	(8.0)	~	(4.0)	0	(0.0)
Nevada	102	36	(35.3)	_	(1.0)	30	(29.4)	14	(13.7)	_	(1.0)	18	(17.6)	0	(0.0)	2	(2.0)
New Hampshire	7	7	(18.2)	0	(0.0)	7	(63.6)	0	(0.0)	0	(0.0)	7	(18.2)	0	(0.0)	0	(0.0)
New Jersey	467	165	(35.3)	0	(0.0)	159	(34.0)	82	(17.6)	0	(0.0)	61	(13.1)	0	(0.0)	0	(0.0)
New Mexico	51	28	(54.9)	10	(19.6)	က	(2.9)	-	(2.0)	0	(0.0)	6	(17.6)	0	(0.0)	0	(0.0)

Table 22. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2007

	Total	Hispanic or Latino¹	anic tino¹	American Indian or Alaska Native	n Indian a Native	Asian	an	Black or African American	k or merican	Native Hawaiian or Other Pacific Islander	awaiian Pacific der	White		Multiple Race <sup>2</sup>	Race <sup>2</sup>	Unknown or Missing	vn or ng
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	1,175	347	(29.5)	0	(0.0)	349	(29.7)	329	(28.0)	က	(0.3)	140	(11.9)	4	(0.3)	3	(0.3)
North Carolina	345	101	(29.3)	7	(5.0)	52	(15.1)	129	(37.4)	0	(0.0)	22	(15.9)	_	(0.3)	0	(0.0)
North Dakota	7	_	(14.3)	2	(28.6)	-	(14.3)	0	(0.0)	0	(0.0)	က	(42.9)	0	(0.0)	0	(0.0)
Ohio	252	19	(7.5)	0	(0.0)	43	(17.1)	114	(45.2)	0	(0.0)	75	(29.8)	0	(0.0)	-	(0.4)
Oklahoma	149	25	(16.8)	27	(18.1)	8	(5.4)	22	(14.8)	2	(3.4)	62	(41.6)	0	(0.0)	0	(0.0)
Oregon	94	39	(41.5)	0	(0.0)	25	(56.6)	80	(8.5)	7	(2.1)	20	(21.3)	0	(0.0)	0	(0.0)
Pennsylvania	276	17	(6.2)	0	(0.0)	06	(32.6)	93	(33.7)	-	(0.4)	72	(26.1)	2	(0.7)	-	(0.4)
Rhode Island	45	15	(33.3)	0	(0.0)	2	(11.1)	12	(26.7)	0	(0.0)	13	(28.9)	0	(0.0)	0	(0.0)
South Carolina	218	34	(15.6)	က	(1.4)	18	(8.3)	124	(26.9)	က	(1.4)	34	(15.6)	2	(6.0)	0	(0.0)
South Dakota	13	0	(0.0)	7	(53.8)	_	(7.7)	2	(15.4)	0	(0.0)	က	(23.1)	0	(0.0)	0	(0.0)
Tennessee	234	36	(15.4)	0	(0.0)	19	(8.1)	94	(40.2)	_	(0.4)	82	(32.0)	_	(0.4)	_	(0.4)
Texas	1,510	729	(48.3)	-	(0.1)	224	(14.8)	314	(20.8)	2	(0.3)	237	(15.7)	0	(0.0)	0	(0.0)
Utah	39	15	(38.5)	_	(5.6)	12	(30.8)	4	(10.3)	က	(7.7)	4	(10.3)	0	(0.0)	0	(0.0)
Vermont	က	0	(0.0)	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	_	(33.3)	0	(0.0)	0	(0.0)
Virginia	309	92	(30.7)	0	(0.0)	105	(34.0)	9/	(24.6)	0	(0.0)	33	(10.7)	0	(0.0)	0	(0.0)
Washington	291	54	(18.6)	7	(2.4)	119	(40.9)	54	(18.6)	16	(2.5)	40	(13.7)	_	(0.3)	0	(0.0)
West Virginia	24	0	(0.0)	0	(0.0)	2	(20.8)	2	(8.3)	0	(0.0)	17	(70.8)	0	(0.0)	0	(0.0)
Wisconsin	20	20	(28.6)	0	(0.0)	20	(28.6)	10	(14.3)	0	(0.0)	20	(28.6)	0	(0.0)	0	(0.0)
Wyoming	2	0	(0.0)	0	(0.0)	_	(20.0)	0	(0.0)	0	(0.0)	_	(20.0)	0	(0.0)	0	(0.0)
American Samoa <sup>3</sup>	က	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	က	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	99	0	(0.0)	0	(0.0)	4	(6.1)	0	(0.0)	61	(92.4)	0	(0.0)	0	(0.0)	~	(1.5)
Guam³	92	0	(0.0)	0	(0.0)	19	(20.7)	0	(0.0)	52	(56.5)	_	(1.1)	0	(0.0)	20	(21.7)
Marshall Islands <sup>3</sup>	117	0	(0.0)	0	(0.0)	_	(6.0)	0	(0.0)	114	(97.4)	0	(0.0)	-	(6.0)	~	(6.0)
N. Mariana Islands <sup>3</sup>	41	0	(0.0)	0	(0.0)	31	(75.6)	0	(0.0)	6	(22.0)	_	(2.4)	0	(0.0)	0	(0.0)
Puerto Rico <sup>3</sup>	86	96	(0.86)	0	(0.0)	_	(1.0)	-	(1.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Republic of Palau <sup>3</sup>	1	0	(0.0)	0	(0.0)	က	(27.3)	0	(0.0)	7	(63.6)	0	(0.0)	0	(0.0)	_	(9.1)
U.S. Virgin Islands³	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

<sup>&</sup>lt;sup>1</sup>Persons of Hispanic origin may be of any race or multiple race.
<sup>2</sup>Indicates two or more races reported for a person.
<sup>3</sup>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 or multiple race. Multiple Race does not include persons of Hispanic ethnicity or multiple race.

Table 23. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons: States, 2007

	Total	U.Sbor	n Persons	Foreign-bo	orn Persons <sup>1</sup>	Unknowr	n Origin
states	Cases	No.	(%)	No.	(%)	No.	(%)
United States	13,299	5,493	(41.3)	7,750	(58.3)	56	(0.4)
Alabama	175	137	(78.3)	37	(21.1)	1	(0.6)
Alaska	51	42	(82.4)	8	(15.7)	1	(2.0)
Arizona	304	114	(37.5)	186	(61.2)	4	(1.3)
Arkansas	106	80	(75.5)	25	(23.6)	1	(0.9)
California	2,726	596	(21.9)	2,109	(77.4)	21	(0.8)
Colorado	111	33	(29.7)	78	(70.3)	0	(0.0)
Connecticut	108	32	(29.6)	75	(69.4)	1	(0.9)
Delaware	19	2	(10.5)	17	(89.5)	0	(0.0)
District of Columbia	60	36	(60.0)	24	(40.0)	0	(0.0)
Florida	989	527	(53.3)	462	(46.7)	0	(0.0)
Georgia	474	281	(59.3)	193	(40.7)	0	(0.0)
Hawaii	122	42	(34.4)	78	(63.9)	2	(1.6)
Idaho	9	42	(44.4)	5		0	
Illinois	521	211	` ,	307	(55.6)	3	(0.0)
	128	72	(40.5)	307 55	(58.9)	1	(0.6)
Indiana			(56.3)		(43.0)	-	(0.8)
lowa	43	20	(46.5)	23	(53.5)	0	(0.0)
Kansas	59	22	(37.3)	37	(62.7)	0	(0.0)
Kentucky	120	83	(69.2)	37	(30.8)	0	(0.0)
Louisiana	218	181	(83.0)	36	(16.5)	1	(0.5)
Maine	19	6	(31.6)	13	(68.4)	0	(0.0)
Maryland	270	83	(30.7)	187	(69.3)	0	(0.0)
Massachusetts	224	58	(25.9)	166	(74.1)	0	(0.0)
Michigan	226	140	(61.9)	85	(37.6)	1	(0.4)
Minnesota	238	35	(14.7)	203	(85.3)	0	(0.0)
Mississippi	137	121	(88.3)	15	(10.9)	1	(0.7)
Missouri	119	77	(64.7)	42	(35.3)	0	(0.0)
Montana	11	8	(72.7)	3	(27.3)	0	(0.0)
Nebraska	25	1	(4.0)	24	(96.0)	0	(0.0)
Nevada	102	38	(37.3)	64	(62.7)	0	(0.0)
New Hampshire	11	2	(18.2)	9	(81.8)	0	(0.0)
New Jersey	467	123	(26.3)	344	(73.7)	0	(0.0)
New Mexico	51	27	(52.9)	24	(47.1)	0	(0.0)
New York	1,175	336	(28.6)	835	(71.1)	4	(0.3)
North Carolina	345	203	(58.8)	141	(40.9)	1	(0.3)
North Dakota	7	5	(71.4)	2	(28.6)	0	(0.0)
Ohio	252	137	(54.4)	115	(45.6)	0	(0.0)
Oklahoma	149	114	(76.5)	35	(23.5)	0	(0.0)
Oregon	94	26	(27.7)	68	(72.3)	0	(0.0)
Pennsylvania	276	121	(43.8)	142	(51.4)	13	(4.7)
Rhode Island	45	10	(22.2)	35	(77.8)	0	(0.0)
South Carolina	218	162	(74.3)	56	(25.7)	0	(0.0)
South Dakota	13	11	(84.6)	2	(15.4)	0	(0.0)
Tennessee	234	167	(71.4)	67	(28.6)	0	(0.0)
Texas	1,510	736	(48.7)	774	(51.3)	0	(0.0)
Utah	39	12	(30.8)	27	(69.2)	0	(0.0)
Vermont	3	1	(33.3)	2	(66.7)	0	(0.0)
Virginia	309	79	(25.6)	230	(74.4)	0	(0.0)
Washington	291	87	(29.9)	204	(70.1)	0	(0.0)
West Virginia	24	19	(79.2)	5	(20.8)	0	(0.0)
Wisconsin	70	32	(45.7)	38	(54.3)	0	(0.0)
Wyoming	2	1	(50.0)	1	(50.0)	0	(0.0)

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

Note: See Surveillance Slide #14.

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Table 24. Tuberculosis Cases and Percentages in Foreign-born Persons¹ by Country of Origin: States, 2007

										$\cdot \Big $									
									Con	Country of Origin	Origin								
	Total	Σ	Mexico	Philip	ippines	Viet	Viet Nam	드	India	G	China	Haiti	<u> </u>	Rep. Korea	(orea	All O	All Others <sup>2</sup>	Unkno Mis	Unknown or Missing
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	7,750	1,848	(23.8)	955	(12.3)	624	(8.1)	573	(7.4)	386	(2.0)	248	(3.2)	180	(2.3)	2,931	(37.8)	2	(0.1)
Alabama	37	o	(24.3)	0	(0.0)	4	(10.8)	က	(8.1)	_	(2.7)	12	(32.4)	0	(0.0)	œ	(21.6)	0	(0.0)
Alaska	8	_	(12.5)	9	(75.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	_	(12.5)	0	(0.0)
Arizona	186	106	(57.0)	20	(10.8)	7	(3.8)	8	(4.3)	2	(2.7)	7	(3.8)	4	(2.2)	29	(15.6)	0	(0.0)
Arkansas	22	14	(26.0)	_	(4.0)	က	(12.0)	7	(8.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(20.0)	0	(0.0)
California	2,109	603	(28.6)	477	(22.6)	102	(4.8)	257	(12.2)	119	(2.6)	62	(2.9)	18	(0.9)	471	(22.3)	0	(0.0)
Colorado	78	31	(39.7)	4	(5.1)	4	(5.1)	4	(5.1)	9	(7.7)	-	(1.3)	0	(0.0)	28	(32.9)	0	(0.0)
Connecticut	75	က	(4.0)	2	(6.7)	12	(16.0)	2	(2.7)	2	(2.7)	4	(5.3)	_	(1.3)	46	(61.3)	0	(0.0)
Delaware	17	_	(2.9)	0	(0.0)	4	(23.5)	-	(2.9)	0	(0.0)	က	(17.6)	0	(0.0)	80	(47.1)	0	(0.0)
District of Columbia	24	2	(8.3)	0	(0.0)	<del>-</del>	(4.2)	2	(8.3)	_	(4.2)	2	(8.3)	_	(4.2)	15	(62.5)	0	(0.0)
Florida	462	83	(18.0)	33	(7.1)	13	(2.8)	20	(4.3)	7	(1.5)	22	(4.8)	25	(5.4)	259	(56.1)	0	(0.0)
Georgia	193	22	(28.5)	2	(5.6)	21	(10.9)	17	(8.8)	က	(1.6)	17	(8.8)	7	(3.6)	92	(33.7)	3	(1.6)
Hawaii	78	0	(0.0)	22	(73.1)	0	(0.0)	7	(0.6)	9	(7.7)	0	(0.0)	0	(0.0)	80	(10.3)	0	(0.0)
Idaho	2	က	(0.09)	_	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	~	(20.0)	0	(0.0)
Illinois	307	93	(30.3)	47	(15.3)	24	(17.6)	9	(2.0)	14	(4.6)	7	(2.3)	4	(1.3)	81	(26.4)	_	(0.3)
Indiana	22	23	(41.8)	9	(10.9)	2	(9.1)	7	(3.6)	0	(0.0)	_	(1.8)	_	(1.8)	17	(30.9)	0	(0.0)
lowa	23	9	(26.1)	_	(4.3)	6	(39.1)	2	(8.7)	0	(0.0)	0	(0.0)	0	(0.0)	2	(21.7)	0	(0.0)
Kansas	37	13	(35.1)	7	(5.4)	-	(2.7)	4	(10.8)	0	(0.0)	0	(0.0)	-	(2.7)	16	(43.2)	0	(0.0)
Kentucky	37	16	(43.2)	2	(5.4)	_	(2.7)	_	(2.7)	_	(2.7)	4	(10.8)	0	(0.0)	12	(32.4)	0	(0.0)
Louisiana	36	7	(19.4)	2	(2.6)	က	(8.3)	2	(13.9)	0	(0.0)	2	(5.6)	7	(19.4)	10	(27.8)	0	(0.0)
Maine	13	-	(7.7)	-	(7.7)	-	(7.7)	0	(0.0)	-	(7.7)	_	(7.7)	0	(0.0)	80	(61.5)	0	(0.0)
Maryland	187	4	(2.1)	16	(8.6)	18	(9.6)	7	(3.7)	9	(3.2)	4	(2.1)	7	(3.7)	125	(86.8)	0	(0.0)
Massachusetts	166	-	(0.6)	က	(1.8)	18	(10.8)	7	(9.9)	18	(10.8)	9	(3.6)	0	(0.0)	109	(65.7)	0	(0.0)
Michigan	82	10	(11.8)	6	(10.6)	18	(21.2)	က	(3.5)	က	(3.5)	က	(3.5)	0	(0.0)	39	(45.9)	0	(0.0)
Minnesota	203	15	(7.4)	7	(1.0)	13	(6.4)	4	(5.0)	9	(3.0)	<b>~</b>	(0.5)	~	(0.5)	161	(79.3)	0	(0.0)
Mississippi	15	2	(33.3)	0	(0.0)	_	(6.7)	7	(13.3)	_	(6.7)	2	(13.3)	2	(13.3)	2	(13.3)	0	(0.0)
Missouri	45	4	(6.5)	9	(14.3)	-	(2.4)	7	(16.7)	က	(7.1)	7	(4.8)	0	(0.0)	19	(45.2)	0	(0.0)
Montana	က	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	_	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

Table 24. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons' by Country of Origin: States, 2007

Total States Cases																	Unknown or	100
		Mexico	Phi	Philippines	Viet	Viet Nam	드	India	China	na	Haiti		Rep. Korea	orea	All Others <sup>2</sup>	hers <sup>2</sup>	Missing	vn or ing
	No.	. (%)	Š	(%)	Š	(%)	Š.	(%)	Š	(%)	Š.	(%)	No.	(%)	Š.	(%)	No.	(%)
Nebraska 24	11	(45.8)	-	(4.2)	0	(0.0)	2	(20.8)	0	(0.0)	0	(0.0)	0	(0.0)	7	(29.2)	0	(0.0)
Nevada 64	24	(37.5)	56	(40.6)	_	(1.6)	0	(0.0)	4	(6.3)	0	(0.0)	0	(0.0)	6	(14.1)	0	(0.0)
New Hampshire 9	0	(0.0)	~	(11.1)	က	(33.3)	2	(22.2)	0	(0.0)	0	(0.0)	0	(0.0)	က	(33.3)	0	(0.0)
New Jersey 344	4 30	(8.7)	32	(6.3)	62	(23.0)	7	(2.0)	10	(5.9)	œ	(2.3)	10	(2.9)	168	(48.8)	0	(0.0)
New Mexico 24	19	(79.2)	0	(0.0)	2	(8.3)	0	(0.0)	0	(0.0)	0	(0.0)	_	(4.2)	2	(8.3)	0	(0.0)
New York 835	5 64	(7.7)	51	(6.1)	62	(7.4)	6	(1.1)	118	(14.1)	15	(1.8)	17	(2.0)	499	(28.8)	0	(0.0)
North Carolina 141	1 54	(38.3)	9	(4.3)	16	(11.3)	6	(6.4)	4	(2.8)	က	(2.1)	œ	(5.7)	41	(29.1)	0	(0.0)
North Dakota 2	0	(0:0)	~	(20.0)	-	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio 115	2	(7.8)	7	(6.1)	13	(11.3)	12	(10.4)	4	(3.5)	0	(0.0)	7	(1.7)	89	(59.1)	0	(0.0)
Oklahoma 35	17	(48.6)	2	(5.7)	2	(2.7)	3	(8.6)	0	(0.0)	0	(0.0)	0	(0.0)	7	(31.4)	0	(0.0)
Oregon 68	28	(41.2)	4	(2.9)	က	(4.4)	က	(4.4)	2	(7.4)	2	(2.9)	0	(0.0)	23	(33.8)	0	(0.0)
Pennsylvania 142	2 4	(2.8)	10	(7.0)	23	(16.2)	20	(14.1)	9	(4.2)	~	(0.7)	0	(0.0)	78	(54.9)	0	(0.0)
Rhode Island 35	0	(0.0)	_	(5.9)	0	(0.0)	0	(0.0)	_	(5.9)	က	(8.6)	_	(5.9)	59	(82.9)	0	(0.0)
South Carolina 56	17	(30.4)	9	(10.7)	4	(7.1)	_	(1.8)	2	(3.6)	12 (	(21.4)	2	(3.6)	12	(21.4)	0	(0.0)
South Dakota 2	0	(0.0)	0	(0.0)	0	(0.0)	_	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	_	(20.0)	0	(0.0)
Tennessee 67	14	(20.9)	~	(1.5)	10	(14.9)	4	(0.9)	0	(0.0)	6	(13.4)	2	(3.0)	27	(40.3)	0	(0.0)
Texas 774	4 382	(49.4)	40	(5.2)	43	(9.9)	29	(8.7)	16	(2.1)	22	(2.8)	48	(6.2)	155	(20.0)	-	(0.1)
Utah 27	10	(37.0)	_	(3.7)	0	(0.0)	4	(14.8)	_	(3.7)	0	(0.0)	0	(0.0)	7	(40.7)	0	(0.0)
Vermont 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)
Virginia 230	0 15	(6.5)	56	(11.3)	21	(9.1)	12	(5.2)	9	(5.6)	2	(2.2)	တ	(3.9)	136	(59.1)	0	(0.0)
Washington 204	4 27	(13.2)	27	(13.2)	18	(8.8)	37	(18.1)	4	(2.0)	2	(2.5)	_	(0.5)	85	(41.7)	0	(0.0)
West Virginia 5	0	(0:0)	2	(40.0)	8	(0.09)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin 38	14	(36.8)	2	(5.3)	9	(15.8)	0	(0.0)	_	(5.6)	0	(0.0)	0	(0.0)	15	(39.5)	0	(0.0)
Wyoming 1	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	_	(100.0)	0	(0.0)

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.

Includes 156 countries.

Note: See Surveillance Slide #17.

Table 25. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Number of Years in the United States: States, 2007

	Total	<	1 Year		1–4	5	<u>-</u> 9	10–	19	≥2	0		nown or ssing
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	7,750	1,519	(19.6)	1,643	(21.2)	1,150	(14.8)	1,229	(15.9)	1,385	(17.9)	824	(10.6)
Alabama	37	12	(32.4)	8	(21.6)	10	(27.0)	3	(8.1)	4	(10.8)	0	(0.0)
Alaska	8	2	(25.0)	3	(37.5)	0	(0.0)	2	(25.0)	0	(0.0)	1	(12.5)
Arizona	186	48	(25.8)	36	(19.4)	28	(15.1)	22	(11.8)	36	(19.4)	16	(8.6)
Arkansas	25	9	(36.0)	7	(28.0)	3	(12.0)	3	(12.0)	2	(8.0)	1	(4.0)
California	2,109	349	(16.5)	296	(14.0)	265	(12.6)	387	(18.3)	497	(23.6)	315	(14.9)
Colorado	78	24	(30.8)	8	(10.3)	8	(10.3)	12	(15.4)	9	(11.5)	17	(21.8)
Connecticut	75	9	(12.0)	18	(24.0)	18	(24.0)	13	(17.3)	17	(22.7)	0	(0.0)
Delaware	17	3	(17.6)	7	(41.2)	5	(29.4)	0	(0.0)	2	(11.8)	0	(0.0)
District of Columbia	24	6	(25.0)	9	(37.5)	4	(16.7)	2	(8.3)	3	(12.5)	0	(0.0)
Florida	462	98	(21.2)	126	(27.3)	77	(16.7)	66	(14.3)	84	(18.2)	11	(2.4)
Georgia	193	35	(18.1)	45	(23.3)	43	(22.3)	39	(20.2)	20	(10.4)	11	(5.7)
Hawaii	78	22	(28.2)	11	(14.1)	7	(9.0)	16	(20.5)	17	(21.8)	5	(6.4)
Idaho	5	1	(20.0)	3	(60.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)
Illinois	307	42	(13.7)	58	(18.9)	35	(11.4)	50	(16.3)	56	(18.2)	66	(21.5)
Indiana	55	11	(20.0)	11	(20.0)	2	(3.6)	2	(3.6)	0	(0.0)	29	(52.7)
Iowa	23	12	(52.2)	4	(17.4)	1	(4.3)	4	(17.4)	2	(8.7)	0	(0.0)
Kansas	37	13	(35.1)	12	(32.4)	6	(16.2)	0	(0.0)	5	(13.5)	1	(2.7)
Kentucky	37	6	(16.2)	18	(48.6)	10	(27.0)	1	(2.7)	2	(5.4)	0	(0.0)
Louisiana	36	11	(30.6)	12	(33.3)	4	(11.1)	2	(5.6)	7	(19.4)	0	(0.0)
Maine	13	3	(23.1)	2	(15.4)	3	(23.1)	4	(30.8)	1	(7.7)	0	(0.0)
Maryland	187	37	(19.8)	66	(35.3)	36	(19.3)	24	(12.8)	21	(11.2)	3	(1.6)
Massachusetts	166	33	(19.9)	39	(23.5)	31	(18.7)	28	(16.9)	33	(19.9)	2	(1.2)
Michigan	85	18	(21.2)	19	(22.4)	11	(12.9)	12	(14.1)	19	(22.4)	6	(7.1)
Minnesota	203	52	(25.6)	64	(31.5)	33	(16.3)	15	(7.4)	4	(2.0)	35	(17.2)
Mississippi	15	6	(40.0)	1	(6.7)	2	(13.3)	3	(20.0)	3	(20.0)	0	(0.0)
Missouri	42	8	(19.0)	14	(33.3)	3	(7.1)	9	(21.4)	6	(14.3)	2	(4.8)
Montana	3	1	(33.3)	0	(0.0)	1	(33.3)	0	(0.0)	1	(33.3)	0	(0.0)
Nebraska	24	4	(16.7)	6	(25.0)	5	(20.8)	5	(20.8)	3	(12.5)	1	(4.2)
Nevada	64	17	(26.6)	10	(15.6)	13	(20.3)	13	(20.3)	8	(12.5)	3	(4.7)
New Hampshire	9	2	(22.2)	10	(11.1)	0	(0.0)	2	(22.2)	0	(0.0)	4	(44.4)
New Jersey	344	55	(16.0)	74	(21.5)	42	(12.2)	21	(6.1)	29	(8.4)	123	(35.8)
New Mexico	24	2	(8.3)	6	(25.0)	1	(4.2)	2	(8.3)	12	(50.0)	1	(4.2)
New York	835	145	(17.4)	189	(22.6)	127	(15.2)	150	(18.0)	162	(19.4)	62	(7.4)
North Carolina	141	25	(17.7)	39	(27.7)	31	(22.0)	16	(11.3)	12	(8.5)	18	(12.8)
North Dakota	2	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)
Ohio	115	42	(36.5)	33	(28.7)	16	(13.9)	10	(8.7)	8	(7.0)	6	(5.2)
Oklahoma	35	6	(17.1)	7	(20.1)	4	(11.4)	10	(28.6)	8	(22.9)	0	(0.0)
	68	12		12				3				28	
Oregon Pennsylvania	142	28	(17.6) (19.7)	32	(17.6) (22.5)	6 40	(8.8)		(4.4)	7	(10.3)	12	(41.2)
Rhode Island	35	9	, ,		, ,		` ,	14 2	(9.9)	16	` ,		(8.5)
			(25.7)	0	(0.0)	1	(2.9)		(5.7)	0	(0.0)	23	(65.7)
South Carolina	56	8	(14.3)	27	(48.2)	5	(8.9)	7	(12.5)	8	(14.3)	1	(1.8)
South Dakota	2	0	(0.0)	1	(50.0)	0	(0.0)	1	(50.0)	0	(0.0)	0	(0.0)
Tennessee	67	18	(26.9)	18	(26.9)	15	(22.4)	8 155	(11.9)	7	(10.4)	1	(1.5)
Texas	774	164	(21.2)	156	(20.2)	112	(14.5)	155	(20.0)	187	(24.2)	0	(0.0)
Utah	27	6	(22.2)	8	(29.6)	3	(11.1)	9	(33.3)	1	(3.7)	0	(0.0)
Vermont	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	230	49	(21.3)	70	(30.4)	50	(21.7)	36	(15.7)	25	(10.9)	0	(0.0)
Washington	204	45	(22.1)	37	(18.1)	25	(12.3)	41	(20.1)	37	(18.1)	19	(9.3)
West Virginia	5	0	(0.0)	2	(40.0)	2	(40.0)	0	(0.0)	1	(20.0)	0	(0.0)
Wisconsin	38	9	(23.7)	16	(42.1)	6	(15.8)	4	(10.5)	3	(7.9)	0	(0.0)
Wyoming	1	1	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)

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

Note: See Surveillance Slide #18.

Table 26. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease:

Reporting Areas, 2007

							ulmonary ar pulmonary (	
	Total	Pulmo	onary <sup>1</sup>	Extrapul	monary <sup>2</sup>	Tot		Miliary
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.
United States	13,299	9,488	(71.3)	2,697	(20.3)	1,102	(8.3)	218
Alabama	175	140	(80.0)	28	(16.0)	7	(4.0)	1
Alaska	51	47	(92.2)	4	(7.8)	0	(0.0)	0
Arizona	304	231	(76.0)	56	(18.4)	16	(5.3)	5
Arkansas	106	95	(89.6)	5	(4.7)	6	(5.7)	0
California	2,726	1,937	(71.1)	544	(20.0)	245	(9.0)	36
Colorado	111	68	(61.3)	31	(27.9)	12	(10.8)	3
Connecticut	108	65	(60.2)	37	(34.3)	6	(5.6)	1
Delaware	19	11	(57.9)	4	(21.1)	4	(21.1)	2
District of Columbia	60	48	(80.0)	11	(18.3)	1	(1.7)	1
Florida	989	803	(81.2)	139	(14.1)	47	(4.8)	16
Georgia	474	328	(69.2)	110	(23.2)	35	(7.4)	7
Hawaii	122	101	(82.8)	13	(10.7)	8	(6.6)	2
Idaho	9	7	(77.8)	1	(11.1)	1	(11.1)	1
Illinois	521	356	(68.3)	137	(26.3)	28	(5.4)	6
Indiana	128	99	(77.3)	22	(17.2)	7	(5.5)	4
lowa	43	27	(62.8)	15	(34.9)	1	(2.3)	0
Kansas	59	37	(62.7)	15	(25.4)	7	(11.9)	0
Kentucky	120	94	(78.3)	23	(19.2)	3	(2.5)	0
Louisiana	218	174	(79.8)	34	(15.6)	10	(4.6)	5
Maine	19	14	(73.7)	4	(21.1)	1	(5.3)	0
Maryland	270	175	(64.8)	71	(26.3)	24	(8.9)	2
Massachusetts	224	138	(61.6)	55	(24.6)	31	(13.8)	13
Michigan	226	159	(70.4)	54	(23.9)	13	(5.8)	1
Minnesota	238	115	(48.3)	99	(41.6)	24	(10.1)	3
Mississippi	137	115	(83.9)	18	(13.1)	4	(2.9)	2
Missouri	119	83	(69.7)	23	(19.3)	13	(10.9)	1
Montana	11	5	(45.5)	5	(45.5)	1	(9.1)	0
Nebraska	25	20	(80.0)	4	(16.0)	1	(4.0)	0
Nevada	102	82	(80.4)	15	(14.7)	5	(4.9)	0
New Hampshire	11	9	(81.8)	2	(18.2)	0	(0.0)	0
New Hampshire	467	295	(63.2)	102	(21.8)	70	(15.0)	10
New Jersey New Mexico	51	33	(64.7)	102	(19.6)	8	(15.7)	10
New York	1,175	801	(68.2)	250	(21.3)	124	(10.6)	4
North Carolina	345	249	(72.2)	57	(16.5)	39	(10.0)	17
North Dakota	7	3	(42.9)	3	(42.9)	აყ 1	(14.3)	0
Ohio			, ,		` ,		, ,	
	252	163	(64.7)	75 20	(29.8)	14	(5.6)	2
Oklahoma	149	98	(65.8)	26	(17.4)	25	(16.8)	-
Oregon	94	53	(56.4)	30	(31.9)	11	(11.7)	3 4
Pennsylvania	276	189	(68.5)	60	(21.7)	18	(6.5)	
Rhode Island	45	28	(62.2)	15	(33.3)	2	(4.4)	1
South Carolina	218	148	(67.9)	43	(19.7)	27	(12.4)	6
South Dakota	13	10	(76.9)	3	(23.1)	0	(0.0)	0
Tennessee	234	183	(78.2)	34	(14.5)	16	(6.8)	2
Texas	1,510	1,184	(78.4)	230	(15.2)	96	(6.4)	42
Utah	39	22	(56.4)	10	(25.6)	7	(17.9)	2
Vermont	3	2	(66.7)	1 54	(33.3)	0	(0.0)	0
Virginia	309	229	(74.1)	54	(17.5)	26	(8.4)	3
Washington	291	156	(53.6)	87	(29.9)	48	(16.5)	2
West Virginia	24	17	(70.8)	5	(20.8)	2	(8.3)	1
Wisconsin	70	40	(57.1)	23	(32.9)	7	(10.0)	6
Wyoming	2	2	(100.0)	0	(0.0)	0	(0.0)	0
American Samoa⁴	3	3	(100.0)	0	(0.0)	0	(0.0)	0
Fed. States of Micronesia <sup>4</sup>	66	56	(84.8)	7	(10.6)	3	(4.5)	0
Guam⁴	92	87	(94.6)	4	(4.3)	1	(1.1)	1
Marshall Islands <sup>4</sup>	117	75	(64.1)	35	(29.9)	6	(5.1)	2
N. Mariana Islands <sup>4</sup>	41	37	(90.2)	3	(7.3)	1	(2.4)	0
Puerto Rico⁴	98	84	(85.7)	13	(13.3)	1	(1.0)	0
Republic of Palau <sup>4</sup>	11	6	(54.5)	3	(27.3)	1	(9.1)	1

<sup>&</sup>lt;sup>2</sup>Includes cases with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as major site of disease.

<sup>&</sup>lt;sup>3</sup>Includes miliary cases.

<sup>&</sup>lt;sup>4</sup>Not included in U.S. totals.

Note: 12 cases had missing and/or unknown site of disease.

Table 27. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2007

								Site of Disease	ease						
	Total	Pleural	ral	Lymphatic	latic	Bone and/or Joint	or Joint	Genitourinary	rinary	Meningeal	ıgeal	Peritoneal	neal	Other	 
States	Cases	Š	(%)	o	(%)	No.	(%)	No.	(%)	Š.	(%)	No.	(%)	No.	(%)
United States	2,697	447	(16.6)	1,147	(42.5)	281	(10.4)	120	(4.4)	170	(6.3)	171	(6.3)	361	(13.4)
Alabama	28	7	(25.0)	5	(17.9)	5	(17.9)	0	(0.0)	က	(10.7)	0	(0.0)	8	(28.6)
Alaska	4	-	(25.0)	7	(20.0)	-	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Arizona	56	12	(21.4)	17	(30.4)	က	(5.4)	_	(1.8)	7	(12.5)	6	(16.1)	7	(12.5)
Arkansas	2	_	(20.0)	_	(20.0)	_	(20.0)	0	(0.0)	_	(20.0)	0	(0.0)	-	(20.0)
California	544	75	(13.8)	220	(40.4)	65	(11.9)	21	(3.9)	38	(7.0)	4	(8.1)	84	(14.9)
Colorado	31	4	(12.9)	9	(19.4)	4	(12.9)	9	(19.4)	က	(6.7)	0	(0.0)	80	(25.8)
Connecticut	37	4	(10.8)	25	(67.6)	-	(2.7)	က	(8.1)	_	(2.7)	~	(2.7)	2	(5.4)
Delaware	4	2	(20.0)	2	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
District of Columbia	11	2	(18.2)	2	(45.5)	က	(27.3)	0	(0.0)	0	(0.0)	_	(9.1)	0	(0.0)
Florida	139	30	(21.6)	52	(37.4)	œ	(2.8)	7	(2.0)	14	(10.1)	2	(3.6)	23	(16.5)
Georgia	110	56	(23.6)	47	(42.7)	<u></u>	(8.2)	7	(6.4)	7	(6.4)	2	(4.5)	6	(8.2)
Hawaii	13	2	(15.4)	2	(38.5)	2	(15.4)	_	(7.7)	0	(0.0)	2	(15.4)	-	(7.7)
Idaho	-	0	(0.0)	_	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	137	23	(16.8)	99	(40.9)	6	(9.9)	9	(4.4)	4	(5.9)	80	(2.8)	31	(22.6)
Indiana	22	2	(22.7)	80	(36.4)	2	(9.1)	-	(4.5)	က	(13.6)	0	(0.0)	က	(13.6)
lowa	15	က	(20.0)	80	(53.3)	0	(0.0)	-	(6.7)	7	(13.3)	0	(0.0)	~	(6.7)
Kansas	15	9	(40.0)	4	(26.7)	က	(20.0)	0	(0.0)	0	(0.0)	~	(6.7)	<b>—</b>	(6.7)
Kentucky	23	2	(21.7)	80	(34.8)	_	(4.3)	-	(4.3)	0	(0.0)	2	(8.7)	9	(26.1)
Louisiana	34	7	(20.6)	7	(32.4)	2	(2.9)	2	(2.9)	7	(2.9)	4	(11.8)	9	(17.6)
Maine	4	0	(0.0)	7	(20.0)	-	(25.0)	0	(0.0)	-	(25.0)	0	(0.0)	0	(0.0)
Maryland	7.1	12	(16.9)	31	(43.7)	6	(12.7)	_	(1.4)	က	(4.2)	80	(11.3)	7	(6.6)
Massachusetts	55	12	(21.8)	24	(43.6)	7	(12.7)	9	(10.9)	-	(1.8)	~	(1.8)	4	(7.3)
Michigan	54	14	(25.9)	18	(33.3)	9	(11.1)	2	(3.7)	2	(6.3)	က	(2.6)	9	(11.1)
Minnesota	66	7	(7.1)	99	(26.6)	2	(5.1)	7	(2.0)	7	(2.0)	12	(12.1)	15	(15.2)
Mississippi	18	4	(22.2)	2	(27.8)	_	(2.6)	0	(0.0)	2	(27.8)	0	(0.0)	က	(16.7)
Missouri	23	4	(17.4)	10	(43.5)	2	(8.7)	0	(0.0)	2	(8.7)	~	(4.3)	4	(17.4)
Montana	2	~	(20.0)	0	(0.0)	2	(40.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(40.0)
Nebraska	4	0	(0.0)	က	(75.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	~	(25.0)
Nevada	15	_	(6.7)	4	(26.7)	7	(13.3)	7	(13.3)	7	(13.3)	_	(6.7)	က	(20.0)
New Hampshire	2	-	(20.0)	0	(0.0)	-	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
New Jersey	102	9	(6.9)	53	(52.0)	16	(15.7)	9	(2.9)	9	(2.9)	7	(6.9)	8	(7.8)
New Mexico	10	0	(0.0)	2	(20.0)	_	(10.0)	က	(30.0)	0	(0.0)	0	(0.0)	<del>-</del>	(10.0)

Table 27. (Cont'd) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2007

	•														
								Site of Disease	ease						
	Total Extrapulmonary	Pleural	ral	Lymphatic	natic	Bone and/or Joint	/or Joint	Genitourinary	urinary	Meni	Meningeal	Peritoneal	neal	Other	e.
States	Cases	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	250	31	(12.4)	129	(51.6)	24	(9.6)	11	(4.4)	16	(6.4)	10	(4.0)	29	(11.6)
North Carolina	22	19	(33.3)	19	(33.3)	7	(12.3)	2	(3.5)	2	(8.8)	1	(1.8)	4	(7.0)
North Dakota	က	0	(0.0)	0	(0.0)	2	(66.7)	0	(0.0)	0	(0.0)	_	(33.3)	0	(0.0)
Ohio	75	10	(13.3)	32	(42.7)	10	(13.3)	က	(4.0)	2	(6.7)	6	(12.0)	9	(8.0)
Oklahoma	26	7	(56.9)	10	(38.5)	_	(3.8)	-	(3.8)	2	(7.7)	_	(3.8)	4	(15.4)
Oregon	30	4	(13.3)	1	(36.7)	2	(6.7)	0	(0.0)	0	(0.0)	9	(20.0)	7	(23.3)
Pennyslvania	09	∞	(13.3)	30	(20.0)	œ	(13.3)	0	(0.0)	2	(3.3)	က	(2.0)	6	(15.0)
Rhode Island	15	2	(13.3)	က	(20.0)	က	(20.0)	2	(13.3)	7	(6.7)	_	(6.7)	က	(20.0)
South Carolina	43	7	(16.3)	27	(62.8)	က	(2.0)	2	(4.7)	0	(0.0)	2	(4.7)	7	(4.7)
South Dakota	က	0	(0.0)	7	(66.7)	_	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	34	9	(17.6)	12	(35.3)	2	(2.9)	0	(0.0)	က	(8.8)	က	(8.8)	<b>∞</b>	(23.5)
Texas	230	47	(20.4)	87	(37.8)	28	(12.2)	12	(5.2)	19	(8.3)	1	(4.8)	56	(11.3)
Utah	10	_	(10.0)	2	(20.0)	_	(10.0)	0	(0.0)	0	(0.0)	_	(10.0)	7	(20.0)
Vermont	_	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	-	
Virginia	54	2	(6.3)	32	(26.3)	က	(2.6)	က	(2.6)	_	(1.9)	က	(2.6)	7	(13.0)
Washington	87	16	(18.4)	43	(49.4)	12	(13.8)	4	(4.6)	4	(4.6)	က	(3.4)	2	(5.7)
West Virginia	2	2	(40.0)	_	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(40.0)
Wisconsin	23	2	(21.7)	10	(43.5)	7	(8.7)	-	(4.3)	0	(0.0)	-	(4.3)	4	(17.4)
Wyoming	0	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa1	:	:	;	:	:	÷	:	:	:	:	÷	:	:	:	:
Fed. States of Micronesia1	7	က	(42.9)	7	(28.6)	_	(14.3)	0	(0.0)	0	(0.0)	0	(0.0)	-	(14.3)
Guam¹	4	_	(25.0)	7	(20.0)	0	(0.0)	_	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)
Marshall Islands <sup>1</sup>	35	16	(45.7)	7	(20.0)	_	(5.9)	0	(0.0)	_	(5.9)	<b>o</b>	(25.7)	-	(2.9)
N. Mariana Islands¹	က	_	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	7	(66.7)
Puerto Rico¹	13	7	(15.4)	2	(38.5)	0	(0.0)	_	(7.7)	က	(23.1)	7	(15.4)	0	(0.0)
Republic of Palau <sup>1</sup>	က	0	(0.0)	7	(66.7)	_	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands¹	:	:	:	:	:	:	:	:	:	:	:	:	:	÷	:

'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, 2007 and 2006

	20	007	200	06	2006–2007	% Change	Overall
States	No.	Rate	No.	Rate	No.	Rate	Rank by 2007 Rat
>= 500 cases in 2007							
California	2726	7.5	2778	7.7	-1.9	-2.7	4
Texas	1510	6.3	1583	6.8	-4.6	-6.6	5
New York <sup>1</sup>	1175	6.1	1263	6.6	-7.0	-7.0	6
Florida	989	5.4	1033	5.7	-4.3	-5.3	7
Illinois	521	4.1	562	4.4	-7.3	-7.8	19
100-499 cases in 2007							
Georgia	474	5.0	507	5.4	-6.5	-8.5	10
New Jersey	467	5.4	508	5.9	-8.1	-8.3	8
North Carolina	345	3.8	374	4.2	-7.8	-9.7	22
Virginia	309	4.0	332	4.3	-6.9	-7.8	20
Arizona	304	4.8	314	5.1	-3.2	-5.8	13
Washington	291	4.5	261	4.1	11.5	9.9	16
Pennsylvania	276	2.2	342	2.8	-19.3	-19.5	33
Maryland	270	4.8	252	4.5	7.1	6.8	12
Ohio	252	2.2	239	2.1	5.4	5.4	34
Minnesota	238	4.6	217	4.2	9.7	8.8	15
Tennessee	234	3.8	277	4.6	-15.5	-16.6	23
Michigan	226	2.2	221	2.2	2.3	2.6	32
Massachusetts	224	3.5	259	4.0	-13.5	-13.7	26
Louisiana	218	5.1	207	4.9	5.3	4.1	9
South Carolina	218	4.9	222	5.1	-1.8	-3.5	11
Alabama	175	3.8	196	4.3	-10.7	-11.4	24
Oklahoma	149	4.1	144	4.0	3.5	2.3	18
Mississippi	137	4.7	115	4.0	19.1	18.3	14
Indiana	128	2.0	124	2.0	3.2	2.5	38
Hawaii	122	9.5	114	8.9	7.0	6.6	2
Kentucky	120	2.8	84	2.0	42.9	41.6	28
Missouri	119	2.0	104	1.8	14.4	13.6	37
Colorado	111	2.3	124	2.6	-10.5	-12.2	31
	108	3.1	89	2.5	21.3	21.1	27
Connecticut		3.7	102	3.6		3.0	25
Arkansas Nevada	106 102	4.0	102	4.1	3.9 1.0	-1.9	25
400 !:: 0007							
< 100 cases in 2007	0.4	2.5	04	0.0	40.0	440	20
Oregon	94	2.5	81	2.2	16.0	14.3	30
Wisconsin	70	1.2	75 70	1.3	-6.7	-7.1	45
District of Columbia	60	10.2	72	12.3	-16.7	-17.1	1
Kansas	59	2.1	82	3.0	-28.0	-28.6	36
New Mexico	51	2.6	48	2.5	6.3	4.8	29
Alaska	51	7.5	70	10.3	-27.1	-27.8	3
Rhode Island	45	4.3	26	2.4	73.1	73.7	17
lowa	43	1.4	40	1.3	7.5	6.9	42
Utah	39	1.5	34	1.3	14.7	11.9	40
Nebraska	25	1.4	25	1.4	0.0	-0.6	43
West Virginia	24	1.3	22	1.2	9.1	8.9	44
Delaware	19	2.2	29	3.4	-34.5	-35.4	35
Maine	19	1.4	16	1.2	18.8	18.5	41
South Dakota	13	1.6	14	1.8	-7.1	-8.0	39
Montana	11	1.1	13	1.4	-15.4	-16.4	46
New Hampshire	11	0.8	17	1.3	-35.3	-35.5	48
Idaho	9	0.6	20	1.4	-55.0	-56.1	49
North Dakota	7	1.1	10	1.6	-30.0	-30.2	47
Vermont	3	0.5	8	1.3	-62.5	-62.5	50
Wyoming	2	0.4	4	0.8	-50.0	-51.0	51
Гotal	13299	4.4	13754	4.6	-3.3	-4.2	

<sup>1</sup>Includes New York City.

**Note:** Denominators for computing 2006 and 2007 rates for states and the District of Columbia were obtained from Annual Estimates of the Population for the United States and States, and for Puerto Rico: April 1, 2000–July 1, 2007 (NST-EST2007-01) (http://www.census.gov/popest/states/tables/NST-EST2007-01.xls) (accessed June 25, 2008). See Table 20, page 37, for ranking of states without the District of Columbia.

## Morbidity Tables Reporting Areas, 2007 and 2005

Table 29. Tuberculosis Cases and Percentages by Residence in Correctional Facilities, Age ≥ 15: Reporting Areas, 2007

	Total	Cases with Information in Correction	ation on Residence nal Facilities		ed As Residents onal Facilities <sup>1</sup>
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,491	(99.8)	476	(3.8)
Alabama	168	168	(100.0)	5	(3.0)
Alaska	47	47	(100.0)	3	(6.4)
Arizona	278	278	(100.0)	54	(19.4)
Arkansas	95	95	(100.0)	1	(1.1)
California	2,592	2,590	(99.9)	75	(2.9)
Colorado	104	104	(100.0)	2	
	105	105		3	(1.9)
Connecticut			(100.0)		(2.9)
Delaware	18	18	(100.0)	0	(0.0)
District of Columbia	58	58	(100.0)	2	(3.4)
Florida	928	928	(100.0)	25	(2.7)
Georgia	437	435	(99.5)	24	(5.5)
Hawaii	119	118	(99.2)	2	(1.7)
Idaho	9	9	(100.0)	1	(11.1)
Illinois	504	501	(99.4)	15	(3.0)
Indiana	123	123	(100.0)	3	(2.4)
lowa	42	42	(100.0)	0	(0.0)
Kansas	55	55	(100.0)	1	(1.8)
Kentucky	116	116	(100.0)	2	(1.7)
Louisiana	207	205	(99.0)	20	(9.8)
Maine	17	17	(100.0)	1	(5.9)
Maryland	257	257	(100.0)	5	(1.9)
Massachusetts	209	209	(100.0)	4	(1.9)
Michigan	205	203	(99.0)	5	(2.5)
Minnesota	216	216	(100.0)	2	(0.9)
Mississippi	128	128	(100.0)	6	(4.7)
Missouri	115	115	(100.0)	3	(2.6)
	11	11	(100.0)	0	(0.0)
Montana	23	23		0	
Nebraska			(100.0)		(0.0)
Nevada	93	93	(100.0)	2	(2.2)
New Hampshire	11	11	(100.0)	0	(0.0)
New Jersey	437	437	(100.0)	6	(1.4)
New Mexico	49	49	(100.0)	2	(4.1)
New York State <sup>2</sup>	245	244	(99.6)	6	(2.5)
New York City	888	888	(100.0)	16	(1.8)
North Carolina	320	320	(100.0)	10	(3.1)
North Dakota	7	7	(100.0)	0	(0.0)
Ohio	239	239	(100.0)	3	(1.3)
Oklahoma	128	125	(97.7)	3	(2.4)
Oregon	87	85	(97.7)	0	(0.0)
Pennsylvania	249	240	(96.4)	3	(1.3)
Rhode Island	37	37	(100.0)	0	(0.0)
South Carolina	205	205	(100.0)	3	(1.5)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	224	224	(100.0)	17	(7.6)
Texas	1,406	1,406	(100.0)	133	(9.5)
Utah	37	37	(100.0)	1	(2.7)
Vermont	3	3			, ,
			(100.0)	0	(0.0)
Virginia	291	291	(100.0)	5	(1.7)
Washington	269	269	(100.0)	2	(0.7)
West Virginia	24	24	(100.0)	0	(0.0)
Wisconsin	68	68	(100.0)	0	(0.0)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	48	(98.0)	1	(2.1)
Guam <sup>3</sup>	61	60	(98.4)	0	(0.0)
Marshall Islands <sup>3</sup>	93	92	(98.9)	5	(5.4)
N. Mariana Islands³	41	41	(100.0)	0	(0.0)
Puerto Rico <sup>3</sup>	94	94	(100.0)	4	(4.3)
Republic of Palau <sup>3</sup>	11	11	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>					ì

<sup>1</sup>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.

<sup>3</sup>Not included in U.S. totals.

Note: Ellipses indicate data not available.

<sup>&</sup>lt;sup>2</sup>Excludes New York City.

Table 30. Tuberculosis Cases and Percentages by Homeless Status,¹ Age ≥15: Reporting Areas, 2007

	Total		h Information eless Status		Reported As Homeless
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,364	(98.8)	705	(5.7)
Alabama	168	167	(99.4)	7	(4.2)
Alaska	47	46	(97.9)	11	(23.9)
Arizona	278	262	(94.2)	25	(9.5)
Arkansas	95	95	(100.0)	2	(2.1)
California	2,592	2,570	(99.2)	155	(6.0)
Colorado	104	104	(100.0)	6	(5.8)
Connecticut	105	104	(99.0)	6	(5.8)
Delaware	18	18	(100.0)	0	(0.0)
District of Columbia	58	58	(100.0)	4	(6.9)
Florida	928	921	(99.2)	70	(7.6)
Georgia	437	434	(99.3)	36	(8.3)
Hawaii	119	118	(99.2)	2	(1.7)
daho	9	8	(88.9)	1	(12.5)
llinois	504	481	(95.4)	34	(7.1)
ndiana	123	122	(99.2)	10	(8.2)
owa	42	42	(100.0)	3	(7.1)
Kansas	55	55	(100.0)	3	(5.5)
Kentucky	116	116	(100.0)	11	(9.5)
_ouisiana	207	203	(98.1)	14	(6.9)
Maine	17	17	(100.0)	0	(0.0)
Maryland	257	257	(100.0)	18	(7.0)
Massachusetts	209	207	(99.0)	6	(2.9)
Michigan	205	195	(95.1)	5	(2.6)
Minnesota	216	215	(99.5)	6	(2.8)
Mississippi	128	125	(97.7)	9	(7.2)
Missouri	115	115	(100.0)	7	(6.1)
Montana	11	11	(100.0)	1	(9.1)
Nebraska	23	23	(100.0)	1	(4.3)
Nevada	93	92	(98.9)	7	(7.6)
New Hampshire	11	9	(81.8)	0	(0.0)
New Jersey	437	437	(100.0)	7	(1.6)
New Mexico	49	49	(100.0)	5	(10.2)
New York State <sup>2</sup>	245	234	(95.5)	7	(3.0)
New York City	888	864	(97.3)	42	(4.9)
North Carolina	320	320	(100.0)	15	(4.7)
North Dakota	7	7	(100.0)	0	(0.0)
Ohio	239	239	(100.0)	16	(6.7)
Oklahoma	128	121	(94.5)	6	(5.0)
Oregon	87	84	(96.6)	5	(6.0)
Pennsylvania	249	240	(96.4)	11	(4.6)
Rhode Island	37	37	(100.0)	0	(0.0)
South Carolina	205	205	(100.0)	7	(3.4)
South Dakota	13	13	(100.0)	4	(30.8)
Tennessee	224	224	(100.0)	19	(8.5)
exas	1,406	1,406	(100.0)	63	(4.5)
Jtah	37	37	(100.0)	5	(13.5)
/ermont	3	3	(100.0)	0	(0.0)
/irginia	291	291	(100.0)	7	(2.4)
Vashington	269	269	(100.0)	21	(7.8)
Vest Virginia	24	24	(100.0)	1	(4.2)
Visconsin	68	68	(100.0)	4	(5.9)
Vyoming	2	2	(100.0)	0	(0.0)
			,		, ,
American Samoa³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	45	(91.8)	0	(0.0)
Guam³	61	58	(95.1)	0	(0.0)
Marshall Islands <sup>3</sup>	93	91	(97.8)	1	(1.1)
N. Mariana Islands <sup>3</sup>	41	24	(58.5)		
Puerto Rico <sup>3</sup>	94	94	(100.0)	4	(4.3)
Republic of Palau <sup>3</sup>	11	11	(100.0)	0	(0.0)

¹Homeless 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.
²Excludes New York City.
³Not 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, 2007

	Total		nformation on -term Care Facilities		ed As Residents of Care Facilities
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,483	(99.7)	253	(2.0)
Alabama	168	167	(99.4)	7	(4.2)
Alaska	47	47	(100.0)	1	(2.1)
Arizona	278	278	(100.0)	9	(3.2)
Arkansas	95	95	(100.0)	2	(2.1)
California	2,592	2,589	(99.9)	37	(1.4)
Colorado	104	104	(100.0)	5	(4.8)
Connecticut	105	105	(100.0)	1	(1.0)
Delaware	18	18	(100.0)	0	(0.0)
District of Columbia	58	58	(100.0)	0	(0.0)
Florida	928	928	(100.0)	4	(0.4)
Georgia	437	430	(98.4)	12	(2.8)
	119				
Hawaii	9	118	(99.2)	3	(2.5)
daho		9	(100.0)	2	(22.2)
Illinois	504	500	(99.2)	8	(1.6)
ndiana	123	123	(100.0)	4	(3.3)
owa	42	42	(100.0)	0	(0.0)
Kansas	55	55	(100.0)	1	(1.8)
Kentucky	116	116	(100.0)	7	(6.0)
Louisiana	207	206	(99.5)	2	(1.0)
Maine	17	17	(100.0)	0	(0.0)
Maryland	257	257	(100.0)	5	(1.9)
Massachusetts	209	209	(100.0)	9	(4.3)
Michigan	205	203	(99.0)	7	(3.4)
Minnesota	216	216	(100.Ó)	1	(0.5)
Mississippi	128	128	(100.0)	10	(7.8)
Missouri	115	115	(100.0)	2	(1.7)
Montana	11	11	(100.0)	2	(18.2)
Nebraska	23	23	(100.0)	1	(4.3)
Nevada	93	93	(100.0)	0	(0.0)
New Hampshire	11	11	(100.0)	0	(0.0)
New Jersey	437	437	(100.0)	6	(1.4)
New Mexico	49	49	(100.0)	0	(0.0)
New York State <sup>2</sup>	245	242		6	(2.5)
			(98.8)		
New York City	888	888	(100.0)	15	(1.7)
North Carolina	320	320	(100.0)	7	(2.2)
North Dakota	7	7	(100.0)	0	(0.0)
Ohio	239	239	(100.0)	8	(3.3)
Oklahoma	128	125	(97.7)	4	(3.2)
Oregon	87	86	(98.9)	1	(1.2)
Pennsylvania	249	240	(96.4)	11	(4.6)
Rhode Island	37	37	(100.0)	1	(2.7)
South Carolina	205	205	(100.0)	6	(2.9)
South Dakota	13	13	(100.0)	1	(7.7)
Tennessee	224	224	(100.0)	6	(2.7)
Texas	1,406	1,406	(100.0)	29	(2.1)
Utah	37	37	(100.0)	1	(2.7)
Vermont	3	3	(100.0)	0	(0.0)
Virginia	291	291	(100.0)	2	(0.7)
Washington	269	269	(100.0)	4	(1.5)
West Virginia	24	24	(100.0)	0	(0.0)
Wisconsin	68	68	(100.0)	3	(4.4)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	48	(98.0)	0	(0.0)
Guam <sup>3</sup>	61	61	(100.0)	0	(0.0)
Marshall Islands <sup>3</sup>	93	92	(98.9)	0	(0.0)
N. Mariana Islands <sup>3</sup>	41	41	(100.0)	0	(0.0)
Puerto Rico <sup>3</sup>	94	94	(100.0)	1	(1.1)
Republic of Palau <sup>3</sup>	11	11	(100.0)	0	(0.0)

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  $\geq$ 75% of cases.

Note: Ellipses indicate data not available.

<sup>&</sup>lt;sup>2</sup>Excludes New York City.

<sup>&</sup>lt;sup>3</sup>Not included in U.S. totals.

Table 32. Tuberculosis Cases and Percentages by Injecting Drug Use,¹Age ≥15: **Reporting Areas, 2007** 

	Total		Information on g Drug Use	Cases Reporting	g Injecting Drug Use
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,142	(97.0)	256	(2.1)
Alabama	168	167	(99.4)	3	(1.8)
Alaska	47	44	(93.6)	1	(2.3)
Arizona	278	244	(87.8)	9	(3.7)
Arkansas	95	95	(100.0)	2	(2.1)
California	2,592	2,515	(97.0)	44	(1.7)
Colorado	104	102	(98.1)	1	(1.0)
Connecticut	105	102	(97.1)	5	(4.9)
Delaware	18	18	(100.0)	0	(0.0)
District of Columbia	58	58	(100.0)	5	(8.6)
Florida	928	924	(99.6)	20	(2.2)
Georgia	437	429	(98.2)	13	(3.0)
Hawaii	119	41	(34.5)		
Idaho	9	8	(88.9)	0	(0.0)
Illinois	504	455	(90.3)	3	(0.7)
Indiana	123	120	(97.6)	6	(5.0)
lowa	42	42	(100.0)	0	(0.0)
Kansas	55	55	(100.0)	3	(5.5)
Kentucky	116	115	(99.1)	2	(1.7)
Louisiana	207	181	(87.4)	8	(4.4)
Maine	17	17	(100.0)	0	(0.0)
	257			7	
Maryland		255	(99.2)	•	(2.7)
Massachusetts	209	206	(98.6)	1	(0.5)
Michigan	205	195	(95.1)	8	(4.1)
Minnesota	216	214	(99.1)	1	(0.5)
Mississippi	128	128	(100.0)	1	(0.8)
Missouri	115	114	(99.1)	5	(4.4)
Montana	11	11	(100.0)	0	(0.0)
Nebraska	23	23	(100.0)	1	(4.3)
Nevada	93	91	(97.8)	0	(0.0)
New Hampshire	11	10	(90.9)	0	(0.0)
New Jersey	437	437	(100.0)	6	(1.4)
New Mexico	49	48	(98.0)	1	(2.1)
New York State <sup>2</sup>	245	237	(96.7)	4	(1.7)
New York City	888	861	(97.0)	21	(2.4)
North Carolina	320	318	(99.4)	5	(1.6)
North Dakota	7	7	(100.0)	0	(0.0)
Ohio	239	236	(98.7)	3	(1.3)
Oklahoma	128	121	(94.5)	0	(0.0)
Oregon	87	84	(96.6)	2	(2.4)
Pennsylvania	249	239	(96.0)	3	(1.3)
Rhode Island	37	36	(97.3)	1	(2.8)
South Carolina	205	203	(99.0)	3	(1.5)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	224	224	(100.0)	6	(2.7)
Texas	1,406	1,406	(100.0)	37	(2.6)
Utah	37	37	(100.0)	2	(5.4)
Vermont	3	3	(100.0)	0	(0.0)
Virginia	291	291	(100.0)	5	(1.7)
Washington	269	268	(99.6)	6	(2.2)
West Virginia	24	24	(100.0)	0	(0.0)
Wisconsin	68	68	(100.0)	2	(2.9)
Wyoming	2	2	(100.0)	0	(0.0)
			(100.0)	U	` '
Amercian Samoa³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	45	(91.8)	0	(0.0)
Guam³	61	58	(95.1)	0	(0.0)
Marshall Islands <sup>3</sup>	93	90	(96.8)	0	(0.0)
N. Mariana Islands³	41	41	(100.0)	0	(0.0)
Puerto Rico <sup>3</sup>	94	94	(100.0)	13	(13.8)
	11	11	(100.0)	0	(0.0)
Republic of Palau <sup>3</sup> U.S. Virgin Islands <sup>3</sup>					

¹Injecting 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.

<sup>&</sup>lt;sup>2</sup>Excludes New York City. <sup>3</sup>Not included in U.S. totals.

Table 33. Tuberculosis Cases and Percentages by Noninjecting Drug Use,¹Age ≥15: Reporting Areas, 2007

	Total		Information on ting Drug Use	Cases Reporting	Noninjecting Drug Us
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,103	(96.7)	965	(8.0)
Alabama	168	167	(99.4)	12	(7.2)
Alaska	47	44	(93.6)	6	(13.6)
Arizona	278	242	(87.1)	21	(8.7)
Arkansas	95	95	(100.0)	4	(4.2)
California	2,592	2,516	(97.1)	159	(6.3)
Colorado	104	102	(98.1)	5	(4.9)
Connecticut	105	102	(97.1)	5	(4.9)
Delaware	18	18	(100.0)	0	(0.0)
District of Columbia	58	58	(100.0)	7	(12.1)
Florida	928	925	(99.7)	113	(12.2)
Georgia	437	430	(98.4)	49	(11.4)
Hawaii	119	39	(32.8)		` <b></b> ′
Idaho	9	9	(100.Ó)	1	(11.1)
Illinois	504	449	(89.1)	44	(9.8)
Indiana	123	120	(97.6)	12	(10.0)
lowa	42	42	(100.0)	3	(7.1)
Kansas	55	55	(100.0)	6	(10.9)
Kentucky	116	115	(99.1)	6	(5.2)
Louisiana	207	179	(86.5)	44	(24.6)
Maine	17	17	(100.0)	0	(0.0)
Maryland	257	255	(99.2)	11	(4.3)
Massachusetts	209	207	(99.0)	6	(2.9)
Michigan	205	194	(94.6)	13	(6.7)
Minnesota	216	214	(99.1)	8	(3.7)
Mississippi	128	128	(100.0)	8	(6.3)
Missouri	115	114	(99.1)	15	(13.2)
Montana	11	11	(100.0)	0	(0.0)
Nebraska	23	23	(100.0)	0	(0.0)
Nevada	93	89	(95.7)	3	
	11	10	(90.9)	0	(3.4) (0.0)
New Hampshire	437	437	(100.0)	14	(3.2)
New Jersey	49	48		3	
New Mexico	245	215	(98.0)	10	(6.3)
New York State <sup>2</sup>			(87.8)		(4.7)
New York City	888	860	(96.8)	82	(9.5)
North Carolina	320	318	(99.4)	44	(13.8)
North Dakota	7	6	(85.7)	0	(0.0)
Ohio	239	236	(98.7)	23	(9.7)
Oklahoma	128	120	(93.8)	13	(10.8)
Oregon	87	82	(94.3)	10	(12.2)
Pennsylvania	249	239	(96.0)	14	(5.9)
Rhode Island	37	36	(97.3)	0	(0.0)
South Carolina	205	203	(99.0)	26	(12.8)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	224	224	(100.0)	45	(20.1)
Texas	1,406	1,406	(100.0)	93	(6.6)
Utah	37	37	(100.0)	1	(2.7)
Vermont	3	3	(100.0)	0	(0.0)
Virginia	291	291	(100.0)	10	(3.4)
Washington	269	266	(98.9)	11	(4.1)
West Virginia	24	24	(100.0)	1	(4.2)
Wisconsin	68	68	(100.0)	4	(5.9)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa³	3	3	(100.0)	0	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	35	(71.4)		
Guam <sup>3</sup>	61	56	(91.8)	0	(0.0)
Marshall Islands <sup>3</sup>	93	90	(96.8)	0	(0.0)
N. Mariana Islands³	41	37	(90.2)	0	(0.0)
Puerto Rico <sup>3</sup>	94	94	(100.0)	15	(16.0)
Republic of Palau <sup>3</sup>	11	9	(81.8)	0	(0.0)
U.S. Virgin Islands³			` '		

¹Noninjecting 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. ²Excludes New York City.

<sup>&</sup>lt;sup>3</sup>Not included in U.S. totals.

Table 34. Tuberculosis Cases and Percentages by Excess Alcohol Use,¹ Age ≥15: Reporting Areas, 2007

	Total		n Information on Alcohol Use		Reporting Alcohol Use
Reporting Area	Cases	No.	(%)	No.	(%)
United States	12,518	12,177	(97.3)	1,631	(13.4)
Alabama	168	167	(99.4)	21	(12.6)
Alaska	47	44	(93.6)	20	(45.5)
Arizona	278	241	(86.7)	33	(13.7)
Arkansas	95	95	(100.0)	3	(3.2)
California	2,592	2,510	(96.8)	245	(9.8)
Colorado	104	104	(100.ó)	12	(11.5)
Connecticut	105	103	(98.1)	11	(10.7)
Delaware	18	18	(100.0)	1	(5.6)
District of Columbia	58	58	(100.0)	10	(17.2)
Florida	928	925	(99.7)	175	(18.9)
Georgia	437	428	(97.9)	59	(13.8)
Hawaii	119	86	(72.3)		
Idaho	9	8	(88.9)	2	(25.0)
Illinois	504	450	(89.3)	69	(15.3)
Indiana	123	121	(98.4)	34	(28.1)
lowa	42	42	(100.0)	4	(9.5)
Kansas	55	55	(100.0)	6	(10.9)
Kentucky	116	115	(99.1)	20	(17.4)
Louisiana	207	185	(89.4)	49	(26.5)
Maine	17	17	(100.0)	3	(17.6)
Maryland	257	256	(99.6)	16	(6.3)
Massachusetts	209	206	(98.6)	16	(7.8)
Michigan	205	193	(94.1)	18	(9.3)
Minnesota	216	214	(99.1)	12	(5.6)
Mississippi	128	128	(100.0)	21	(16.4)
Missouri	115	115	(100.0)	22	(19.1)
Montana	11	11	(100.0)	2	(18.2)
Nebraska	23	23	(100.0)	1	(4.3)
Nevada	93	88	(94.6)	10	(11.4)
New Hampshire	11	9	(81.8)	1	(11.1)
New Jersey	437	437	(100.0)	29	(6.6)
New Mexico	49	48	(98.0)	14	(29.2)
New York State <sup>2</sup>	245	236	(96.3)	15	(6.4)
New York City	888	862	(97.1)	144	(16.7)
North Carolina	320	319	(99.7)	42	(13.2)
North Dakota	7	6	(85.7)	0	(0.0)
Ohio	239	238	(99.6)	31	(13.0)
Oklahoma	128	121	(94.5)	15	(12.4)
Oregon	87	83	(95.4)	10	(12.0)
Pennsylvania	249	239	(96.0)	16	(6.7)
Rhode Island	37	36	(97.3)	1	(2.8)
South Carolina	205	203	(99.0)	36	(17.7)
South Dakota	13	13	(100.0)	5	(38.5)
Tennessee	224	224	(100.0)	49	(21.9)
Texas	1,406	1,406	(100.0)	245	(17.4)
Utah	37	37	(100.0)	5	(13.5)
Vermont	3	3	(100.0)	0	(0.0)
Virginia	291	291	(100.0)	25	(8.6)
Washington	269	266	(98.9)	27	(10.2)
West Virginia	24	24	(100.ó)	4	(16.7)
Wisconsin	68	68	(100.0)	13	(19.1)
Wyoming	2	2	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	3	3	(100.0)	1	(33.3)
Fed. States of Micronesia <sup>3</sup>	49	38	(77.6)	0	(0.0)
Guam <sup>3</sup>	61	58	(95.1)	0	(0.0)
Marshall Islands <sup>3</sup>	93	79	(84.9)	11	(13.9)
N. Mariana Islands <sup>3</sup>	41	41	(100.0)	1	(2.4)
Puerto Rico <sup>3</sup>	94	94	(100.0)	15	(16.0)
Republic of Palau <sup>3</sup>	11	9	(81.8)	2	(22.2)
U.S. Virgin Islands <sup>3</sup>	•				\ -=/

<sup>&</sup>lt;sup>1</sup>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.

<sup>&</sup>lt;sup>2</sup>Excludes New York City.

<sup>&</sup>lt;sup>3</sup>Not included in U.S. totals.

Table 35. Tuberculosis Cases and Percentages by Initial Drug Regimen: Reporting Areas, 2007

	T-4-1	Cases in Persons		nformation on g Regimen	Perce	0	ases in Perso ug Regimen <sup>1,3</sup>	
Reporting Area	Total Cases	Alive at Line Diagnosis	No.	(%)	IR	IRZ	IRZ,E/S	IRZE
United States	13,299	12,999	12,954	(99.7)	(1.1)	(4.7)	(83.3)	(83.3)
Alabama	175	167	167	(100.0)	(0.6)	(4.2)	(85.6)	(85.6
Alaska	51	51	50	(98.0)	(0.0)	(12.0)	(86.0)	(86.0
Arizona	304	291	289	(99.3)	(1.4)	(5.2)	(79.6)	(79.2
Arkansas	106	104	104	(100.0)	(7.7)	(38.5)	(39.4)	(39.4
California	2,726	2,676	2,668	(99.7)	(0.9)	(2.4)	(87.6)	(87.5
Colorado	111	103	102	(99.0)	(0.0)	(2.4)	(80.4)	(80.4
Connecticut	108	106	105	(99.1)	(1.0)	(4.8)	(84.8)	(84.8
Delaware	19	19	19	(100.0)	(0.0)	(5.3)	(89.5)	(89.5
District of Columbia	60	57	56	(98.2)	(0.0)	(1.8)	(98.2)	(98.2
	989	968	968				(84.1)	
Florida				(100.0)	(0.6)	(5.9)		(84.1
Georgia	474	464	464	(100.0)	(0.4)	(5.2)	(62.5)	(62.5
Hawaii	122	121	121	(100.0)	(2.5)	(9.9)	(79.3)	(79.3
Idaho	9	8	8	(100.0)	(0.0)	(0.0)	(75.0)	(75.0
Illinois	521	514	514	(100.0)	(1.0)	(3.5)	(83.1)	(83.1
Indiana	128	123	123	(100.0)	(0.8)	(3.3)	(92.7)	(92.7
lowa	43	42	42	(100.0)	(0.0)	(9.5)	(90.5)	(90.5
Kansas	59	57	57	(100.0)	(0.0)	(8.8)	(89.5)	(89.5
Kentucky	120	118	118	(100.0)	(0.0)	(7.6)	(65.3)	(65.3
Louisiana	218	214	213	(99.5)	(0.0)	(2.3)	(95.3)	(95.3
Maine	19	19	19	(100.Ó)	(0.0)	(0.0)	(89.5)	(89.5
Maryland	270	266	266	(100.0)	(1.1)	(4.5)	(90.6)	(90.6
Massachusetts	224	222	221	(99.5)	(0.9)	(1.4)	(82.8)	(82.8
Michigan	226	215	212	(98.6)	(3.3)	(18.9)	(74.1)	(74.1
Minnesota	238	235	234	(99.6)	(0.9)	(7.7)	(84.6)	(84.6
Mississippi	137	132	132	(100.0)	(3.0)	(8.3)	(80.3)	(80.3
Missouri	119	112	112	(100.0)	(0.0)	(7.1)	(75.0)	(75.0
Montana	11	11	11	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
		25						
Nebraska	25		24	(96.0)	(0.0)	(8.3)	(87.5)	(87.5
Nevada	102	94	94	(100.0)	(0.0)	(0.0)	(97.9)	(97.9
New Hampshire	11	9	9	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
New Jersey	467	459	458	(99.8)	(0.9)	(2.8)	(86.5)	(86.5
New Mexico	51	51	51	(100.0)	(0.0)	(0.0)	(92.2)	(92.2
New York State <sup>4</sup>	261	252	252	(100.0)	(1.2)	(5.2)	(86.9)	(86.9
New York City	914	897	897	(100.0)	(1.0)	(3.0)	(85.3)	(85.3
North Carolina	345	337	337	(100.0)	(0.3)	(3.9)	(89.3)	(89.3
North Dakota	7	7	6	(85.7)	(0.0)	(0.0)	(83.3)	(83.3
Ohio	252	247	247	(100.0)	(0.0)	(5.7)	(83.0)	(83.0
Oklahoma	149	145	145	(100.0)	(11.0)	(19.3)	(62.8)	(62.8
Oregon	94	92	91	(98.9)	(0.0)	(2.2)	(93.4)	(93.4
Pennsylvania	276	271	262	(96.7)	(0.4)	(2.3)	(42.4)	(42.4
Rhode Island	45	45	44	(97.8)	(6.8)	(0.0)	(84.1)	(84.1
South Carolina	218	213	213	(100.0)	(0.5)	(10.3)	(82.2)	(82.2
South Dakota	13	13	13	(100.0)	(0.0)	(15.4)	(69.2)	(69.2
Tennessee	234	231	231	(100.0)	(0.0)	(6.1)	(61.0)	(61.0
Texas	1,510	1,471	1,464	(99.5)	(1.9)	(3.1)	(88.5)	(88.5
Utah	39	39	39	(100.0)	(0.0)	(5.1)	(89.7)	(89.7
Vermont	3	3	3	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
Virginia	309	303	299	(98.7)	(0.3)	(3.7)	(89.6)	(89.6
Washington	291	288	288	(100.0)	(0.0)	(3.8)	(88.2)	(88.2
West Virginia	24	21	21	(100.0)	(4.8)	(4.8)	(81.0)	(81.0
Wisconsin	70	69	69	(100.0)	(0.0)	(5.8)	(85.5)	(85.5
Wyoming	2	2	2	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
American Samoa <sup>5</sup>	3	3	3	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
Fed. States of Micronesia <sup>5</sup>	66	65	64	(98.5)	(0.0)	(18.8)	(79.7)	(79.7
Guam⁵	92	90	90	(100.0)	(0.0)	(20.0)	(75.6)	(75.6
Marshall Islands <sup>5</sup>	117	112	111	(99.1)	(0.0)	(19.8)	(78.4)	(78.4
N. Mariana Islands <sup>5</sup>	41	40	40	(100.0)	(0.0)	(0.0)	(100.0)	(100.0
Puerto Rico⁵	98	93	93	(100.0)	(0.0)	(3.2)	(91.4)	(91.4
Republic of Palau⁵	11	11	11	(100.0)	(0.0)	(9.1)	(72.7)	(72.7
U.S. Virgin Islands <sup>5</sup>								`

¹Overall 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.

**Note:** Excluding cases with no information on drug regimen, 127 (0.98%) persons were not started on any drugs, 21 (<0.2%) were started on one drug, and 1,272 (9.8%) had an initial multidrug regimen other than IR, IRZ, or IRZ,E/S. Ellipses indicate data not available.

<sup>&</sup>lt;sup>2</sup>I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin.

<sup>&</sup>lt;sup>3</sup> Streptomycin is no longer considered a first-line drug. CDC. Treatment of Tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No.RR-11): 1–77.

<sup>&</sup>lt;sup>4</sup>Excludes New York City.

<sup>&</sup>lt;sup>5</sup>Not included in U.S. totals.

Table 36. Culture-Positive Tuberculosis Cases and Percentages with Drug-Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2007

	Total	Casas with	Initial Drug-		Kesis	Resistance <sup>2</sup>						
	Culture Positive		sting Performed <sup>1</sup>	Isor	niazid¹	Isoniazid a	and Rifampin					
Reporting Area	Cases	No.	(%)	No.	(%)	No.	(%)					
United States	10,426	9,858	(94.6)	762	(7.7)	119	(1.2)					
Alabama	146	134	(91.8)	1	(0.7)	0	(0.0)					
Alaska	45	45	(100.0)	0	(0.0)	0	(0.0)					
Arizona	222	217	(97.7)	16	(7.4)	3	(1.4)					
Arkansas	70	68	(97.1)	7	(10.3)	3	(4.4)					
California	2,189	2,121	(96.9)	232	(10.9)	27	(1.3)					
Colorado	74	74	(100.0)	9	(12.2)	1	(1.4)					
Connecticut	94	94	(100.0)	12	(12.8)	3	(3.2)					
Delaware	13	13	(100.0)	0	(0.0)	0	(0.0)					
District of Columbia	48	48	(100.0)	1	(2.1)	0	(0.0)					
Florida	812	760	(93.6)	62	(8.2)	6	(0.8)					
Georgia	372	360	(96.8)	21	(5.8)	2	(0.6)					
Hawaii	98	95	(96.9)	5	(5.3)	1	(1.1)					
Idaho	7	7	(100.0)	1	(14.3)	0	(0.0)					
Illinois	406	383	(94.3)	31	(8.1)	4	(1.0)					
Indiana	106	106	(100.0)	10	(9.4)	1	(0.9)					
lowa	33	32	(97.0)	3	(9.4)	1	(3.1)					
Kansas	46	41	(89.1)	1	(2.4)	0	(0.0)					
Kentucky	102	97	(95.1)	4	(4.1)	0	(0.0)					
Louisiana	174	157	(90.2)	4	(2.5)	0	(0.0)					
Maine	16	16	(100.0)	0	(0.0)	0	(0.0)					
Maryland	215	215	(100.0)	10	(4.7)	3	(1.4)					
Massachusetts	159	134	(84.3)	8	(6.0)	1	(0.7)					
Michigan	175 177	171 176	(97.7)	11	(6.4)	3	(1.8)					
Minnesota Mississippi	96	95	(99.4) (99.0)	17 3	(9.7) (3.2)	3 0	(1.7) (0.0)					
Missouri	99	95 97	(98.0)	4		1	(1.0)					
Montana	99	9	(100.0)	1	(4.1) (11.1)	0	(0.0)					
Nebraska	21	19	(90.5)	0	(0.0)	0	(0.0)					
Nevada	83	79	(95.2)	6	(7.6)	1	(1.3)					
New Hampshire	9	5	(55.6)		(7.0) 		(1.5)					
New Jersey	370	368	(99.5)	35	(9.5)	8	(2.2)					
New Mexico	44	44	(100.0)	3	(6.8)	1	(2.3)					
New York State <sup>3</sup>	192	187	(97.4)	16	(8.6)	Ö	(0.0)					
New York City	713	698	(97.9)	79	(11.3)	7	(1.0)					
North Carolina	273	273	(100.0)	11	(4.0)	2	(0.7)					
North Dakota	4	4	(100.0)	0	(0.0)	0	(0.0)					
Ohio	197	194	(98.5)	10	(5.2)	1	(0.5)					
Oklahoma	91	86	(94.5)	0	(0.0)	0	(0.0)					
Oregon	79	79	(100.0)	7	(8.9)	2	(2.5)					
Pennsylvania	205	170	(82.9)	14	(8.2)	2	(1.2)					
Rhode Island	16	16	(100.0)	0	(0.0)	0	(0.0)					
South Carolina	178	171	(96.1)	6	(3.5)	4	(2.3)					
South Dakota	8	8	(100.0)	0	(0.0)	0	(0.0)					
Tennessee	163	160	(98.2)	5	(3.1)	3	(1.9)					
Texas	1,193	980	(82.1)	44	(4.5)	11	(1.1)					
Utah	30	30	(100.0)	2	(6.7)	1	(3.3)					
Vermont	3	3	(100.0)	0	(0.0)	0	(0.0)					
Virginia	230	207	(90.0)	17	(8.2)	5	(2.4)					
Washington	235	233	(99.1)	24	(10.3)	2	(0.9)					
West Virginia	24	20	(83.3)	0	(0.0)	0	(0.0)					
Wisconsin	61	58	(95.1)	9	(15.5)	6	(10.3)					
Wyoming	1	1	(100.0)	0	(0.0)	0	(0.0)					
American Samoa <sup>4</sup>												
Fed. States of Micronesia <sup>4</sup>	5	1	(20.0)									
Guam⁴ .	37	33	(89.2)	11	(3.0)	0	(0.0)					
Marshall Islands <sup>4</sup>	22	18	(81.8)	1	(5.6)	1	(5.6)					
N. Mariana Islands <sup>4</sup>	10	7	(70.0)									
Puerto Rico <sup>4</sup>	88	87	(98.9)	6	(6.9)	3	(3.4)					
Republic of Palau <sup>4</sup>												
U.S. Virgin Islands <sup>4</sup>												

<sup>&</sup>lt;sup>1</sup>Patients tested to at least isoniazid and rifampin

<sup>&</sup>lt;sup>2</sup>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.

<sup>&</sup>lt;sup>3</sup>Excludes New York City.

<sup>&</sup>lt;sup>4</sup>Not included in U.S. totals.

Table 37. Tuberculosis Cases and Percentages Among Persons Aged 25–44 by HIV Status: Reporting Areas, 2007

	Total	Cases with Informat	tion on HIV Status¹	Cases in Persons wi	th HIV-Positive Results
Reporting Area	Cases	No.	(%)	No.	(%)
United States	4,317	3,102	(71.9)		
Alabama	41	36	(87.8)	8	(22.2)
Alaska	6	6	(100.0)	0	(0.0)
Arizona	100	86	(86.0)	12	(14.0)
Arkansas	19	16	(84.2)	1	(6.3)
California	787	0	(0.0)		 (7.4)
Colorado	29	28	(96.6)	2	(7.1)
Connecticut	47	33	(70.2)	 -	
Delaware	14	14	(100.0)	0	(0.0)
District of Columbia	20	20	(100.0)	5	(25.0)
Florida	332	295	(88.9)	73	(24.7)
Georgia	170	161	(94.7)	32	(19.9)
Hawaii	24	19	(79.2)	1	(5.3)
daho	4	3	(75.0)	0	(0.0)
Ilinois	159	140	(88.1)	14	(10.0)
ndiana	47	39	(83.0)	4	(10.3)
owa	20	19	(95.0)	1	(5.3)
Kansas	11	11	(100.0)	4	(36.4)
	35	33		4	(12.1)
Kentucky			(94.3)	•	
_ouisiana	65	59	(90.8)	9	(15.3)
Maine	5	4	(80.0)	1	(25.0)
Maryland	95	89	(93.7)	13	(14.6)
Massachusetts	74	52	(70.3)		
Michigan	61	46	(75.4)	7	(15.2)
Minnesota	92	88	(95.7)	9	(10.2)
Mississippi	39	39	(100.0)	5	(12.8)
Missouri	34	32	(94.1)	1	(3.1)
Montana	2	2	(100.Ó)	0	(0.0)
Nebraska	8	7	(87.5)	0	(0.0)
Nevada	25	25	(100.0)	3	(12.0)
New Hampshire	3	3	(100.0)	0	(0.0)
New Jersey	174	134	(77.0)	21	(15.7)
New Jersey New Mexico	11	11		1	
			(100.0)		(9.1)
New York State <sup>3</sup>	89	80	(89.9)	10	(12.5)
New York City	363	297	(81.8)	56	(18.9)
North Carolina	122	117	(95.9)	14	(12.0)
North Dakota	3	3	(100.0)	0	(0.0)
Ohio	80	78	(97.5)	11	(14.1)
Oklahoma	36	34	(94.4)	3	(8.8)
Oregon	37	36	(97.3)	3	(8.3)
Pennsylvania	79	55	(69.6)		` ′
Rhode Island	14	11	(78.6)	1	(9.1)
South Carolina	59	57	(96.6)	8	(14.0)
South Dakota	1	1	(100.0)	0	(0.0)
Tennessee	82	82	(100.0)	20	(24.4)
Texas	524	451	(86.1)	90	(20.0)
Jtah	13	13	(100.0)	0	
					(0.0)
Vermont			(0.0)		 (5.0)
Virginia	127	119	(93.7)	7	(5.9)
Washington	101	90	(89.1)	5	(5.6)
Nest Virginia	7	6	(85.7)	0	(0.0)
Visconsin	24	22	(91.7)	5	(22.7)
Wyoming	1	0	(0.0)		
American Samoa⁴					
Fed. States of Micronesia <sup>4</sup>	14	9	(64.3)		
Guam4	19	18	(94.7)	0	(0.0)
Marshall Islands <sup>4</sup>	30	28	(93.3)	1	(3.6)
N. Mariana Islands <sup>4</sup>	23	22	(95.7)	0	(0.0)
Puerto Rico <sup>4</sup>	25	25	(100.0)	11	(44.0)
Republic of Palau <sup>4</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>4</sup>					

<sup>&</sup>lt;sup>1</sup>Includes only those cases in persons with negative, positive, or indeterminate HIV test results.

See Technical Notes (page 9).

<sup>&</sup>lt;sup>2</sup>Counts and percentages shown only for reporting areas with information reported for ≥75% of cases. All 2007 California cases had an unknown HIV status because CA HIV data for 2007 were not available at time of publication.

<sup>&</sup>lt;sup>3</sup>Excludes New York City.

<sup>&</sup>lt;sup>4</sup>Not included in U.S. totals.

Table 38. Tuberculosis Cases and Percentages by Occupation, Age ≥15: Reporting Areas, 2007

		1	es with nation on		Perc	entage of Ca	ses by Occ	cupation <sup>1</sup>	
	Total	Occ	upation	Unemployed	Health Care	Correctional	Migrant	Other	Multiple
Reporting Area	Cases	No.	(%)	Past 24 Mos.	Worker	Employee	Worker	Occupation	Occupation
United States	12,518	11,969	(95.6)	(51.4)	(3.2)	(0.1)	(1.1)	(44.0)	(0.2)
Alabama	168	168	(100.0)	(59.5)	(2.4)	(0.0)	(0.0)	(38.1)	(0.0)
Alaska	47	44	(93.6)	(70.5)	(0.0)	(0.0)	(0.0)	(29.5)	(0.0)
Arizona	278	244	(87.8)	(59.8)	(4.1)	(0.0)	(4.1)	(32.0)	(0.0)
Arkansas	95	36	(37.9)						
California	2,592	2,458	(94.8)	(56.0)	(3.3)	(0.1)	(1.9)	(38.6)	(0.1)
Colorado	104	104	(100.0)	(57.7)	(3.8)	(0.0)	(1.0)	(37.5)	(0.0)
Connecticut	105	105	(100.0)	(37.1)	(3.8)	(1.0)	(1.0)	(57.1)	(0.0)
Delaware	18	18	(100.0)	(22.2)	(5.6)	(5.6)	(0.0)	(66.7)	(0.0)
District of Columbia	58 928	58	(100.0)	(94.8)	(0.0)	(0.0)	(0.0)	(5.2)	(0.0)
Florida	437	926 374	(99.8) (85.6)	(47.3) (38.0)	(2.9) (2.4)	(0.2)	(2.5) (0.5)	(47.1) (59.1)	(0.0)
Georgia Hawaii	119	92	(77.3)	(56.5)	(1.1)	(0.0)	(0.0)	(41.3)	(0.0) (1.1)
Idaho	9	7	(77.8)	(28.6)	(0.0)	(0.0)	(0.0)	(71.4)	(0.0)
Illinois	504	440	(87.3)	(57.0)	(4.3)	(0.0)	(0.0)	(38.2)	(0.0)
Indiana	123	120	(97.6)	(45.8)	(3.3)	(0.2)	(0.0)	(50.2)	(0.0)
lowa	42	42	(100.0)	(40.5)	(0.0)	(0.0)	(0.0)	(57.1)	(2.4)
Kansas	55	55	(100.0)	(63.6)	(5.5)	(0.0)	(1.8)	(29.1)	(0.0)
Kentucky	116	116	(100.0)	(55.2)	(3.4)	(0.9)	(6.0)	(34.5)	(0.0)
Louisiana	207	174	(84.1)	(47.1)	(2.9)	(0.6)	(0.6)	(48.3)	(0.6)
Maine	17	17	(100.0)	(29.4)	(11.8)	(0.0)	(5.9)	(52.9)	(0.0)
Maryland	257	256	(99.6)	(39.8)	(2.3)	(0.4)	(0.0)	(56.3)	(1.2)
Massachusetts	209	202	(96.7)	(47.5)	(6.4)	(0.0)	(0.5)	(45.5)	(0.0)
Michigan	205	193	(94.1)	(54.9)	(3.1)	(0.0)	(0.0)	(41.5)	(0.5)
Minnesota	216	214	(99.1)	(57.5)	(7.0)	(0.0)	(0.0)	(35.0)	(0.5)
Mississippi	128	127	(99.2)	(55.1)	(1.6)	(0.0)	(0.8)	(42.5)	(0.0)
Missouri	115	114	(99.1)	(49.1)	(1.8)	(0.9)	(0.9)	(46.5)	(0.9)
Montana	11	11	(100.0)	(54.5)	(0.0)	(0.0)	(0.0)	(45.5)	(0.0)
Nebraska	23	23	(100.0)	(43.5)	(0.0)	(0.0)	(4.3)	(52.2)	(0.0)
Nevada	93	88	(94.6)	(48.9)	(1.1)	(0.0)	(0.0)	(48.9)	(1.1)
New Hampshire	11	11	(100.0)	(54.5)	(0.0)	(0.0)	(0.0)	(45.5)	(0.0)
New Jersey	437	437	(100.0)	(55.8)	(3.4)	(0.0)	(0.2)	(40.3)	(0.2)
New Mexico	49	47	(95.9)	(51.1)	(0.0)	(0.0)	(0.0)	(48.9)	(0.0)
New York State <sup>2</sup>	245	236	(96.3)	(41.9)	(8.1)	(0.0)	(0.8)	(48.7)	(0.4)
New York City	888	861	(97.0)	(57.1)	(3.7)	(0.0)	(0.0)	(38.9)	(0.2)
North Carolina	320	319	(99.7)	(46.4)	(1.3)	(0.0)	(1.3)	(51.1)	(0.0)
North Dakota	7	7	(100.0)	(28.6)	(28.6)	(14.3)	(0.0)	(28.6)	(0.0)
Ohio	239	234	(97.9)	(56.4)	(4.3)	(0.4)	(0.4)	(38.5)	(0.0)
Oklahoma	128	120	(93.8)	(44.2)	(3.3)	(0.0)	(0.0)	(52.5)	(0.0)
Oregon	87 249	86	(98.9)	(32.6)	(3.5)	(1.2)	(5.8)	(57.0)	(0.0)
Pennsylvania Rhode Island	37	235 33	(94.4) (89.2)	(31.5)	(3.4) (6.1)	(0.0)	(0.0)	(65.1) (48.5)	(0.0)
South Carolina	205	204	(99.5)	(45.5) (49.5)	(2.0)	(0.0) (0.5)	(1.5)	(46.6)	(0.0) (0.0)
South Dakota	13	13	(100.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Tennessee	224	224	(100.0)	(64.3)	(1.3)	(0.0)	(0.4)	(33.9)	(0.0)
Texas	1,406	1,406	(100.0)	(46.4)	(2.6)	(0.0)	(0.4)	(50.2)	(0.0)
Utah	37	37	(100.0)	(45.9)	(0.0)	(0.0)	(2.7)	(51.4)	(0.0)
Vermont	3	3	(100.0)	(33.3)	(0.0)	(0.0)	(0.0)	(66.7)	(0.0)
Virginia	291	291	(100.0)	(50.2)	(2.1)	(0.0)	(0.0)	(47.8)	(0.0)
Washington	269	245	(91.1)	(47.8)	(4.5)	(0.0)	(1.2)	(46.1)	(0.4)
West Virginia	24	24	(100.0)	(58.3)	(12.5)	(0.0)	(0.0)	(29.2)	(0.0)
Wisconsin	68	68	(100.0)	(47.1)	(1.5)	(0.0)	(0.0)	(51.5)	(0.0)
Wyoming	2	2	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
American Samoa <sup>3</sup>	3	3	(100.0)	(66.7)	(0.0)	(0.0)	(0.0)	(33.3)	(0.0)
Fed. States of Micronesia <sup>3</sup>	49	43	(87.8)	(79.1)	(0.0)	(0.0)	(0.0)	(20.9)	(0.0)
Guam <sup>3</sup>	61	56	(91.8)	(55.4)	(0.0)	(0.0)	(0.0)	(44.6)	(0.0)
Marshall Islands <sup>3</sup>	93	92	(98.9)	(52.2)	(3.3)	(0.0)	(0.0)	(43.5)	(1.1)
N. Mariana Islands <sup>3</sup>	41	41	(100.0)	(12.2)	(0.0)	(0.0)	(0.0)	(87.8)	(0.0)
Puerto Rico <sup>3</sup>	94	93	(98.9)	(73.1)	(1.1)	(0.0)	(0.0)	(25.8)	(0.0)
Republic of Palau <sup>3</sup>	11	10	(90.9)	(20.0)	(0.0)	(0.0)	(0.0)	(80.0)	(0.0)
U.S. Virgin Islands <sup>3</sup>									

Occupation within past 24 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.

<sup>&</sup>lt;sup>2</sup>Excludes New York City. <sup>3</sup>Not included in U.S. totals.

Table 39. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2005<sup>1</sup>

		Cases in		th Information on alth Care Provider		rcentage of 0 of Health Ca	
Reporting Area	Total Cases	Persons Alive at Diagnosis	No.	(%)	Health Department	Private/ Other	Both Health Department and Private/Other
United States	14,065	13,766	13,561	(98.5)	(58.7)	(18.5)	(22.7)
Alabama	216	212	212	(100.0)	(72.2)	(9.4)	(18.4)
Alaska	59	59	59	(100.0)	(32.2)	(1.7)	(66.1)
Arizona	281	276	259	(93.8)	(68.0)	(22.0)	(10.0)
Arkansas	117	113	86	(76.1)	(90.7)	(9.3)	(0.0)
California	2,900	2,856	2,824	(98.9)	(51.8)	(30.7)	(17.4)
Colorado	101	98	97	(99.0)	(62.9)	(7.2)	(29.9)
Connecticut	95	93	93	(100.0)	(14.0)	(49.5)	(36.6)
Delaware	27	27	27	(100.0)	(74.1)	(3.7)	(22.2)
District of Columbia	55	54	54	(100.0)	(63.0)	(22.2)	(14.8)
Florida	1,093	1,066	1,065	(99.9)	(72.9)	(13.1)	(14.1)
Georgia	505	503	480	(95.4)	(68.3)	(6.0)	(25.6)
Hawaii	112	111	110	(99.1)	(27.3)	(18.2)	(54.5)
Idaho	23	23	23	(100.0)	(47.8)	(30.4)	(21.7)
Illinois	589	583	578	(99.1)	(40.0)	(30.3)	(29.8)
Indiana	146	143	143	(100.0)	(14.0)	(8.4)	(77.6)
lowa	55	55	55	(100.0)	(1.8)	(3.6)	(94.5)
Kansas	60	59	59	(100.0)	(32.2)	(13.6)	(54.2)
Kentucky	124	120	119	(99.2)	(58.8)	(13.4)	(27.7)
Louisiana	257	247	218	(88.3)	(62.8)	(6.9)	(30.3)
Maine	17	17	16	(94.1)	(93.8)	(6.3)	(0.0)
Maryland	283	279	276	(98.9)	(87.3)	(5.8)	(6.9)
Massachusetts	266	261	254	(97.3)	(39.0)	(8.3)	(52.8)
Michigan	245	239	238	(99.6)	(55.0)	(21.4)	(23.5)
Minnesota	199	197	197	(100.0)	(58.9)	(36.5)	(4.6)
Mississippi	103	94	94	(100.0)	(91.5)	(3.2)	(5.3)
Missouri	108	103	102	(99.0)	(14.7)	(17.6)	(67.6)
Montana	10	9	9	(100.0)	(44.4)	(0.0)	(55.6)
Nebraska	35	33	33	(100.0)	(3.0)	(36.4)	(60.6)
Nevada	112	110	98	(89.1)	(80.6)	(4.1)	(15.3)
New Hampshire	4	4	4	(100.0)	(0.0)	(0.0)	(100.0)
New Jersey	482	468	464	(99.1)	(69.2)	(26.3)	(4.5)
New Mexico	39	37	37	(100.0)	(51.4)	(29.7)	(18.9)
New York State <sup>3</sup>	300	292	289	(99.0)	(63.0)	(17.0)	(20.1)
New York City	984	966	962	(99.6)	(36.4)	(21.0)	(42.6)
North Carolina	329	322	322	(100.0)	(56.2)	(4.0)	(39.8)
North Dakota	6	6	6	(100.0)	(0.0)	(66.7)	(33.3)
Ohio	260	251	249	(99.2)	(56.6)	(20.1)	(23.3)
Oklahoma	144	139	138	(99.3)	(96.4)	(0.0)	(3.6)
Oregon	103	103	103	(100.0)	(57.3)	(4.9)	(37.9)
Pennsylvania	320	313	311	(99.4)	(78.5)	(21.2)	(0.3)
Rhode Island	47	46	46	(100.0)	(91.3)	(4.3)	(4.3)
South Carolina	261	252	250	(99.2)	(83.6)	(1.6)	(14.8)
South Dakota	16	16	16	(100.0)	(68.8)	(12.5)	(18.8)
Tennessee	299	292	292	(100.0)	(61.0)	(3.1)	(36.0)
Texas	1,526	1,481	1,460	(98.6)	(71.0)	(17.3)	(11.7)
Utah	29	29	29	(100.0)	(24.1)	(0.0)	(75.9)
Vermont	8	8	8	(100.0)	(12.5)	(12.5)	(75.0)
Virginia	355	350	349	(99.7)	(73.1)	(15.8)	(11.2)
Washington	254	247	245	(99.2)	(65.3)	(9.8)	(24.9)
West Virginia	28	28	27	(96.4)	(29.6)	(7.4)	(63.0)
Wisconsin	78	76	76	(100.0)	(0.0)	(0.0)	(100.Ó)
Wyoming	0	0	0		` ′	` ´	` ′
American Samoa <sup>4</sup>	5	5	3	(60.0)			
Fed. States of Micronesia <sup>4</sup>	74	74	33	(44.6)			
Guam <sup>4</sup>	64	63	59	(93.7)	(93.2)	(0.0)	(6.8)
Marshall Islands <sup>4</sup>	66	66	55	(83.3)	(100.0)	(0.0)	(0.0)
N. Mariana Islands <sup>4</sup>	56	56	50	(89.3)	(98.0)	(0.0)	(2.0)
Puerto Rico <sup>4</sup>	113	100	100	(100.0)	(84.0)	(14.0)	(2.0)
Republic of Palau <sup>4</sup>	10	10	9	(90.0)	(88.9)	(0.0)	(11.1)
U.S. Virgin Islands <sup>4</sup>							

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>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.

<sup>&</sup>lt;sup>3</sup>Excludes New York City.

Table 40. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2005<sup>1</sup>

		Cases with Initial Drug		Information on served Therapy		age of Cases by bserved Therapy <sup>3</sup>
Reporting Area	Total Cases	Regimen Prescribed <sup>2</sup>	No.	(%)	DOT Only	Both DOT and Self-Administered
United States	14,065	13,662	13,454	(98.5)	(57.6)	(29.9)
	•	•	•	• •	,	` ,
Alabama	216	212	212	(100.0)	(22.2)	(77.4)
Alaska	59	59	59	(100.0)	(91.5)	(8.5)
Arizona	281	268	258	(96.3)	(75.6)	(13.6)
Arkansas	117	112	92	(82.1)	(10.9)	(52.2)
California	2,900	2,823	2,778	(98.4)	(62.1)	(21.2)
Colorado	101	97	97	(100.0)	(91.8)	(4.1)
Connecticut	95	93	93	(100.0)	(18.3)	(48.4)
Delaware	27	27	27	(100.0)	(70.4)	(29.6)
District of Columbia	55	54	54	(100.0)	(46.3)	(16.7)
Florida	1,093	1,060	1,059	(99.9)	(50.7)	(44.0)
Georgia	505	495	483	(97.6)	(82.8)	(15.5)
Hawaii	112	110	108	(98.2)	(2.8)	(66.7)
daho	23	23	22	(95.7)	(45.5)	(27.3)
llinois	589	575	573	(99.7)	(54.1)	(16.2)
ndiana	146	143	143	(100.0)	(55.9)	(31.5)
owa	55	55	54	(98.2)	(64.8)	(18.5)
Kansas	60	59	58	(98.3)	(93.1)	(6.9)
Kentucky	124	120	119	(99.2)	(63.9)	(30.3)
_ouisiana	257	245	215	(87.8)	(81.9)	(13.5)
Maine	17	17	16	(94.1)	(93.8)	(0.0)
	283	276	276	(100.0)	(90.2)	(8.0)
Maryland		260	257			
Massachusetts	266			(98.8)	(30.4)	(47.1)
Michigan	245	238	237	(99.6)	(28.7)	(31.2)
Minnesota	199	197	197	(100.0)	(84.3)	(14.7)
Mississippi	103	94	94	(100.0)	(30.9)	(68.1)
Missouri	108	103	102	(99.0)	(30.4)	(51.0)
Montana	10	9	9	(100.0)	(77.8)	(22.2)
Nebraska	35	33	33	(100.0)	(63.6)	(6.1)
Nevada	112	110	98	(89.1)	(84.7)	(10.2)
New Hampshire	4	4	4	(100.0)	(75.0)	(0.0)
New Jersey	482	465	459	(98.7)	(48.6)	(22.7)
New Mexico	39	36	35	(97.2)	(85.7)	(14.3)
New York State⁴	300	292	292	(100.0)	(15.8)	(76.7)
New York City	984	959	953	(99.4)	(5.0)	(63.4)
North Carolina	329	322	322	(100.0)	(91.9)	(7.8)
North Dakota	6	6	6	(100.0)	(0.0)	(100.0)
Ohio	260	250	250	(100.0)	(58.4)	(28.0)
Oklahoma	144	138	138	(100.0)	(99.3)	(0.0)
Oregon	103	103	103	(100.0)	(65.0)	(32.0)
Pennsylvania	320	311	308	(99.0)	(61.0)	(29.5)
Rhode Island	47	46	46	(100.0)	(8.7)	(91.3)
South Carolina	261	252	250	(99.2)	(94.4)	(4.4)
South Dakota	16	16	16	(100.0)	(62.5)	(12.5)
	299	292	292			(18.2)
Tennessee				(100.0)	(81.8)	
Texas	1,526	1,469	1,427	(97.1)	(64.3)	(33.8)
Jtah	29	29	29	(100.0)	(96.6)	(3.4)
/ermont	8	8	8	(100.0)	(75.0)	(12.5)
/irginia	355	350	349	(99.7)	(83.7)	(14.6)
Vashington	254	245	243	(99.2)	(78.2)	(16.5)
Nest Virginia	28	26	26	(100.0)	(61.5)	(30.8)
Visconsin	78	76	75	(98.7)	(33.3)	(60.0)
Vyoming	0	0	0			
American Samoa⁵	5	5	3	(60.0)		
Fed. States of Micronesia <sup>5</sup>	74	74	33	(44.6)		
Guam⁵	64	63	60	(95.2)	(3.3)	(96.7)
Marshall Islands <sup>5</sup>	66	66	55	(83.3)	(65.5)	(30.9)
N. Mariana Islands <sup>5</sup>	56	56	50	(89.3)	(98.0)	(2.0)
Puerto Rico5	113	99	99	(100.0)	(61.6)	(0.0)
Republic of Palau <sup>5</sup>	10	10	10	(100.0)	(10.0)	(60.0)
U.S. Virgin Islands <sup>5</sup>	10	10	10	(100.0)	(10.0)	(00.0)

<sup>&</sup>lt;sup>1</sup>Most recent year for which data are available.

<sup>&</sup>lt;sup>2</sup>Includes persons alive at diagnosis with an initial drug regimen of one or more drugs prescribed.

³Percentage 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.

<sup>&</sup>lt;sup>4</sup>Excludes New York City.

<sup>&</sup>lt;sup>5</sup>Not included in U.S. totals.

Table 41. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy

(COT): Reporting Areas, 20051

	Total	The	erapy ≤1 Year Indic	ated <sup>2</sup>	Therapy >1	Year Indicated <sup>3</sup>	All Drug	Therapy
Reporting Area	Cases	No.4	COT ≤1 Year(%)	COT(%)	No.⁴	COT(%)	No.4	COT(%)
United States	14,065	12342	(82.7)	(91.9)	346	(82.7)	12688	(91.7)
Alabama	216	194	(89.7)	(94.8)	3	(33.3)	197	(93.9)
Alaska	59	57	(93.0)	(96.5)	1	(100.0)	58	(96.6)
Arizona	281	245	(83.3)	(87.3)	3	(100.0)	248	(87.5)
Arkansas	117	103	` <b></b> ´	` ´	2	` ′	105	
California	2,900	2544	(80.7)	(91.9)	71	(80.3)	2615	(91.6)
Colorado	101	85	(96.5)	(97.6)	4	(100.0)	89	(97.8)
Connecticut	95	87	(82.8)	(97.7)	1	(100.0)	88	(97.7)
Delaware	27	24	(87.5)	(100.0)	0		24	(100.0
District of Columbia	55	49	(87.8)	(93.9)	3	(33.3)	52	(90.4)
Florida	1,093	967	(88.6)	(94.6)	21	(95.2)	988	(94.6)
Georgia	505	449	(82.0)	(93.1)	11	(72.7)	460	(92.6)
Hawaii	112	95	(74.7)	(88.4)	0		95	(88.4)
ldaho	23	21	(76.2)	(85.7)	0		21	(85.7)
Illinois	589	524	(80.0)	(91.4)	5	(80.0)	529	(91.3)
Indiana	146	133	(91.0)	(95.5)	1	(100.0)	134	(95.5)
lowa	55	52	(84.6)	(94.2)	0		52	(94.2)
Kansas	60	57	(86.0)	(91.2)	0		57	(91.2)
Kentucky	124	104	(87.5)	(93.3)	3	(100.0)	107	(93.5)
Louisiana	257	218	·		3		221	
Maine	17	16	(75.0)	(75.0)	1	(100.0)	17	(76.5)
Maryland	283	249	(88.4)	(94.8)	8	(100.0)	257	(94.9)
Massachusetts	266	235	(78.3)	(89.8)	12	(75.0)	247	(89.1)
Michigan	245	201	(80.1)	(91.5)	8	(75.0)	209	(90.9)
Minnesota	199	183	(92.9)	(97.8)	7	(100.0)	190	(97.9)
Mississippi	103	84	(84.5)	(95.2)	2	(100.0)	86	(95.3)
Missouri	108	91	(85.7)	(96.7)	3	(66.7)	94	(95.7)
Montana	10	8	(87.5)	(100.0)	0	`	8	(100.0
Nebraska	35	29	(75.9)	(82.8)	3	(100.0)	32	(84.4)
Nevada	112	106	` ′	` ′	1	` ′	107	` ′
New Hampshire	4	4	(75.0)	(100.0)	0		4	(100.0
New Jersey	482	420	(85.7)	(93.3)	15	(93.3)	435	(93.3)
New Mexico	39	26	(80.8)	(100.0)	2	(100.0)	28	(100.0
New York State <sup>5</sup>	300	266	(87.2)	(97.4)	9	(77.8)	275	(96.7)
New York City	984	845	(81.9)	(90.5)	44	(77.3)	889	(89.9)
North Carolina	329	290	(86.2)	(96.6)	8	(100.0)	298	(96.6)
North Dakota	6	6	(50.0)	(83.3)	0	`	6	(83.3)
Ohio	260	231	(87.0)	(94.8)	7	(85.7)	238	(94.5)
Oklahoma	144	118	(84.7)	(97.5)	3	(66.7)	121	(96.7)
Oregon	103	95	(93.7)	(96.8)	1	(100.Ó)	96	(96.9)
Pennsylvania	320	270	` ′	` ´	6	` <b></b>	276	` ´
Rhode Island	47	41	(82.9)	(95.1)	1	(0.0)	42	(92.9)
South Carolina	261	232	(87.1)	(96.1)	7	( <del>7</del> 1.4)	239	(95.4)
South Dakota	16	13	(53.8)	(100.Ó)	0	` ′	13	(100.0
Tennessee	299	267	(88.8)	(96.6)	7	(85.7)	274	(96.4)
Texas	1,526	1334	(80.6)	(89.7)	42	(83.3)	1376	(89.5)
Utah	29	26	(96.2)	(96.2)	2	(100.0)	28	(96.4)
Vermont	8	7	(100.0)	(100.0)	0		7	(100.0
Virginia	355	321	(81.9)	(90.7)	7	(100.0)	328	(90.9)
Washington	254	226	(83.2)	(92.0)	6	(83.3)	232	(91.8)
West Virginia	28	24	(58.3)	(87.5)	0		24	(87.5)
Wisconsin	78	70	(84.3)	(90.0)	2	(100.0)	72	(90.3)
Wyoming	0	0			0		0	
American Samoa <sup>6</sup>	5	5			0		5	
Fed. States of Micronesia <sup>6</sup>	74	72			1		73	
Guam <sup>6</sup>	64	59	(79.7)	(88.1)	1	(0.0)	60	(86.7)
Marshall Islands <sup>6</sup>	66	63			0		63	
N. Mariana Islands <sup>6</sup>	56	54			1		55	
Puerto Rico <sup>6</sup>	113	86	(87.2)	(94.2)	1	(100.0)	87	(94.3)
Republic of Palau <sup>6</sup>	10	10	(100.0)	(100.0)	0		10	(100.0
U.S. Virgin Islands <sup>6</sup>	0	0			Ö		0	

<sup>&</sup>lt;sup>1</sup>Most recent year for which data are available.

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

<sup>&</sup>lt;sup>2</sup>Initial isolate susceptible to rifampin (n=9,212) or susceptibility unknown (n=223); culture negative (n=2,346); culture status unknown (n=561); age unknown (n=0).

Initial isolate rifampin resistant, or pediatric patients (aged <15) with meningeal, bone, joint, or miliary disease.

<sup>&</sup>lt;sup>4</sup>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.

<sup>&</sup>lt;sup>5</sup>Excludes New York City.

<sup>&</sup>lt;sup>6</sup>Not included in U.S. totals.

Table 42. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2005<sup>1</sup>

Reporting Area United States  Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia	Regimen Prescribed2 13,662 212 59 268 112 2,823 97 93 27 54	No. 11,629 185 56 217 86 2,395 87	(%) (85.1) (87.3) (94.9) (81.0) (76.8) (84.8)	336 3 0 1 2	(%) (2.5) (1.4) (0.0)	No. 317	(%) (2.3)	No.	(%) (0.6)	No.	(%) (7.1)	No.	(%)
Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware	212 59 268 112 2,823 97 93 27	185 56 217 86 2,395 87	(87.3) (94.9) (81.0) (76.8)	3 0 1	(1.4)		(2.3)	88	(0.6)	974	(7 1)	318	(0.0)
Alaska Arizona Arkansas California Colorado Connecticut Delaware	59 268 112 2,823 97 93 27	56 217 86 2,395 87	(94.9) (81.0) (76.8)	0 1		_					(,,,,		(2.3
Arizona Arkansas California Colorado Connecticut Delaware	268 112 2,823 97 93 27	217 86 2,395 87	(81.0) (76.8)	1	(0.0)	5	(2.4)	2	(0.9)	15	(7.1)	2	(0.9
Arkansas California Colorado Connecticut Delaware	112 2,823 97 93 27	86 2,395 87	(76.8)		\-·-/	0	(0.0)	1	(1.7)	1	(1.7)	1	(1.7
California Colorado Connecticut Delaware	2,823 97 93 27	2,395 87	. ,	2	(0.4)	15	(5.6)	2	(0.7)	20	(7.5)	13	(4.9
Colorado Connecticut Delaware	97 93 27	87	(84.8)	_	(1.8)	1	(0.9)	0	(0.0)	7	(6.3)	16	(14.
Connecticut Delaware	93 27			106	(3.8)	47	(1.7)	16	(0.6)	208	(7.4)	51	(1.8
Delaware	27	0.0	(89.7)	0	(0.0)	1	(1.0)	0	(0.0)	8	(8.2)	1	(1.0
		86	(92.5)	1	(1.1)	1	(1.1)	0	(0.0)	5	(5.4)	0	(0.0
District of Columbia	E 1	24	(88.9)	0	(0.0)	0	(0.0)	0	(0.0)	3	(11.1)	0	(0.0
	54	47	(87.0)	3	(5.6)	2	(3.7)	0	(0.0)	2	(3.7)	0	(0.0
Florida	1,060	935	(88.2)	19	(1.8)	25	(2.4)	5	(0.5)	72	(6.8)	4	(0.4
Georgia	495	426	(86.1)	7	(1.4)	18	(3.6)	3	(0.6)	35	(7.1)	6	(1.2
Hawaii	110	84	(76.4)	5	(4.5)	2	(1.8)	2	(1.8)	15	(13.6)	2	(1.8
Idaho	23	18	(78.3)	1	(4.3)	0	(0.0)	1	(4.3)	2	(8.7)	1	(4.3
Illinois	575	483	(84.0)	16	(2.8)	16	(2.8)	6	(1.0)	46	(8.0)	8	(1.4
Indiana	143	128	(89.5)	1	(0.7)	3	(2.1)	1	(0.7)	9	(6.3)	1	(0.7
lowa	55	49	(89.1)	0	(0.0)	2	(3.6)	0		3		1	•
Kansas	59	52	(88.1)	1	(1.7)	1	(3.6)	1	(0.0)	2	(5.5) (3.4)	2	(1.8
	120	100				2		0		13			
Kentucky			(83.3)	3	(2.5)		(1.7)		(0.0)		(10.8)	2	(1.7
Louisiana	245	175	(71.4)	7	(2.9)	12	(4.9)	1	(0.4)	24	(9.8)	26	(10.
Maine	17	13	(76.5)	1	(5.9)	0	(0.0)	1	(5.9)	0	(0.0)	2	(11.
Maryland	276	244	(88.4)	7	(2.5)	3	(1.1)	1	(0.4)	19	(6.9)	2	(0.7)
Massachusetts	260	220	(84.6)	18	(6.9)	4	(1.5)	2	(8.0)	13	(5.0)	3	(1.2
Michigan	238	190	(79.8)	2	(8.0)	6	(2.5)	9	(3.8)	29	(12.2)	2	3.0)
Minnesota	197	186	(94.4)	1	(0.5)	1	(0.5)	2	(1.0)	7	(3.6)	0	(0.0
Mississippi	94	82	(87.2)	4	(4.3)	0	(0.0)	0	(0.0)	8	(8.5)	0	(0.0
Missouri	103	90	(87.4)	1	(1.0)	1	(1.0)	1	(1.0)	9	(8.7)	1	(1.0
Montana	9	8	(88.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)	0	(0.0
Nebraska	33	27	(81.8)	2	(6.1)	3	(9.1)	0	(0.0)	1	(3.0)	0	(0.0
Nevada	110	93	(84.5)	2	(1.8)	0	(0.0)	0	(0.0)	3	(2.7)	12	(10.
New Hampshire	4	4	(0)	0	(0.0)	Ö	(0.0)	Ö	(0.0)	0	(0.0)	0	(0.0
New Jersey	465	406	(87.3)	Ö	(0.0)	23	(4.9)	Ö	(0.0)	30	(6.5)	6	(1.3
New Mexico	36	28	(77.8)	ő	(0.0)	0	(0.0)	ő	(0.0)	8	(22.2)	Ö	(0.0
New York State <sup>5</sup>	292	266	(91.1)	1	(0.3)	5	(1.7)	2	(0.7)	17	(5.8)	1	(0.3
New York City	959	799	(83.3)	17	(1.8)	33	(3.4)	8	(0.7)	70	(7.3)	32	(3.3
North Carolina	322	288	(89.4)	2	(0.6)	7	(2.2)	0	(0.0)	24		1	(0.3
		200 5		0		0	` '	1			(7.5)		•
North Dakota	6		(83.3)		(0.0)		(0.0)		(16.7)	0	(0.0)	0	(0.0
Ohio	250	225	(90.0)	7	(2.8)	0	(0.0)	4	(1.6)	12	(4.8)	2	(0.8
Oklahoma	138	117	(84.8)	2	(1.4)	1	(0.7)	0	(0.0)	17	(12.3)	1	(0.7
Oregon	103	93	(90.3)	0	(0.0)	2	(1.9)	1	(1.0)	7	(6.8)	0	(0.0
Pennsylvania	311	206	(66.2)	5	(1.6)	1	(0.3)	2	(0.6)	35	(11.3)	62	(19.
Rhode Island	46	39	(84.8)	2	(4.3)	0	(0.0)	1	(2.2)	4	(8.7)	0	(0.0
South Carolina	252	228	(90.5)	2	(8.0)	2	(8.0)	4	(1.6)	13	(5.2)	3	(1.2
South Dakota	16	13	(81.3)	0	(0.0)	0	(0.0)	0	(0.0)	3	(18.8)	0	(0.0
Tennessee	292	264	(90.4)	4	(1.4)	5	(1.7)	0	(0.0)	18	(6.2)	1	(0.3
Texas	1,469	1,231	(83.8)	50	(3.4)	51	(3.5)	5	(0.3)	93	(6.3)	39	(2.7
Utah	29	27	(93.1)	0	(0.0)	1	(3.4)	0	(0.0)	1	(3.4)	0	(0.0
Vermont	8	7	(87.5)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	0	(0.0
Virginia	350	298	(85.1)	13	(3.7)	11	(3.1)	1	(0.3)	22	(6.3)	5	(1.4
Washington	245	213	(86.9)	13	(5.3)	2	(0.8)	1	(0.4)	13	(5.3)	3	(1.2
West Virginia	26	21	(80.8)	2	(7.7)	0	(0.0)	Ö	(0.0)	2	(7.7)	1	(3.8)
Wisconsin	76	65	(85.5)	2	(2.6)	2	(2.6)	1	(1.3)	4	(5.3)	2	(2.6
Wyoming	0	0		0	(2.0)	0		Ö		0		0	(2.0
American Samoa <sup>6</sup>	5	2	(60.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(40.
Fed. States of Micronesia	5 74	3					. ,			0			
		29	(39.2)	2	(2.7)	0	(0.0)	1	(1.4)	1	(1.4)	41	(55.
Guam <sup>6</sup>	63	52	(82.5)	1	(1.6)	0	(0.0)	0	(0.0)	3	(4.8)	7	(11.
Marshall Islands <sup>6</sup>	66	49	(74.2)	0	(0.0)	3	(4.5)	0	(0.0)	3	(4.5)	11	(16.
N. Mariana Islands <sup>6</sup>	56	44	(78.6)	5	(8.9)	0	(0.0)	0	(0.0)	1	(1.8)	6	(10.
Puerto Rico <sup>6</sup>	99	82	(82.8)	1	(1.0)	4	(4.0)	0	(0.0)	12	(12.1)	0	(0.0
Republic of Palau <sup>6</sup> U.S. Virgin Islands <sup>6</sup>	10	10		0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0

<sup>&</sup>lt;sup>1</sup>Most recent year for which data are available.

<sup>&</sup>lt;sup>2</sup>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).

<sup>&</sup>lt;sup>3</sup>Died = Died of any cause. <sup>4</sup>Includes cases reported as Other, Missing, or Unknown.

<sup>&</sup>lt;sup>5</sup>Excludes New York City.

<sup>&</sup>lt;sup>6</sup>Not included in U.S. totals.

Table 43. Completion of Tuberculosis Therapy (COT) Cases and Percentages<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2005<sup>2</sup>

								Non-Hisp	anic				
	Total	His	spanic⁴		an Indian ka Native		or Pacific ander	Bla	ıck	Wł	nite		own or ssing
Reporting Area	Cases <sup>3</sup>	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	12,342	3,627	(82.5)	121	(80.2)	2,894	(81.5)	3,454	(83.6)	2,156	(83.7)	90	(76.7)
Alabama	194	25	(88.0)	0		13	(100.0)	77	(92.2)	79	(86.1)	0	
Alaska	57	3	(100.0)	28	(89.3)	18	(100.0)	0		5	(80.0)	3	(100.0)
Arizona	245	153	(81.0)	11	(81.8)	18	(88.9)	18	(83.3)	45	(88.9)	0	
Arkansas	103						 (=0,=)		 (== 0)		 (=0.0)		 (00. <b>=</b> )
California	2,544	1,003	(83.0)	5	(80.0)	1,097	(79.7)	190	(77.9)	233	(79.8)	16	(62.5)
Colorado	85	40	(97.5)	0		12	(100.0)	17	(94.1)	15	(93.3)	1	(100.0)
Connecticut	87	21	(95.2)	0	•••	24	(70.8)	21	(85.7)	21	(81.0)	0	•••
Delaware	24	11	(100.0)	0		3	(33.3)	7	(85.7)	3	(100.0)	0	
District of Columbia	49	6	(100.0)	0		2	(100.0)	41	(85.4)	0	(91.4)	0	 (EQ.Q)
Florida Georgia	967 449	258 84	(86.0) (72.6)	0		80 43	(83.8) (90.7)	405 252	(90.1) (83.7)	220 67	(82.1)	4	(50.0) (66.7)
Hawaii	95		` '	0		86		252	, ,	7	(85.7)		(100.0)
Idaho	21	0 5	(60.0)	2	(100.0)	0	(73.3)	1	(100.0)	12	(75.0)	2 1	(100.0)
Illinois	524	125	(80.8)	1	(100.0)	138	(79.7)	196	(82.1)	61	(72.1)	3	(66.7)
Indiana	133	27	(88.9)	0		24	(91.7)	36	(97.2)	46	(87.0)	0	
lowa	52	13	(61.5)	1	(100.0)	6	(83.3)	7	(100.0)	25	(92.0)	0	•••
Kansas	57	17	(88.2)	1	(100.0)	10	(80.0)	15	(86.7)	14	(85.7)	0	
Kentucky	104	24	(83.3)	Ó	,	8	(87.5)	12	(91.7)	60	(88.3)	0	
Louisiana	218		(00.0)				(07.5)		(31.7)		(00.5)		
Maine	16	0		0		5	(60.0)	4	(50.0)	7	(100.0)	0	
Maryland	249	43	(83.7)	0		54	(94.4)	130	(88.5)	22	(81.8)	0	
Massachusetts	235	40	(75.0)	0		77	(75.3)	70	(80.0)	48	(83.3)	Ö	
Michigan	201	20	(75.0)	1	(0.0)	43	(83.7)	90	(81.1)	44	(77.3)	3	(100.0)
Minnesota	183	18	(88.9)	4	(100.0)	49	(89.8)	102	(94.1)	10	(100.0)	Ő	(100.0)
Mississippi	84	10	(90.0)	1	(100.0)	0		52	(82.7)	21	(85.7)	0	
Missouri	91	12	(66.7)	Ö		12	(75.0)	30	(86.7)	37	(94.6)	Õ	
Montana	8	1	(100.0)	4	(75.0)	0		0		3	(100.0)	Ö	
Nebraska	29	11	(72.7)	1	(0.0)	2	(100.0)	3	(100.0)	11	(81.8)	1	(0.0)
Nevada	106												
New Hampshire	4	0		0		4	(75.0)	0		0		0	
New Jersey	420	135	(88.1)	Ö		129	(81.4)	100	(89.0)	56	(83.9)	Ö	
New Mexico	26	16	(87.5)	5	(40.0)	2	(100.0)	3	(100.0)	0		0	
New York State <sup>5</sup>	266	90	(88.9)	0		62	(88.7)	60	(81.7)	54	(88.9)	0	
New York City	845	241	(83.0)	0		251	(86.9)	246	(78.5)	74	(77.0)	33	(72.7)
North Carolina	290	67	(86.6)	8	(87.5)	25	(84.0)	141	(85.8)	49	(87.8)	0	
North Dakota	6	0	·	3	(33.3)	0		1	(0.0)	2	(100.0)	0	
Ohio	231	21	(90.5)	0	` ´	35	(85.7)	100	(87.Ó)	73	(86.3)	2	(100.0)
Oklahoma	118	19	(94.7)	22	(81.8)	11	(90.9)	18	(72.2)	39	(82.1)	9	(100.0)
Oregon	95	25	(96.0)	2	(100.0)	33	(87.9)	7	(100.0)	27	(96.3)	1	(100.0)
Pennsylvania	270												
Rhode Island	41	15	(86.7)	0		9	(88.9)	4	(75.0)	13	(76.9)	0	
South Carolina	232	13	(76.9)	0		3	(100.0)	168	(89.9)	48	(79.2)	0	
South Dakota	13	0		3	(33.3)	3	(33.3)	3	(66.7)	4	(75.0)	0	
Tennessee	267	34	(85.3)	1	(0.0)	11	(100.0)	126	(87.3)	95	(91.6)	0	
Texas	1,334	717	(80.8)	2	(50.0)	145	(80.7)	286	(79.7)	184	(81.5)	0	
Utah	26	12	(91.7)	1	(100.0)	3	(100.0)	2	(100.0)	8	(100.0)	0	
Vermont	7	0		0		2	(100.0)	0		5	(100.0)	0	
Virginia	321	87	(78.2)	0		94	(84.0)	100	(81.0)	38	(86.8)	2	(100.0)
Washington	226	34	(70.6)	13	(92.3)	89	(82.0)	40	(80.0)	48	(93.8)	2	(100.0)
West Virginia	24	1	(100.0)	0		3	(33.3)	1	(0.0)	18	(61.1)	1	(100.0)
Wisconsin	70	17	(82.4)	1	(100.0)	23	(87.0)	16	(87.5)	13	(76.9)	0	
Wyoming	0												
American Samoa <sup>6</sup>	5												
Fed. States of Micronesia <sup>6</sup>	72												
Guam <sup>6</sup>	59	0		0		58	(79.3)	0		0		1	(100.0)
Marshall Islands <sup>6</sup>	63						` ′						` <b></b> ′
N. Mariana Islands <sup>6</sup>	54												
Puerto Rico <sup>6</sup>	86	85	(88.2)	0		0		1	(0.0)	0		0	
Republic of Palau <sup>6</sup>	10	0	·	0		10	(100.0)	0	`	0		0	
U.S. Virgin Islands <sup>6</sup>	0						'						

<sup>&</sup>lt;sup>1</sup>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.

**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).

<sup>&</sup>lt;sup>2</sup>Most recent year for which data are available.

<sup>&</sup>lt;sup>3</sup>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. <sup>4</sup>Persons of Hispanic or Latino origin may be of any race.

<sup>&</sup>lt;sup>5</sup>Excludes New York City.

<sup>&</sup>lt;sup>6</sup>Not included in U.S. totals.

Table 44. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2001–2005<sup>1</sup>

						ear				
	200	01	20	02	20	03	20	04	20	05
Reporting Area	No.²	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>
United States	13,921	(81.5)	13,128	(82.1)	13,065	(82.8)	12,788	(82.8)	12,342	(82.7)
Alabama	223	(81.2)	201	(90.0)	232	(86.2)	179	(89.9)	194	(89.7)
Alaska	50	(88.0)	45	(88.9)	51	(92.2)	38	(84.2)	57	(93.0)
Arizona	251	(82.1)	222	(80.2)	260	(79.6)	246	(74.8)	245	(83.3)
Arkansas	138	(92.0)	114	(86.8)	116	(87.9)	114	(88.6)	103	
California	2,938	(80.9)	2,791	(82.7)	2,839	(81.5)	2,638	(81.7)	2,544	(80.7)
Colorado	125	(92.0)	96	(84.4)	102	(93.1)	116	(96.6)	85	(96.5)
Connecticut	112	(73.2)	89	(70.8)	100	(76.0)	85	(77.6)	87	(82.8)
Delaware	30	(93.3)	22	(90.9)	28	(85.7)	29	(93.1)	24	(87.5)
District of Columbia	62	(85.5)	75	(98.7)	68	(91.2)	66	(93.9)	49	(87.8)
Florida	1,007	(81.6)	931	(82.3)	917	(85.9)	928	(85.9)	967	(88.6)
Georgia Hawaii	500	(82.6)	456	(78.9)	480	(79.6)	458	(83.4)	449	(82.0)
	138 7	(74.6)	136 12	(69.9)	99 13	(78.8)	108 10	(79.6)	95 21	(74.7)
Idaho Illinois	633		577			(80.8)	503	(80.0)	524	(76.2) (80.0)
Indiana	97	(78.0) (92.8)	105	(77.6) (96.2)	563 118	(80.8)	111	(79.9) (93.7)	133	(80.0
lowa	36	(92.6)	33	(81.8)	37	(95.6)	47	(76.6)	52	(84.6
Kansas	70	(77.8)	73	(83.6)	64	(78.1)	57	(84.2)	57	(86.0)
Kentucky	131	(87.8)	129	(85.3)	120	(85.8)	110	(87.3)	104	(87.5
Louisiana	259	(74.5)	207	(81.6)	219	(81.7)	231	(73.2)	218	(07.0
Maine	19	(94.7)	18	(77.8)	23	(69.6)	18	(66.7)	16	(75.0
Maryland	230	(90.0)	261	(87.7)	239	(87.9)	279	(90.7)	249	(88.4)
Massachusetts	247	(77.3)	254	(76.8)	243	(80.2)	256	(77.0)	235	(78.3
Michigan	271	(81.9)	261	(82.0)	205	(84.9)	239	(87.0)	201	(80.1
Minnesota	218	(84.9)	218	(85.3)	200	(89.5)	188	(91.0)	183	(92.9
Mississippi	137	(83.9)	112	(83.0)	109	(73.4)	101	(85.1)	84	(84.5
Missouri	137	(84.7)	114	(86.0)	105	(73.3)	111	(82.0)	91	(85.7
Montana	17	(94.1)	10	(90.0)	5	(100.0)	14	(92.9)	8	(87.5
Nebraska	31	(83.9)	24	(70.8)	25	(68.0)	37	(86.5)	29	(75.9
Nevada	87	(81.6)	70	(98.6)	96	(91.7)	88	(90.9)	106	
New Hampshire	19	(89.5)	18	(88.9)	13	(92.3)	21	(100.Ó)	4	(75.0
New Jersey	456	(76.5)	474	(79.1)	450	(81.8)	429	(82.3)	420	(85.7)
New Mexico	44	(86.4)	49	(83.7)	37	(86.5)	33	(84.8)	26	(80.8)
New York State⁴	369	(83.2)	314	(77.1)	296	(83.4)	293	(86.3)	266	(87.2
New York City	1,049	(85.5)	910	(86.2)	982	(86.5)	901	(84.5)	845	(81.9
North Carolina	339	(88.8)	366	(90.7)	323	(89.5)	332	(92.5)	290	(86.2
North Dakota	5	(100.0)	6	(100.0)	4	(50.0)	4	(100.0)	6	(50.0)
Ohio	256	(79.7)	219	(80.4)	193	(90.7)	190	(87.9)	231	(87.0)
Oklahoma	160	(80.6)	168	(85.7)	137	(70.1)	164	(80.5)	118	(84.7
Oregon	111	(88.3)	101	(88.1)	96	(84.4)	97	(89.7)	95	(93.7
Pennsylvania	277	(76.9)	299	(75.6)	288	(79.5)	280	 (05.7)	270	(00.0
Rhode Island	60	(73.3)	44	(68.2)	40	(90.0)	49	(85.7)	41	(82.9)
South Carolina	227	(85.0)	222	(80.2)	232	(86.6)	213	(82.2)	232	(87.1)
South Dakota	12	(66.7)	9	(88.9)	16	(68.8)	9	(44.4)	13	(53.8
Tennessee	263	(85.2)	276	(84.4)	237	(81.0)	237	(85.7)	267	(88.8
Texas	1,425 31	(76.6)	1,340 30	(76.6)	1,389 35	(77.0) (97.1)	1,460	(06.0)	1,334 26	(80.6
Utah Vermont	7	(83.9) (100.0)	8	(93.3) (87.5)	8	(100.0)	32	(96.9) (66.7)	7	(96.2
	267	(81.6)	285	(86.7)	298	(87.6)	6 292	(88.4)	321	(81.9
Virginia Washington	240	(85.0)	238	(83.2)	234	(82.5)	292	(88.1)	226	(83.2
West Virginia	25	(64.0)	26	(65.4)	17	(70.6)	21	(81.0)	24	(58.3
Wisconsin	75	(81.3)	67	(83.6)	61	(86.9)	89	(79.8)	70	(84.3
Wyoming	3	(100.0)	3	(100.0)	3	(100.0)	5	(100.0)	0	
American Samoa⁵	0	(0.0)	0	(0.0)	0	(0.0)	3	(0.0)	5	(60.0
Fed. States of Micronesia <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	5	(40.0)	72	(38.9
Guam⁵	54	( <del>7</del> 5.9)	79	′	58	(87.9 <sup>°</sup> )	45	(84.4)	59	(79.7
Marshall Islands <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	38	(76.3)	63	(76.2
N. Mariana Islands <sup>5</sup>	50	(88.0)	50	(70.0)	42	(78.6)	54	(87.0)	54	(81.5
Puerto Rico⁵	92	(92.4)	93	(79.6)	89	(70.8)	89	(79.8)	86	(87.2
Republic of Palau⁵	0	(0.0)	0	(0.0)	7	(57.1)	5	(80.0)	10	(100.0
U.S. Virgin Islands <sup>5</sup>										

<sup>&</sup>lt;sup>1</sup>Most recent year for which data are available.

<sup>&</sup>lt;sup>2</sup>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.

<sup>&</sup>lt;sup>3</sup>Percentage of total cases in persons who completed therapy for whom therapy less than 1 year was indicated.

<sup>&</sup>lt;sup>4</sup>Excludes New York City.

<sup>&</sup>lt;sup>5</sup>Not included in U.S. totals.

Ellipses indicate data not available.

See Technical Notes for description of Completion of Therapy calculation (page 9).

### Morbidity Tables Cities and Metropolitan Statistical Areas, 2007

Table 45. Tuberculosis Cases in Selected Cities1: 2007 and 2006

		Cases <sup>2</sup>
City	2007	2006
Albuquerque, NM	10	9
Anaheim, CA	35	28
Arlington, TX	24	19
Atlanta, GA	44	39
Austin, TX	51	38
Baltimore, MD	47	35
Birmingham, AL	25	18
Boston, MA	49	61
Buffalo, NY	6	6
Charlotte, NC	28	50
chicago, IL	259	285
Cincinnati, OH	21	22
eleveland, OH	25	22
	6	6
Colorado Springs, CO	68	74
Columbus, OH		
Corpus Christi, TX	13	34
vallas, TX	163	169
enver, CO	40	46
etroit, MI	62	59
I Paso, TX	40	65
ort Worth, TX	58	62
resno, CA	28	35
lonolulu, HI	62	49
louston, TX	368	377
ndianapolis, IN	41	46
acksonville, FL	68	87
Cansas City, MO	20	23
as Vegas, NV	76	72
ong Beach, CA	38	38
os Angeles, CA	305	330
ouisville, KY	30	18
Memphis, TN	71	101
Mesa, AZ	11	16
liami, FL	153	126
filwaukee, WI	26	21
/linneapolis, MN	71	63
Nashville, TN	50	49
lew Orleans, LA	28	30
	914	948
lew York, NY		
lewark, NJ	36	41
Jorfolk, VA	4	7
Oakland, CA	59	50
Oklahoma City, OK	26	28
Omaha, NE	9	9
hiladelphia, PA	124	145
hoenix, AZ	98	100
ittsburgh, PA	6	7
ortland, OR	29	29
acramento, CA	74	67
an Antonio, TX	71	89
an Diego, CA	161	202
an Francisco, CA	142	120
an Jose, CA	167	155
santa Ana, CA	33	38
eattle, WA	86	86
t. Louis, MO	25	30
t. Paul, MN	40	42
ampa, FL	53	56
oledo, OH	4	5
ucson, AZ	35	29
ulsa, OK	22	20
/irginia Beach, VA	11	12
	60	72
Vashington, DC		
Vichita, KS	17	24
TOTAL CACITIES	4.000	5.000
OTAL - 64 CITIES	4,826	5,039
	:-	
an Juan, PR	15	9

<sup>&</sup>lt;sup>1</sup>Historical list of cities. <sup>2</sup>Case counts are based on verified cases in persons residing 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, 2007 and 2006

	Cas	ses	Case	Rates	Population
Metropolitan Statistical Area	2007	2006	2007	2006	Estimates 2007
Akron, OH	5	5	(0.7)	(0.7)	699,356
Albany-Schenectady-Troy, NY	16	16	(1.9)	(1.9)	853,358
Albuquerque, NM	16	12	(1.9)	(1.5)	835,120
Allentown-Bethlehem-Easton, PA-NJ	2	22	(0.2)	(2.8)	803,844
Atlanta-Sandy Springs-Marietta, GA	276	282	(5.2)	(5.5)	5,278,904
Augusta-Richmond County, GA-SC	34	36	(6.4)	(6.9)	528,519
Austin-Round Rock, TX	66	52	(4.1)	(3.4)	1,598,161
Bakersfield, CA	40	39	(5.1)	(5.0)	790,710
Baltimore-Towson, MD	104	82	(3.9)	(3.1)	2,668,056
Baton Rouge, LA	28	18	(3.6)	(2.4)	770,037
Birmingham-Hoover, AL	42	44	(3.8)	(4.0)	1,108,210
Boise City-Nampa, ID	4	5	(0.7)	(0.9)	587,689
Boston-Cambridge-Quincy, MA-NH	179	194	(4.0)	(4.3)	4,482,857
Bridgeport-Stamford-Norwalk, CT	52	33	(5.8)	(3.7)	895,015
Buffalo-Niagara Falls, NY	10	15	(0.9)	(1.3)	1,128,183
Cape Coral-Fort Myers, FL	45	19	(7.6)	(3.3)	590,564
Charleston-North Charleston, SC	44	34	(7.0)	(5.5)	630,100
Charlotte-Gastonia-Concord, NC-SC	50	81	(3.0)	(5.1)	1,651,568
	16		(3.0)		
Chattanooga, TN-GA		 E4E		 (F.4)	514,568
Chicago-Naperville-Joliet, IL	490	515	(5.1)	(5.4)	9,524,673
Cincinnati-Middleton, OH-KY-IN	44	36	(2.1)	(1.7)	2,133,678
Cleveland-Elyria-Mentor, OH	61	47	(2.9)	(2.2)	2,096,471
Colorado Springs, CO	7	10	(1.1)	(1.7)	609,096
Columbia, SC	31	20	(4.3)	(2.8)	716,030
Columbus, OH	81	90	(4.6)	(5.2)	1,754,337
Dallas-Fort Worth-Arlington, TX	384	421	(6.2)	(7.0)	6,145,037
Dayton, OH	15	15	(1.8)	(1.8)	835,537
Deltona-Daytona Beach-Ormond Beach, FL	17		(3.4)		500,413
Denver-Aurora, CO	79 _	85	(3.2)	(3.5)	2,464,866
Des Moines-West Des Moines, IA	7	15	(1.3)	(2.8)	546,599
Detroit-Warren-Livonia, MI	139	131	(3.1)	(2.9)	4,467,592
El Paso, TX	40	72	(5.4)	(9.9)	734,669
Fresno, CA	42	62	(4.7)	(7.0)	899,348
Grand Rapids-Wyoming, MI	23	22	(3.0)	(2.8)	776,742
Greensboro-High Point, NC	31	42	(4.4)	(6.1)	698,497
Greenville, SC	18	11	(2.9)	(1.8)	613,828
Harrisburg-Carlisle, PA	13	5	(2.5)	(1.0)	528,892
Hartford-West Hartford-East Hartford, CT	25	20	(2.1)	(1.7)	1,189,113
Honolulu, HI	109	94	(12.0)	(10.4)	905,601
Houston-Sugar Land-Baytown, TX	488	473	(8.7)	(8.6)	5,628,101
Indianapolis-Carmel, IN	48	50	(2.8)	(3.0)	1,695,037
Jackson, MS	34	31	(6.4)	(5.8)	534,047
Jacksonville, FL	76	96	(5.8)	(7.5)	1,300,823
Kansas City, MO-KS	49	50	(2.5)	(2.5)	1,985,429
Knoxville, TN	16	14	(2.3)	(2.1)	681,525
Lakeland, FL	29	31	(5.0)	(5.6)	574,746
Las Vegas-Paradise, NV	92	89	(5.0)	(5.0)	1,836,333
Little Rock-North Little Rock-Conway, AR	31	11	(4.7)	(1.7)	666,401
Los Angeles-Long Beach-Santa Ana, CA	1,076	1,152	(8.4)	(9.0)	12,875,587
Louisville-Jefferson County, KY-IN	39	28	(3.2)	(2.3)	1,233,735
Madison, WI	4	11	(0.7)	(2.0)	555,626
McAllen-Edinburg-Mission, TX	76	68	(10.7)	(9.9)	710,514
Memphis, TN-MS-AR	83	121	(6.5)	(9.5)	1,280,533
Miami-Fort Lauderdale-Pompano Beach, FL	338	368	(6.2)	(6.8)	5,413,212
Milwaukee-Waukesha-West Allis, WI	38	33	(2.5)	(2.1)	1,544,398
Minneapolis-St. Paul-Bloomington, MN-WI	188	169	(5.9)	(5.3)	3,208,212

Table 46. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with ≥500,000 Population, 2007 and 2006

	Ca	ses	Case	Rates	Population
Metropolitan Statistical Area	2007	2006	2007	2006	Estimates 2007
Modesto, CA	15	16	(2.9)	(3.2)	511,263
Nashville-Davidson-Murfreesboro-Franklin, TN	74	82	(4.9)	(5.5)	1,521,437
New Haven-Milford, CT	25	22	(3.0)	(2.6)	845,494
New Orleans-Metairie-Kenner, LA	70	80	(6.8)	(8.1)	1,030,363
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,456	1,568	(7.7)	(8.3)	18,815,988
Ogden-Clearfield, UT	4		(0.8)		518,349
Oklahoma City, OK	41	45	(3.4)	(3.8)	1,192,989
Omaha-Council Bluffs, NE-IA	14	13	(1.7)	(1.6)	829,890
Orlando-Kissimmee, FL	116	139	(5.7)	(7.0)	2,032,496
Oxnard-Thousand Oaks-Ventura, CA	58	49	(7.3)	(6.2)	798,364
Palm Bay-Melbourne-Titusville, FL	19	8	(3.5)	(1.5)	536,161
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	231	287	(4.0)	(4.9)	5,827,962
Phoenix-Mesa-Scottsdale, AZ	211	205	(5.0)	(5.1)	4,179,427
Pittsburgh, PA	30	31	(1.3)	(1.3)	2,355,712
Portland-South Portland-Biddeford, ME	12	10	(2.3)	(2.0)	513,102
Portland-Vancouver-Beaverton, OR-WA	67	51	(3.1)	(2.4)	2,175,113
Poughkeepsie-Newburgh-Middletown, NY	10	13	(1.5)	(2.0)	669,915
Providence-New Bedford-Fall River, RI-MA	58	38	(3.6)	(2.4)	1,600,856
Raleigh-Cary, NC	64	56	(6.1)	(5.6)	1,047,629
Richmond, VA	30	42	(2.5)	(3.5)	1,212,977
Riverside-San Bernardino-Ontario, CA	139	132	(3.4)	(3.3)	4,081,371
Rochester, NY	24	25	(2.3)	(2.4)	1,030,495
Sacramento-Arden Arcade-Roseville, CA	134	110	(6.4)	(5.3)	2,091,120
St. Louis, MO-IL	57	52	(2.0)	(1.9)	2,803,707
Salt Lake City, UT	21	26	(1.9)	(2.4)	1,099,973
San Antonio, TX	84	108	(4.2)	(5.6)	1,990,675
San Diego-Carlsbad-San Marcos, CA	280	315	(9.4)	(10.7)	2,974,859
San Francisco-Oakland-Fremont, CA	452	400	(10.8)	(9.6)	4,203,898
San Jose-Sunnyvale-Santa Clara, CA	241	229	(13.4)	(12.9)	1,803,643
Sarasota-Bradenton-Venice, FL	34	33	(4.9)	(4.8)	687,181
Scranton-Wilkes-Barre, PA	9	8	(1.6)	(1.5)	549,430
Seattle-Tacoma-Bellevue, WA	209	191	(6.3)	(5.9)	3,309,347
Springfield, MA	13	17	(1.9)	(2.5)	682,657
Stockton, CA	51	78			670,990
Syracuse, NY	17	14	(7.6) (2.6)	(11.7) (2.2)	645,293
Tampa-St. Petersburg-Clearwater, FL	129	123	(4.7)	(4.6)	·
· · · · · · · · · · · · · · · · · · ·			. ,	· ,	2,723,949
Toledo, OH Tucson, AZ	8 40	12	(1.2)	(1.8)	650,955
		35	(4.1)	(3.7)	967,089
Tulsa, OK	31	27	(3.4)	(3.0)	905,755
Virginia Beach-Norfolk-Newport News, VA-NC	41	51	(2.5)	(3.1)	1,658,754
Washington-Arlington-Alexandria, DC-VA-MD-WV	419	420	(7.9)	(8.0)	5,306,565
Wichita, KS	17	29	(2.9)	(4.9)	596,452
Worchester, MA	18	32	(2.3)	(4.1)	781,352
Youngstown-Warren-Boardman, OH-PA	8	6	(1.4)	(1.0)	570,704
Total - 100 Areas	10,471	10,725	(5.3)	(5.5)	197,281,798
San Juan-Caguas-Guaynabo, PR	79	88	(2.9)	(3.2)	2,745,901

**Note:** In 2007, there were 3 metropolitan statistical areas with a 2006 population of less than 500,000. Ellipses indicate that data not shown for those populations less than 500,000.

2007 and 2006 population case counts and rates updated using U.S. Census Metropolitan Statistical Areas and Components, December 2006, with Codes (http://www.whitehouse.gov/omb/bulletins/fy2007/b07-01.pdf) (accessed June 6, 2008). See Technical Notes (page 9) for definition of MSA.

Table 47. Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with ≥500,000 Population, 2007

						1	Persons with nd Extrapulr	
Metropolitan	Total	Pulmo		Extrapul	<u> </u>	To	otal <sup>3</sup>	Miliary
Statistical Area	Cases	No.	(%)	No.	(%)	No.	(%)	No.
Akron, OH	5	2	(40.0)	3	(60.0)	0	(0.0)	0
Albany-Schenectady-Troy, NY	16	7	(43.8)	6	(37.5)	3	(18.8)	0
Albuquerque, NM	16	9	(56.3)	2	(12.5)	5	(31.3)	1
Allentown-Bethlehem-Easton, PA-NJ	2	1	(50.0)	1	(50.0)	0	(0.0)	0
Atlanta-Sandy Springs-Marietta, GA	276	191	(69.2)	63	(22.8)	22	(8.0)	2
Augusta-Richmond County, GA-SC	34	19	(55.9)	11	(32.4)	4	(11.8)	0
Austin-Round Rock, TX	66	51	(77.3)	12	(18.2)	3	(4.5)	1
Bakersfield, CA	40	30	(75.0)	5	(12.5)	5	(12.5)	0
Baltimore-Towson, MD	104	76	(73.1)	23	(22.1)	5	(4.8)	0
Baton Rouge, LA	28	21	(75.0)	5	(17.9)	2	(7.1)	0
Birmingham-Hoover, AL	42	38	(90.5)	4	(9.5)	0	(0.0)	0
Boise City-Nampa, ID	4	2	(50.0)	1	(25.0)	1	(25.0)	1
Boston-Cambridge-Quincy, MA-NH	179	110	(61.5)	43	(24.0)	26	(14.5)	9
Bridgeport-Stamford-Norwalk, CT	52	35	(67.3)	16	(30.8)	1	(1.9)	0
Buffalo-Niagara Falls, NY	10	4	(40.0)	2	(20.0)	4	(40.0)	1
Cape Coral-Fort Myers, FL	45	34	(75.6)	8	(17.8)	3	(6.7)	0
Charleston-North Charleston, SC	44	27	(61.4)		(25.0)	6	(13.6)	3
Charlotte-Gastonia-Concord, NC-SC	50	34	(68.0)	11	(22.0)	5	(10.0)	4
Chattanooga, TN-GA	16	12	(75.0)	3	(18.8)	1	(6.3)	0
Chicago-Naperville-Joliet, IL	490	335	(68.4)	129	(26.3)	26	(5.3)	5
Cincinnati-Middleton, OH-KY-IN	44	36	(81.8)		(15.9)	1	(2.3)	0
Cleveland-Elyria-Mentor, OH	61	35	(57.4)		(34.4)	5	(8.2)	1
Colorado Springs, CO	7	6	(85.7)	0	(0.0)	1	(14.3)	0
Columbia, SC	31	26	(83.9)		(9.7)	2	(6.5)	0
Columbus, OH	81	51	(63.0)	26	(32.1)	4	(4.9)	0
Dallas-Fort Worth-Arlington, TX	384	287	(74.7)		(16.4)	34	(8.9)	13
Dayton, OH	15	10	(66.7)	4	(26.7)	1	(6.7)	0
Deltona-Daytona Beach-Ormond Beach, FL	17	13	(76.5)		(23.5)	0	(0.0)	0
Denver-Aurora, CO	79	46	(58.2)	25	(31.6)	8	(10.1)	3
Des Moines-West Des Moines, IA	7	5	(71.4)		(14.3)	1	(14.3)	0
Detroit-Warren-Livonia, MI	139	96	(69.1)	34	(24.5)	9	(6.5)	1
El Paso, TX	40	29	(72.5)	8	(20.0)	3	(7.5)	1
Fresno, CA	42	30	(71.4)		(21.4)	3	(7.1)	1
Grand Rapids-Wyoming, MI	23	16	(69.6)		(21.7)	2	(8.7)	0
Greensboro-High Point, NC	31	22	(71.0)		(16.1)	4	(12.9)	1
Greenville, SC	18	14	(77.8)		(16.7)	1	(5.6)	0
Harrisburg-Carlisle, PA	13	8	(61.5)		(30.8)	1	(7.7)	0
Hartford-West Hartford-East Hartford, CT	25	14	(56.0)		(36.0)	2	(8.0)	0
Honolulu, HI	109	90	(82.6)		(11.0)	7	(6.4)	2
Houston-Sugar Land-Baytown, TX	488	388	(79.5)		(16.6)	19	(3.9)	12
Indianapolis-Carmel, IN	48	38	(79.2)		(12.5)	4	(8.3)	3
Jackson, MS	34	32	(94.1)		(5.9)	0	(0.0)	0
Jacksonville, FL	76	61	(80.3)		(15.8)	3	(3.9)	0
Kansas City, MO-KS	49	31	(63.3)		(28.6)	4	(8.2)	0
Knoxville, TN	16	12	(75.0)	4	(25.0)	0	(0.2)	0
Lakeland, FL	29	21	(72.4)		(20.7)	2	(6.9)	2
Las Vegas-Paradise, NV	92	74	(80.4)		(14.1)	5	(5.4)	0
Little Rock-North Little Rock-Conway, AR	31	28	(90.3)		(6.5)	1	(3.2)	0
Los Angeles-Long Beach-Santa Ana, CA	1,076	784	(72.9)	209	(19.4)	83	(7.7)	12
Louisville-Jefferson County, KY-IN	39	34	(87.2)		(12.8)	0	(0.0)	0
Madison, WI	4	3	, ,		(0.0)	1		1
McAllen-Edinburg-Mission, TX	76	56	(75.0) (73.7)		(15.8)	8	(25.0) (10.5)	
Memphis, TN-MS-AR	83	63			(13.3)	9		2 1
Miami-Fort Lauderdale-Pompano Beach, FL		289	(75.9)				(10.8)	
	338 38	18	(85.5)		(11.8)	9 5	(2.7)	4
Milwaukee-Waukesha-West Allis, WI			(47.4)		(39.5)		(13.2)	5
Minneapolis-St. Paul-Bloomington, MN-WI	188	89	(47.3)	79	(42.0)	20	(10.6)	3

Table 47. (Cont'd) Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with ≥500,000 Population, 2007

						monary ar	nd Extrapulr	n Both Pul m. Disease
etropolitan	Total	Pulmo	nary¹	Extrapul	monary <sup>2</sup>	To	otal <sup>3</sup>	Miliary
atistical Area	Cases	No.	(%)	No.	(%)	No.	(%)	No.
Modesto, CA	15	10	(66.7)	4	(26.7)	1	(6.7)	1
Nashville-Davidson-Murfreesboro-Franklin, TN	74	64	(86.5)	8	(10.8)	2	(2.7)	1
New Haven-Milford, CT	25	12	(48.0)	11	(44.0)	2	(8.0)	0
New Orleans-Metairie-Kenner, LA	70	59	(84.3)	6	(8.6)	5	(7.1)	4
New York-Northern New Jersey-Long Island, NY-NJ-PA	A 1,456	981	(67.4)	307	(21.1)	168	(11.5)	10
Ogden-Clearfield, UT	4	1	(25.0)	2	(50.0)	1	(25.0)	1
Oklahoma City, OK	41	27	(65.9)	10	(24.4)	4	(9.8)	0
Omaha-Council Bluffs, NE-IA	14	13	(92.9)	1	(7.1)	0	(0.0)	0
Orlando-Kissimmee, FL	116	88	(75.9)	17	(14.7)	11	(9.5)	4
Oxnard-Thousand Oaks-Ventura, CA	58	47	(81.0)	5	(8.6)	6	(10.3)	0
Palm Bay-Melbourne-Titusville, FL	19	17	(89.5)	2	(10.5)	0	(0.0)	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	231	154	(66.7)		(20.3)	22	(9.5)	4
Phoenix-Mesa-Scottsdale, AZ	211	161	(76.3)		(18.0)	11	(5.2)	4
Pittsburgh, PA	30	19	(63.3)		(33.3)	1	(3.3)	1
Portland-South Portland-Biddeford, ME	12	9	(75.0)		(16.7)	1	(8.3)	0
Portland-Vancouver-Beaverton, OR-WA	67	36	(53.7)	25	(37.3)	6	(9.0)	1
Poughkeepsie-Newburgh-Middletown, NY	10	6	(60.0)		(30.0)	1	(10.0)	1
Providence-New Bedford-Fall River, RI-MA	58	34	(58.6)	20	(34.5)	4	(6.9)	3
Raleigh-Cary, NC	64	48	(75.0)		(14.1)	7	(10.9)	3
Richmond, VA	30	23	(76.7)	6	(20.0)	1	(3.3)	0
Riverside-San Bernardino-Ontario, CA	139	113	(81.3)		(15.1)	5	(3.6)	0
Rochester, NY	24	15	(62.5)		(29.2)	2	(8.3)	0
Sacramento-Arden Arcade-Roseville, CA	134	106	(79.1)		(17.2)	5	(3.7)	1
St. Louis, MO-IL	57	38	(66.7)		(21.1)	7	(12.3)	2
Salt Lake City, UT	21	12	(57.1)		(23.8)	4	(19.0)	1
San Antonio, TX	84	67	(79.8)		(17.9)	2	(2.4)	1
San Diego-Carlsbad-San Marcos, CA	280	176	(62.9)		(16.1)	59	(21.1)	15
San Francisco-Oakland-Fremont, CA	452	305	(67.5)		(23.2)	42	(9.3)	4
San Jose-Sunnyvale-Santa Clara, CA	241	156	(64.7)		(29.0)	15	(6.2)	0
Sarasota-Bradenton-Venice, FL	34	27	(79.4)		(14.7)	2	(5.9)	1
Scranton-Wilkes-Barre, PA	9	5	(55.6)		(44.4)	0	(0.0)	0
Seattle-Tacoma-Bellevue, WA	209	105	(50.2)		(29.7)	42	(20.1)	1
Springfield, MA	13	11	(84.6)		(15.4)	0	(0.0)	0
Stockton, CA	51	29	(56.9)		(25.5)	9	(17.6)	1
Syracuse, NY	17	13	(76.5)		(23.5)	0	(0.0)	0
rampa-St. Petersburg-Clearwater, FL	129	108	(83.7)		(11.6)	6	(4.7)	0
Toledo, OH	8	3	(37.5)		(50.0)	1	(12.5)	0
Tucson, AZ	40	31	(77.5)		(17.5)	2	(5.0)	0
Tulsa, OK	31	20	(64.5)		(19.4)	5	(16.1)	0
/irginia Beach-Norfolk-Newport News, VA-NC	41	32	(78.0)		(22.0)	0	(0.0)	0
Vashington-Arlington-Alexandria, DC-VA-MD-WV	419	289	(69.0)		(22.2)	37	(8.8)	4
Vichita, KS	17	9	(52.9)		(23.5)	4	(23.5)	0
Vorchester, MA	18	13	(72.2)		(22.2)	1	(5.6)	1
oungstown-Warren-Boardman, OH-PA	8	5	(62.5)		(25.0)	1	(12.5)	1
Fotal - 100 Areas	10,471	7,390	(70.6)	2,183	(20.8)	889	(8.5)	166

Includes cases in persons with pulmonary listed as major site of disease and no additional site of disease.

Note: 9 (<0.1%) cases had missing and/or unknown site of disease.

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

<sup>&</sup>lt;sup>2</sup>Includes cases in persons with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as major site of disease.

<sup>&</sup>lt;sup>3</sup>Includes miliary cases.

Table 48. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15 –24	25–44	45–64	<u>≥</u> 65	Unknov or Missin
Akron, OH	5	0	1	0	1	1	2	0
Albany-Schenectady-Troy, NY	16	1	0	2	6	4	3	0
Albuquerque, NM	16	0	0	0	2	7	7	0
Allentown-Bethlehem-Easton, PA-NJ	2	0	0	1	0	0	1	0
Atlanta-Sandy Springs-Marietta, GA	276	16	8	38	108	78	28	0
Augusta-Richmond County, GA-SC	34	0	0	2	10	16	6	0
Austin-Round Rock, TX	66	3	2	7	30	16	8	0
Bakersfield, CA	40	2	0	8	12	15	3	0
Baltimore-Towson, MD	104	2	3	14	34	37	14	0
Baton Rouge, LA	28	2	1	3	5	12	5	0
Birmingham-Hoover, AL	42	1	0	1	8	20	12	0
Boise City-Nampa, ID	4	0	0	0	3	0	1	0
Boston-Cambridge-Quincy, MA-NH	179	3	7	16	64	55	34	0
Bridgeport-Stamford-Norwalk, CT	52	1	1	11	15	15	9	0
Buffalo-Niagara Falls, NY	10	0	0	2	4	1	3	0
Cape Coral-Fort Myers, FL	45	5	1	5	13	17	4	0
Charleston-North Charleston, SC	44	5	0	6	12	15	6	0
Charlotte-Gastonia-Concord, NC-SC	50	2	0	8	21	15	4	0
Chattanooga, TN-GA	16	1	0	2	6	1	6	0
Chicago-Naperville-Joliet, IL	490	10	6	- 45	147	174	108	0
Cincinnati-Middleton, OH-KY-IN	44	0	0	3	16	18	7	0
Cleveland-Elyria-Mentor, OH	61	3	3	4	16	18	17	0
Colorado Springs, CO	7	1	0	1	1	2	2	0
Columbia, SC	31	1	1	4	6	9	10	0
Columbus, OH	81	1	1	20	34	15	10	0
Dallas-Fort Worth-Arlington, TX	384	17	9	40	143	134	41	0
Dayton, OH	15	1	0	1	6	5	2	0
Deltona-Daytona Beach-Ormond Beach, FL	17	0	0	1	8	5	3	0
Denver-Aurora, CO	79	3	3	11	23	19	20	0
Des Moines-West Des Moines, IA	79	0	0	2	3	1	1	0
	139	5	2	15	38	37	42	0
Detroit-Warren-Livonia, MI	40					9		-
El Paso, TX	40	2 1	1	4	10		14	0
Fresno, CA			1	9	12	14	5	-
Grand Rapids-Wyoming, MI	23	1	1	5	9	5	2	0
Greensboro-High Point, NC	31	2	3	2	15	7	2	0
Greenville, SC	18	0	1	5	6	5	1	0
Harrisburg-Carlisle, PA	13	0	1	1	3	6	2	0
Hartford-West Hartford-East Hartford, CT	25	1	0	4	15	5	0	0
Honolulu, HI	109	1	2	12	23	40	31	0
Houston-Sugar Land-Baytown, TX	488	12	12	51	166	171	76	0
Indianapolis-Carmel, IN	48	2	0	9	20	11	6	0
Jackson, MS	34	2	2	5	10	12	3	0
Jacksonville, FL	76	2	2	8	27	26	11	0
Kansas City, MO-KS	49	3	0	12	15	12	7	0
Knoxville, TN	16	0	0	0	3	5	8	0
Lakeland, FL	29	0	1	2	10	10	6	0
Las Vegas-Paradise, NV	92	6	3	13	24	32	14	0
Little Rock-North Little Rock-Conway, AR	31	1	0	5	8	12	5	0
Los Angeles-Long Beach-Santa Ana, CA	1,076	37	12	104	301	360	262	0
Louisville-Jefferson County, KY-IN	39	0	1	3	14	13	8	0
Madison, WI	4	0	0	1	3	0	0	0
McAllen-Edinburg-Mission, TX	76	7	3	15	24	18	9	0
Memphis, TN-MS-AR	83	4	3	12	31	26	7	0
Miami-Fort Lauderdale-Pompano Beach, FL	338	14	7	44	117	106	50	0
Milwaukee-Waukesha-West Allis, WI	38	0	0	5	14	10	9	0

Table 48. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15 –24	25–44	45–64	<u>≥</u> 65	Unknowr or
Minneapolis-St. Paul-Bloomington, MN-WI	188	3	16	<u>1</u> 42	75	32	20	Missing 0
Modesto, CA	15	0	0	2	6	3	4	0
Nashville-Davidson-Murfreesboro-Franklin, TN	74	3	3	8	30	17	13	0
New Haven-Milford, CT	25	0	0	1	13	6	5	0
New Orleans-Metairie-Kenner, LA	70	1	4	14	22	21	8	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,456	35	28	179	567	391	256	0
Ogden-Clearfield, UT	4	0	0	1	1	2	0	0
Oklahoma City, OK	41	2	0	6	11	17	5	0
Omaha-Council Bluffs, NE-IA	14	0	0	1	7	5	1	0
Orlando-Kissimmee, FL	116	5	2	12	36	42	19	0
Oxnard-Thousand Oaks-Ventura, CA	58	4	3	6	10	19	16	0
Palm Bay-Melbourne-Titusville, FL	19	0	0	1	5	7	6	0
		-			-			0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Phoenix-Mesa-Scottsdale, AZ	231 211	12 12	13 4	26 30	67 76	75 53	38 35	1
		12						•
Pittsburgh, PA	30	1	0	2	11	6	10 2	0
Portland-South Portland-Biddeford, ME	12	•	1	-	3	4		-
Portland-Vancouver-Beaverton, OR-WA	67	3	3	7	20	22	12	0
Poughkeepsie-Newburgh-Middletown, NY	10	0	0	1	6	2	1	0
Providence-New Bedford-Fall River, RI-MA	58	7	3	3	15	21	9	0
Raleigh-Cary, NC	64	4	1	12	27	12	8	0
Richmond, VA	30	2	1	6	8	8	5	0
Riverside-San Bernardino-Ontario, CA	139	2	5	11	53	31	37	0
Rochester, NY	24	3	0	7	8	2	4	0
Sacramento-Arden Arcade-Roseville, CA	134	8	2	13	38	38	35	0
St. Louis, MO-IL	57	3	1	2	17	22	12	0
Salt Lake City, UT	21	0	0	6	8	4	3	0
San Antonio, TX	84	2	2	6	23	40	11	0
San Diego-Carlsbad-San Marcos, CA	280	10	5	51	81	82	51	0
San Francisco-Oakland-Fremont, CA	452	9	5	38	133	151	116	0
San Jose-Sunnyvale-Santa Clara, CA	241	6	6	26	67	73	63	0
Sarasota-Bradenton-Venice, FL	34	2	3	4	7	11	7	0
Scranton-Wilkes-Barre, PA	9	2	0	3	1	1	2	0
Seattle-Tacoma-Bellevue, WA	209	7	7	36	74	56	29	0
Springfield, MA	13	0	0	3	2	4	4	0
Stockton, CA	51	4	2	6	12	17	10	0
Syracuse, NY	17	1	0	3	2	5	6	0
Tampa-St. Petersburg-Clearwater, FL	129	4	1	8	43	53	20	0
Toledo, OH	8	0	0	0	2	2	4	0
Tucson, AZ	40	1	0	3	11	10	15	0
Tulsa, OK	31	2	2	2	10	11	4	0
Virginia Beach-Norfolk-Newport News, VA-NC	41	0	1	3	12	17	8	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	419	12	10	59	176	99	63	0
Wichita, KS	17	0	0	3	3	9	2	0
Worchester, MA	18	1	1	4	5	5	2	0
Youngstown-Warren-Boardman, OH-PA	8	1	0	0	1	3	3	0
Total - 100 Areas	10,471	359	240	1,262	3,480	3,188	1,941	1
1307.1307	. 5, 11 1	230		.,	0,.00	5,.00	.,511	
San Juan-Caguas-Guaynabo, PR	79	2	1	5	22	34	15	0

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

Table 49. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Alterny-Ohenectady-Truy, NY	Metropolitan Statistical Area	Total Cases	Hispanic or Latino¹	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race <sup>2</sup>	Unknown or Missing
Albany-Scheneclady-Troy, NY	Akron, OH	5								
Abbuquerque, NM	·	16	2	0	7	2	0	5	0	0
Allentown-Bethiehem-Easton, PA-NJ Allanta-Sandy Springs-Mainetta, GA A 26 62 0 5 53 131 0 29 0 1 Augusta-Richmond Counly, GA-SC 34 2 0 4 21 1 6 0 0 Bakersfield, CA A 40 24 1 4 3 0 8 0 0 Bakersfield, CA A 40 24 1 4 3 0 8 0 0 Bakersfield, CA A 40 24 1 4 3 0 8 0 0 Bakersfield, CA Bakersfield, CA A 40 24 1 4 3 0 0 8 0 0 Bakersfield, CA Bakersfield, CA A 40 24 1 4 3 0 0 8 0 0 Bakersfield, CA Bakersfield, CA Bakersfield, CA A 40 24 1 4 3 0 0 8 0 0 Bakersfield, CA		16	8	3	1	0	0	4	0	0
Augusta-Richmond County, GA-SC 44 2 0 4 21 1 6 0 0 0 Astern Floring More, TX 66 32 0 16 7 0 111 0 0 0 Batern Floring More, TX 68 32 0 16 7 0 111 0 0 0 0 Batern Floring More, TX 68 32 0 16 7 0 111 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Allentown-Bethlehem-Easton, PA-NJ		0	0	0	1	1	0	0	0
Augusta-Richmond County, GA-SC  34		276	62	0	53	131	0	29	0	1
Austin-Round Rock, TX		34	2	0	4	21	1	6	0	0
Bakenseled, CA	· · · · · · · · · · · · · · · · · · ·	66	32	0	16	7	0	11	0	0
Bathmore-Towson, MD	·	40	24	1	4	3	0	8	0	0
Baton Rouge LA										
Birmingham-Hoover, AL		28	2	0	5	12	0	9	0	0
Boise City-Nampa, ID  8 doston-Cambridge-Quincy, MA-NH  179 27 0 59 59 0 34 0 0  Bridgeport-Stamford-Norwalk, CT 52 15 0 12 12 0 13 0 0  Bridgeport-Stamford-Norwalk, CT 52 15 0 12 12 0 13 0 0  Buffalo-Niagara Falls, NY  10 1 1 0 5 1 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Charlotte-Gastonia-Concord, NC-SC 50 15 2 8 15 0 0 10 0 0  Chicago-Naperville-Jolet, IL 490 127 0 145 148 0 65 1 4 4  Grindhard-Gastonia-Concord, NC-SC 50 15 0 15 0 0 10 0 0  Cloredo-Sprigh-Go 7 1 0 3 0 4 20 0 17 0 0  Cloredo-Sprighg, CO 7 1 0 3 1 0 2 0 0 17 0 0  Columbia, SC 31 5 0 4 16 0 6 0 0 0  Columbia, SC 31 5 0 4 16 0 0 6 0 0  Columbia, SC 31 5 0 4 16 0 0 6 0 0  Columbia, SC 31 5 0 4 16 0 0 6 0 0  Columbia, SC 31 5 0 4 16 0 0 6 0 0  Dayton, OH 51 0 0 0 3 7 0 5 0 0 0  Dayton, OH 51 0 0 0 3 7 0 5 0 0 0  Dayton, OH 51 0 0 0 3 7 0 5 0 0 0  Denver-Aurora, CO 79 35 0 21 14 0 0 9 0 0 0  Denver-Aurora, CO 79 35 0 0 21 14 0 0 9 0 0 0  Denver-Aurora, CO 79 35 0 0 1 1 0 0 0 3 0 0 0 0  Denver-Aurora, CO 79 35 0 0 1 1 0 0 0 3 0 0 0 0  Denver-Aurora, CO 79 3 5 0 1 1 0 0 0 3 0 0 0 0 0  Denver-Aurora, CO 79 3 5 0 1 1 1 0 0 0 0 3 0 0 0 0 0 0  Denver-Aurora, CO 79 3 5 0 1 1 1 0 0 0 0 3 0 0 0 0 0 0 0  Denver-Aurora, CO 79 3 5 0 1 1 1 0 0 0 0 0 0 0 0 0 0  Denver-Aurora, CO 79 3 5 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•									
Boston-Cambridge-Quincy, MA-NH			2		1		0		0	0
Bridgeport-Stamford-Norwalk, CT  S2  15  0  10  10  10  10  10  10  10  11  0  5  11  0  3  0  0  Cape Coral-Fort Myers, FL  45  111  10  22  21  0  10  10  0  Charletston-North Charletston, SC  44  41  11  0  22  23  15  0  10  0  Charlotte-Gastonia-Concord, NC-SC  50  15  28  15  0  10  0  Charlotte-Gastonia-Concord, NC-SC  50  15  28  15  0  10  0  Charlotte-Gastonia-Concord, NC-SC  Charlotte, Gastonia-Concord, NC-SC  Columbus, OH  61  61  61  61  61  61  61  61  61  6		179			59				0	
Buffalo-Niegara Falis, NY	•						-		0	0
Cape Coral-Fort Myers, FL         45         11         1         2         21         0         10         0         0           Charleston-North Charleston, SC         44         11         0         2         23         1         5         2         0           Charlotte-Gastonia-Concord, NC-SC         50         15         2         8         15         0         10         0         0           Chicago-Naperville-Jollet, IL         490         127         0         145         148         0         65         1         4           Chicago-Naperville-Jollet, IL         490         127         0         145         148         0         65         1         4           Chicago-Naperville-Jollet, IL         490         127         0         145         148         0         65         1         4           Clourdo Springs, CO         7         1         0         1         25         0         15         0         0           Columbia, SC         31         5         0         4         16         0         6         0         0           Dallas-Fort Worth-Arlington, TX         384         117         0										
Charleston-North Charleston, SC							-		-	-
Charlotte-Gastonia-Concord, NC-SC         50         15         2         8         15         0         10         0         0           Chattanooga, TN-GA         16         5         0         1         3         0         7         0         0           Chicago-Naperille-Joliet, IL         490         127         0         145         148         0         65         1         4           Cincinadi-Middleton, OH-KY-IN         44         3         0         4         20         0         17         0         0           Cleveland-Elyria-Mentor, OH         61         4         0         17         25         0         15         0         0           Colorado Springs, CO         7         1         0         3         1         0         2         0         0           Columbia, SC         31         5         0         4         16         0         6         0         0         0           Columbia, SC         31         3         4         16         0         6         0         0         0           Columbia, SC         31         3         0         0         0         0										
Chicago-Naperville-Jollet, IL	·						•			-
Chicago-Naperville-Joliet, IL         490         127         0         145         148         0         65         1         4           Cincinadi-Middleton, OH-KYFIN         44         3         0         4         20         0         17         0         0           Cleveland-Eyira-Mentor, OH         61         4         0         17         25         0         15         0         0           Colorado Springs, CO         7         1         0         3         1         0         2         0         0           Columbus, CH         81         5         0         13         48         0         15         0         0           Dallas-Fort Worth-Ailington, TX         384         117         0         65         133         5         64         0         0           Dayton, OH         15         0         0         3         7         0         5         0         0           Deltona-Daytona Beach-Ormond Beach, FL         17         5         0         1         6         0         5         0         0           Destonice-Wallone, Wall         33         1         1         7         3         <										
Cincinnati-Middleton, OH-KY-IN         44         3         0         4         20         0         17         0         0           Cleveland-Elyria-Mentor, OH         61         4         0         17         25         0         15         0         0           Columbia, SC         31         5         0         4         16         0         6         0         0           Columbus, OH         81         5         0         14         16         0         6         0         0           Daltas-Fort Worth-Arlington, TX         384         117         0         65         133         5         64         0         0           Dayton, OH         15         0         0         3         7         0         5         0         0           Des Moines-West Des Moines, IA         7         3         0         0         2         0         2         0	-				145		-		1	4
Cleveland-Elyria-Mentor, OH										
Colorado Springs, CO	•						-		-	-
Columbia, SC   31   5   0   4   16   0   6   0   0   Columbus, OH   81   5   0   13   48   0   15   0   0   Dallas-Fort Worth-Arlington, TX   384   117   0   65   133   5   64   0   0   0   Dayton, OH   15   0   0   3   7   0   5   0   0   Dayton, OH   15   0   0   3   7   0   5   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   Deltona-Daytona Beach-Ormond Beach, FL   17   5   0   1   6   0   5   0   0   0   0   0   0   0   0	•									
Columbus, OH         81         5         0         13         48         0         15         0         0           Dallas-Fort Worth-Arlington, TX         384         117         0         65         133         5         64         0         0         0         0         5         0         0         0         0         5         0         0         0         0         5         0         0         0         0         5         0         0         0         0         0         0         0         5         0			•		-		-		-	-
Daltas-Fort Worth-Arlington, TX   384   117   0   65   133   5   64   0   0   Dayton, OH   15   0   0   3   7   0   5   0   0   0   0   0   0   0   0										
Dayton, OH			-				-		-	
Delitona-Daytona Beach-Ormond Beach, FL										
Denver-Aurora, CO	•						-	-	-	-
Des Moines-West Des Moines, IA   7   3   0   0   2   0   2   0   0										
Detroit-Warren-Livonia, MI							-	-	-	
El Paso, TX										
Fresno, CA	·		-				-		-	•
Grand Rapids-Wyoming, MI         23         7         0         7         5         0         4         0         0           Greensboro-High Point, NC         31         6         0         10         14         0         1         0         0           Greenville, SC         18         8         0         5         3         1         1         0         0           Harrisburg-Carlisle, PA         13         0         0         2         4         0         6         1         0           Hartford-West Hartford, CT         25         5         0         13         1         0         6         0         0           Honolulu, HI         109         1         0         77         0         25         6         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Indianapolis-Carmel, IN         48         17         0         9         11         0										
Greensboro-High Point, NC         31         6         0         10         14         0         1         0         0           Greenville, SC         18         8         0         5         3         1         1         0         0           Harrisburg-Carlisle, PA         13         0         0         2         4         0         6         1         0           Honolulu, HI         109         1         0         77         0         25         6         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Indianapolis-Carmel, IN         48         17         0         9         11         0         11         0         0           Jackson, MS         34         5         0         2         23         0         4         0         0           Jacksonville, FL         76         3         0         14         41         0         18         0         0           Knoxville, TN         16         0         0         2         2         0         12         0	•		-				-	-	-	-
Greenville, SC         18         8         0         5         3         1         1         0         0           Harrisburg-Carlisle, PA         13         0         0         2         4         0         6         1         0           Honolulu, HI         109         1         0         77         0         25         6         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Indianapolis-Carmel, IN         48         17         0         9         11         0         11         0         0           Jackson, MS         34         5         0         2         23         0         4         0         0           Jacksonville, FL         76         3         0         14         41         0         18         0         0           Kansas City, MO-KS         49         11         0         9         16         1         12         0         0           Knoxville, TN         16         0         0         2         2         0         12         0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
Harrisburg-Carlisle, PA  13  0  0  2  4  0  6  1  0  Hartford-West Hartford-East Hartford, CT  25  5  0  13  1  0  6  0  0  Honolulu, HI  109  1  0  77  0  25  6  0  0  Houston-Sugar Land-Baytown, TX  488  168  1  104  126  0  89  0  0  Indianapolis-Carmel, IN  Jackson, MS  34  5  0  2  23  0  4  0  0  Jackson, MS  Jacksonville, FL  76  3  0  14  41  0  18  0  Kansas City, MO-KS  49  11  0  0  14  41  0  18  0  Knoxville, TN  16  0  0  2  2  0  12  0  14  Lakeland, FL  29  8  0  0  9  11  1  0  11  0  11  0  12  0  0  Las Vegas-Paradise, NV  12  Little Rock-North Little Rock-Conway, AR  31  1  0  485  83  11  0  3  5  6  0  13  14  0  6  10  6  0  0  17  11  11  0  14  15  0  0  0  0  0  0  0  0  0  0  0  0  0	•		-				-	•	-	-
Hartford-West Hartford, East Hartford, CT         25         5         0         13         1         0         6         0         0           Honolulu, HI         109         1         0         77         0         25         6         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Indianapolis-Carmel, IN         48         17         0         9         11         0         11         0         0           Jackson, MS         34         5         0         2         23         0         4         0         0           Jacksonville, FL         76         3         0         14         41         0         18         0         0           Kansas City, MO-KS         49         11         0         9         16         1         12         0         0           Knoxville, TN         16         0         0         2         2         0         12         0         0           Las Vegas-Paradise, NV         92         34         0         26         14         0         17 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td>							•			
Honolulu, HI         109         1         0         77         0         25         6         0         0           Houston-Sugar Land-Baytown, TX         488         168         1         104         126         0         89         0         0           Indianapolis-Carmel, IN         48         17         0         9         11         0         11         0         0           Jackson, MS         34         5         0         2         23         0         4         0         0           Jacksonville, FL         76         3         0         14         41         0         18         0         0           Kansas City, MO-KS         49         11         0         9         16         1         12         0         0           Knoxville, TN         16         0         0         2         2         0         12         0         0           Lak Vegas-Paradise, NV         92         34         0         0         9         0         11         1         0           Little Rock-North Little Rock-Conway, AR         31         1         0         4         17         0         7			5	0		1	-		0	0
Houston-Sugar Land-Baytown, TX       488       168       1       104       126       0       89       0       0         Indianapolis-Carmel, IN       48       17       0       9       11       0       11       0       0         Jackson, MS       34       5       0       2       23       0       4       0       0         Jacksonville, FL       76       3       0       14       41       0       18       0       0         Kansas City, MO-KS       49       11       0       9       16       1       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       485       85 </td <td></td>										
Indianapolis-Carmel, IN       48       17       0       9       11       0       11       0       0         Jackson, MS       34       5       0       2       23       0       4       0       0         Jacksonville, FL       76       3       0       14       41       0       18       0       0         Kansas City, MO-KS       49       11       0       9       16       1       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0	·									-
Jackson, MS       34       5       0       2       23       0       4       0       0         Jacksonville, FL       76       3       0       14       41       0       18       0       0         Kansas City, MO-KS       49       11       0       9       16       1       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3										
Jacksonville, FL       76       3       0       14       41       0       18       0       0         Kansas City, MO-KS       49       11       0       9       16       1       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         Memphis, TN-MS-AR       83       11       0       3 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td>									-	-
Kansas City, MO-KS       49       11       0       9       16       1       12       0       0         Knoxville, TN       16       0       0       2       2       0       12       0       0         Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0 </td <td></td>										
Knoxville, TN         16         0         0         2         2         0         12         0         0           Lakeland, FL         29         8         0         0         9         0         11         1         0           Las Vegas-Paradise, NV         92         34         0         26         14         0         17         0         1           Little Rock-North Little Rock-Conway, AR         31         1         0         4         17         0         7         1         1           Los Angeles-Long Beach-Santa Ana, CA         1,076         428         0         485         85         1         75         1         1           Louisville-Jefferson County, KY-IN         39         4         0         2         15         0         18         0         0           Madison, WI         4         1         0         3         0         0         0         0         0           McAllen-Edinburg-Mission, TX         76         74         0         1         0         0         1         0           Memphis, TN-MS-AR         83         11         0         3         58         0         10 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>									-	
Lakeland, FL       29       8       0       0       9       0       11       1       0         Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
Las Vegas-Paradise, NV       92       34       0       26       14       0       17       0       1         Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0										
Little Rock-North Little Rock-Conway, AR       31       1       0       4       17       0       7       1       1         Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0										1
Los Angeles-Long Beach-Santa Ana, CA       1,076       428       0       485       85       1       75       1       1         Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0       0										1
Louisville-Jefferson County, KY-IN       39       4       0       2       15       0       18       0       0         Madison, WI       4       1       0       3       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0       0										
Madison, WI       4       1       0       3       0       0       0       0       0       0         McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0       0										-
McAllen-Edinburg-Mission, TX       76       74       0       1       0       0       1       0       0         Memphis, TN-MS-AR       83       11       0       3       58       0       10       1       0         Miami-Fort Lauderdale-Pompano Beach, FL       338       137       1       31       139       0       29       1       0         Milwaukee-Waukesha-West Allis, WI       38       11       0       8       9       0       10       0       0	· · · · · · · · · · · · · · · · · · ·									
Memphis, TN-MS-AR     83     11     0     3     58     0     10     1     0       Miami-Fort Lauderdale-Pompano Beach, FL     338     137     1     31     139     0     29     1     0       Milwaukee-Waukesha-West Allis, WI     38     11     0     8     9     0     10     0     0										-
Miami-Fort Lauderdale-Pompano Beach, FL         338         137         1         31         139         0         29         1         0           Milwaukee-Waukesha-West Allis, WI         38         11         0         8         9         0         10         0         0										
Milwaukee-Waukesha-West Allis, WI 38 11 0 8 9 0 10 0 0										-
Minneapolis-St Paul-Bloomington MN-WI 188 19 1 41 120 0 7 0 0	Minneapolis-St. Paul-Bloomington, MN-WI	188	19	1	41	120	0	7	0	0

Table 49. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Metropolitan Statistical Area	Total Cases	Hispanic or Latino¹	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race <sup>2</sup>	Unknowr or Missing
Modesto, CA	15	9	0	6	0	0	0	0	0
Nashville-Davidson-Murfreesboro-Franklin, TN	74	14	0	10	28	1	21	0	0
New Haven-Milford, CT	25	9	0	8	4	0	4	0	0
New Orleans-Metairie-Kenner, LA	70	15	0	6	39	0	10	0	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,456	475	0	458	357	3	158	4	1
Ogden-Clearfield, UT	4	3	0	1	0	0	0	0	0
Oklahoma City, OK	41	6	6	3	8	0	18	0	0
Omaha-Council Bluffs, NE-IA	14	9	0	2	0	1	1	1	0
Orlando-Kissimmee, FL	116	25	0	17	48	0	26	0	0
Oxnard-Thousand Oaks-Ventura, CA	58	22	0	28	1	0	7	0	0
Palm Bay-Melbourne-Titusville, FL	19	2	0	3	2	0	12	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	231	20	0	86	91	0	33	1	0
Phoenix-Mesa-Scottsdale, AZ	211	127	6	41	12	0	24	1	0
Pittsburgh, PA	30	1	0	8	8	0	13	0	0
Portland-South Portland-Biddeford, ME	12	1	0	1	5	0	5	0	0
Portland-Vancouver-Beaverton, OR-WA	67	20	0	23	7	1	16	0	0
Poughkeepsie-Newburgh-Middletown, NY	10	4	0	3	2	0	1	0	0
Providence-New Bedford-Fall River, RI-MA	58	15	0	8	15	0	20	0	0
Raleigh-Cary, NC	64	23	0	17	17	0	6	1	0
Richmond, VA	30	7	0	1	18	0	4	0	0
Riverside-San Bernardino-Ontario, CA	139	65	0	31	11	1	27	0	4
Rochester, NY	24	3	0	6	11	0	4	0	0
Sacramento-Arden Arcade-Roseville, CA	134	27	0	76	7	3	19	0	2
St. Louis, MO-IL	57	2	0	13	25	0	17	0	0
Salt Lake City, UT	21	7	0	6	4	2	2	0	0
San Antonio, TX	84	51	0	10	6	0	17	0	0
San Diego-Carlsbad-San Marcos, CA	280	144	0	99	22	1	14	0	0
San Francisco-Oakland-Fremont, CA	452	86	-	257	57	8	39	2	
			0			2		0	1 2
San Jose-Sunnyvale-Santa Clara, CA	241	40	-	178	10		9	-	
Sarasota-Bradenton-Venice, FL	34	9	0	8	7	0	10	0	0
Scranton-Wilkes-Barre, PA	9	2	0	4	1	0	2	0	0
Seattle-Tacoma-Bellevue, WA	209	27	4	92	52	14	19	1	0
Springfield, MA	13	3	0	4	2	0	4	0	0
Stockton, CA	51	27	0	14	4	0	5	1	0
Syracuse, NY	17	0	0	4	8	0	4	0	1
Tampa-St. Petersburg-Clearwater, FL	129	42	0	16	29	1	40	1	0
Toledo, OH	8	2	0	0	3	0	3	0	0
Tucson, AZ	40	15	3	5	6	0	11	0	0
Tulsa, OK	31	7	2	3	11	0	8	0	0
Virginia Beach-Norfolk-Newport News, VA-NC	41	4	0	17	16	0	4	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	419	124	0	135	137	0	23	0	0
Wichita, KS	17	2	0	8	5	1	1	0	0
Worchester, MA	18	5	0	6	4	0	3	0	0
Youngstown-Warren-Boardman, OH-PA	8	0	0	2	0	0	6	0	0
Total - 100 Areas	10,471	3,055	34	3,109	2,700	75	1,455	23	20
San Juan-Caguas-Guaynabo, PR	79	77	0	1	1	0	0	0	0

<sup>&</sup>lt;sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

**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) for definition of MSA and Hispanic ethnicity and non-Hispanic race.

<sup>&</sup>lt;sup>2</sup>Indicates two or more races reported for a person.

Table 50. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Metropolitan	Total	U.Sborn	Persons	Foreig Pers		Unkn	own
Statistical Area	Cases	No.	(%)	No.	(%)	No.	(%)
Akron, OH	5	4	(80.0)	1	(20.0)	0	(0.0)
Albany-Schenectady-Troy, NY	16	4	(25.0)	12	(75.0)	0	(0.0)
Albuquerque, NM	16	9	(56.3)	7	(43.8)	0	(0.0)
Allentown-Bethlehem-Easton, PA-NJ	2	1	(50.0)	1	(50.0)	0	(0.0)
Atlanta-Sandy Springs-Marietta, GA	276	132	(47.8)	144	(52.2)	0	(0.0)
Augusta-Richmond County, GA-SC	34	29	(85.3)	5	(14.7)	0	(0.0)
Austin-Round Rock, TX	66	22	(33.3)	44	(66.7)	0	(0.0)
Bakersfield, CA	40	15	(37.5)	25	(62.5)	0	(0.0)
Baltimore-Towson, MD	104	55	(52.9)	49	(47.1)	0	(0.0)
Baton Rouge, LA	28	21	(75.0)	7	(25.0)	0	(0.0)
Birmingham-Hoover, AL	42	36	(85.7)	6	(14.3)	0	(0.0)
Boise City-Nampa, ID	4	1	(25.0)	3	(75.0)	0	(0.0)
Boston-Cambridge-Quincy, MA-NH	179	49	(27.4)	130	(72.6)	0	(0.0)
Bridgeport-Stamford-Norwalk, CT	52	17	(32.7)	35	(67.3)	0	(0.0)
Buffalo-Niagara Falls, NY	10	4	(40.0)	6	(60.0)	0	(0.0)
Cape Coral-Fort Myers, FL	45	26	(57.8)	19	(42.2)	0	(0.0)
Charleston-North Charleston, SC	44	31	(70.5)	13	(29.5)	0	(0.0)
Charlotte-Gastonia-Concord, NC-SC	50	23	(46.0)	27	(54.0)	0	(0.0)
Chattanooga, TN-GA	16	10	(62.5)	6	(37.5)	0	(0.0)
Chicago-Naperville-Joliet, IL	490	189	(38.6)	297	(60.6)	4	(0.8)
Cincinnati-Middleton, OH-KY-IN	44	30	(68.2)	14	(31.8)	0	(0.0)
Cleveland-Elyria-Mentor, OH	61	38	(62.3)	23	(37.7)	0	(0.0)
Colorado Springs, CO	7	1	(14.3)	6	(85.7)	0	(0.0)
Columbia, SC	31	21	(67.7)	10	(32.3)	0	(0.0)
Columbus, OH	81	27	(33.3)	54	(66.7)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	384	208	(54.2)	176	(45.8)	0	(0.0)
Dayton, OH	15	5	(33.3)	10	(66.7)	0	(0.0)
Deltona-Daytona Beach-Ormond Beach, FL	17	14	(82.4)	3	(17.6)	0	(0.0)
Denver-Aurora, CO	79	19	(24.1)	60	(75.9)	0	(0.0)
Des Moines-West Des Moines, IA	7	4	(57.1)	3	(42.9)	0	(0.0)
Detroit-Warren-Livonia, MI	139	91	(65.5)	47	(33.8)	1	(0.7)
El Paso, TX	40	12	(30.0)	28	(70.0)	0	(0.0)
Fresno, CA	42	12	(28.6)	30	(71.4)	0	(0.0)
Grand Rapids-Wyoming, MI	23	6	(26.1)	17	(73.9)	0	(0.0)
Greensboro-High Point, NC	31	15	(48.4)	16	(51.6)	0	(0.0)
Greenville, SC	18	5	(27.8)	13	(72.2)	0	(0.0)
Harrisburg-Carlisle, PA	13	7	(53.8)	6	(46.2)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	25	6	(24.0)	19	(76.0)	0	(0.0)
Honolulu, HI	109	35	(32.1)	72	(66.1)	2	(1.8)
Houston-Sugar Land-Baytown, TX	488	247	(50.6)	241	(49.4)	0	(0.0)
Indianapolis-Carmel, IN	48	18	(37.5)	30	(62.5)	0	(0.0)
Jackson, MS	34	29	(85.3)	4	(11.8)	1	(2.9)
Jacksonville, FL	76	54	(71.1)	22	(28.9)	0	(0.0)
Kansas City, MO-KS	49	26	(53.1)	23	(46.9)	0	(0.0)
Knoxville, TN	16	14	(87.5)	2	(12.5)	0	(0.0)
Lakeland, FL	29	20	(69.0)	9	(31.0)	0	(0.0)
Las Vegas-Paradise, NV	92	34	(37.0)	58	(63.0)	0	(0.0)
Little Rock-North Little Rock-Conway, AR	31	25	(80.6)	6	(19.4)	0	(0.0)
Los Angeles-Long Beach-Santa Ana, CA	1,076	206	(19.1)	866	(80.5)	4	(0.0)
Louisville-Jefferson County, KY-IN	39	31	(79.5)	8	(20.5)	0	(0.4)
Madison, WI	4	0	(0.0)	4	(100.0)	0	(0.0)
McAllen-Edinburg-Mission, TX	76	26	(34.2)	50	(65.8)	0	(0.0)
Memphis, TN-MS-AR	83	64	(34.2)	19	(22.9)	0	(0.0)
Miami-Fort Lauderdale-Pompano Beach, FL	338	115	(34.0)	223	(66.0)	0	(0.0)
Milwaukee-Waukesha-West Allis, WI	38	20	(52.6)	18	(47.4)	0	(0.0)

Table 50. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with ≥500,000 Population, 2007

Metropoliton	Total	U.Sborr	Persons	Foreig Pers		Unkno	own
Metropolitan Statistical Area	Cases	No.	(%)	No.	(%)	No.	(%)
Minneapolis-St. Paul-Bloomington, MN-WI	188	25	(13.3)	163	(86.7)	0	(0.0)
Modesto, CA	15	1	(6.7)	14	(93.3)	0	(0.0)
Nashville-Davidson-Murfreesboro-Franklin, TN	74	41	(55.4)	33	(44.6)	0	(0.0)
New Haven-Milford, CT	25	8	(32.0)	16	(64.0)	1	(4.0)
New Orleans-Metairie-Kenner, LA	70	53	(75.7)	17	(24.3)	0	(0.0)
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,456	387	(26.6)	1,065	(73.1)	4	(0.3)
Ogden-Clearfield, UT	4	1	(25.0)	3	(75.0)	0	(0.0)
Oklahoma City, OK	41	27	(65.9)	14	(34.1)	0	(0.0)
Omaha-Council Bluffs, NE-IA	14	1	(7.1)	13	(92.9)	0	(0.0)
Orlando-Kissimmee, FL	116	64	(55.2)	52	(44.8)	0	(0.0)
Oxnard-Thousand Oaks-Ventura, CA	58	16	(27.6)	42	(72.4)	0	(0.0)
Palm Bay-Melbourne-Titusville, FL	19	14	(73.7)	5	(26.3)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	231	91	(39.4)	135	(58.4)	5	(2.2)
Phoenix-Mesa-Scottsdale, AZ	211	63	(29.9)	146	(69.2)	2	(0.9)
Pittsburgh, PA	30	14	(46.7)		` '	3	(10.0
Portland-South Portland-Biddeford, ME	12	4	(33.3)	13 8	(43.3) (66.7)	0	
·	67		` ,		` '		(0.0)
Portland-Vancouver-Beaverton, OR-WA		15	(22.4)	52	(77.6)	0	(0.0)
Poughkeepsie-Newburgh-Middletown, NY	10	3	(30.0)	7	(70.0)	0	(0.0)
Providence-New Bedford-Fall River, RI-MA	58	12	(20.7)	46	(79.3)	0	(0.0)
Raleigh-Cary, NC	64	25	(39.1)	38	(59.4)	1	(1.6)
Richmond, VA	30	18	(60.0)	12	(40.0)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	139	46	(33.1)	85	(61.2)	8	(5.8)
Rochester, NY	24	6	(25.0)	18	(75.0)	0	(0.0)
Sacramento-Arden Arcade-Roseville, CA	134	39	(29.1)	90	(67.2)	5	(3.7)
St. Louis, MO-IL	57	38	(66.7)	19	(33.3)	0	(0.0)
Salt Lake City, UT	21	5	(23.8)	16	(76.2)	0	(0.0)
San Antonio, TX	84	46	(54.8)	38	(45.2)	0	(0.0)
San Diego-Carlsbad-San Marcos, CA	280	56	(20.0)	224	(80.0)	0	(0.0)
San Francisco-Oakland-Fremont, CA	452	110	(24.3)	342	(75.7)	0	(0.0)
San Jose-Sunnyvale-Santa Clara, CA	241	19	(7.9)	219	(90.9)	3	(1.2)
Sarasota-Bradenton-Venice, FL	34	17	(50.0)	17	(50.0)	0	(0.0)
Scranton-Wilkes-Barre, PA	9	5	(55.6)	4	(44.4)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	209	58	(27.8)	151	(72.2)	0	(0.0)
Springfield, MA	13	5	(38.5)	8	(61.5)	0	(0.0)
Stockton, CA	51	19	(37.3)	31	(60.8)	1	(2.0
Syracuse, NY	17	8	(47.1)	9	(52.9)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	129	74	(57.4)	55	(42.6)	0	(0.0)
Toledo, OH	8	6	(75.0)	2	(25.0)	0	(0.0)
Tucson, AZ	40	23	(57.5)	16	(40.0)	1	(2.5
Tulsa, OK	31	22	(71.0)	9	(29.0)	0	(0.0)
Virginia Beach-Norfolk-Newport News, VA-NC	41	21	(51.2)	20	(48.8)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	419	79	(18.9)	340	(81.1)	0	(0.0)
Wichita, KS	17	5	(29.4)	12	(70.6)	0	(0.0)
Worchester, MA	18	3	(16.7)	15	(83.3)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	8	5	(62.5)	3	(37.5)	0	(0.0)
			, ,		, ,		Ì
Total - 100 Areas	10,471	3,761	(35.9)	6,664	(63.6)	46	(0.4)
			(0= 0)	4.5	(46 =)		/a -
San Juan-Caguas-Guaynabo, PR	79	69	(87.3)	10	(12.7)	0	(0.0

<sup>1</sup>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 (page 9) for definition of MSA.

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### Surveillance Slide Set 2007

# **Tuberculosis in the United States**

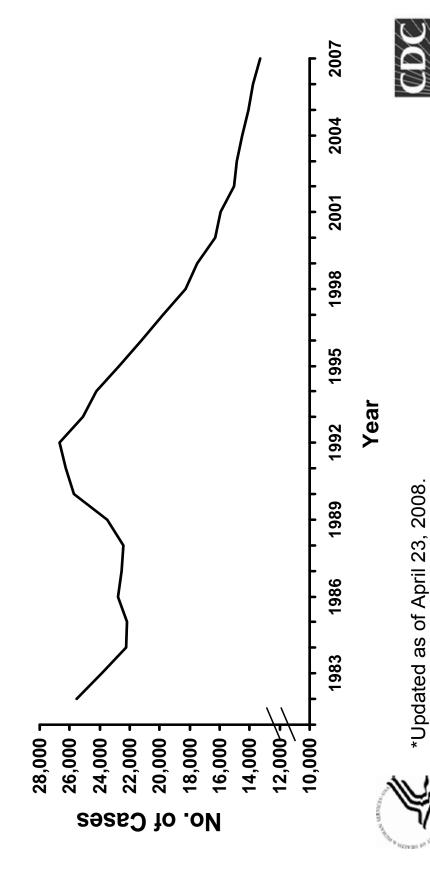
National Tuberculosis Surveillance System Highlights from 2007

**Centers for Disease Control and Prevention** Division of Tuberculosis Elimination





### United States, 1982-2007 Reported TB Cases\*



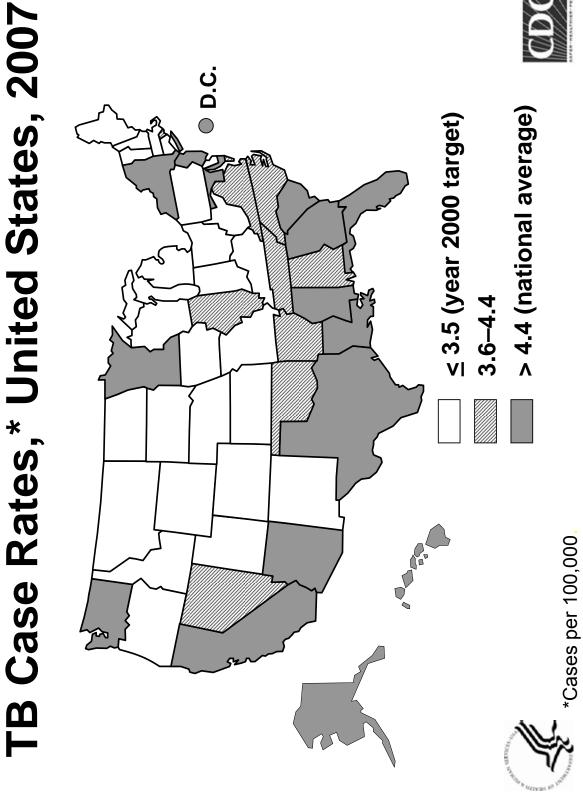
### Surveillance Slide #3

### United States, 2002-2007 **TB Morbidity**

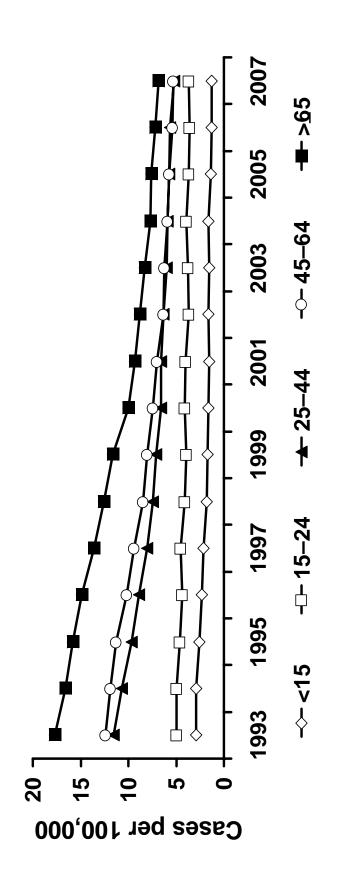
Year	No.	Rate
2002	15,056	5.2
2003	14,837	5.1
2004	14,501	4.9
2002	14,065	4.8
2006	13,754	4.6
2007	13,299	4.4



\*Cases per 100,000, updated as of April 23, 2008.



## TB Case Rates\* by Age Group **United States, 1993–2007**

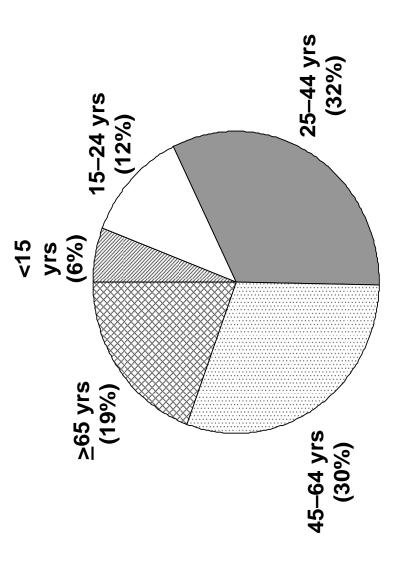








# Reported TB Cases by Age Group, United States, 2007

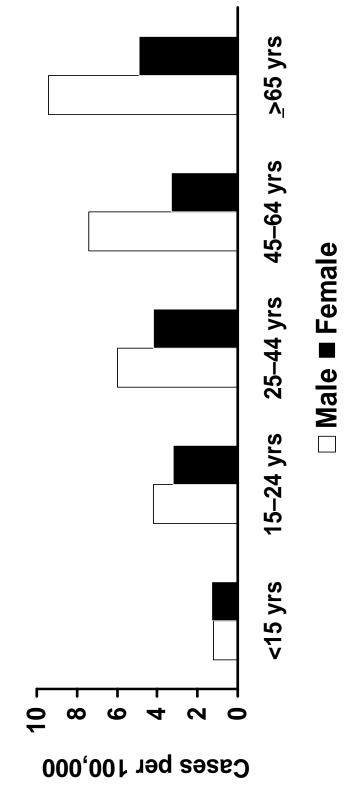






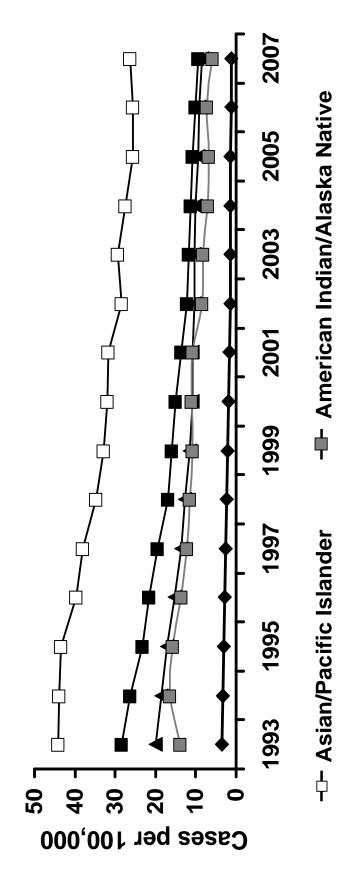
### Surveillance Slide #7

## TB Case Rates by Age Group and Sex, United States, 2007





# TB Case Rates by Race/Ethnicity\* United States, 1993-2007\*\*





\*All races are non-Hispanic. In 2003, Asian/Pacific Islander category includes persons who reported race as Asian only and/or Native Hawaiian or Other Pacific Islander only.

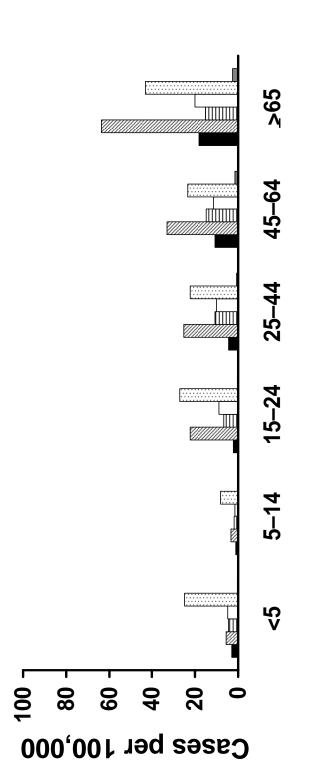
→ White

-- Black or African-American

→ Hispanic

\*\*Updated as of April 23, 2008.

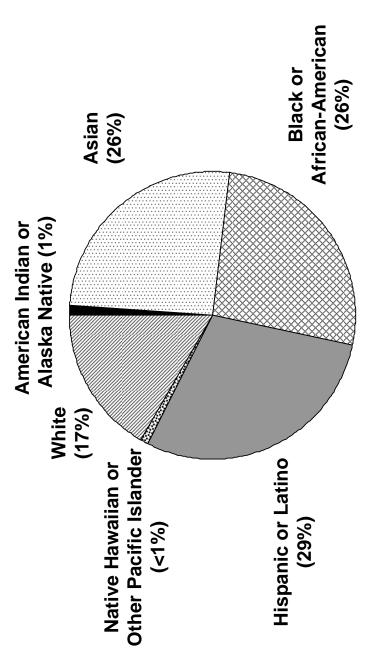
# Race/Ethnicity,\* United States, 2007 TB Case Rates by Age Group and



- American Indian/Alaska Native
- Asian
- Black or African-American
- | Hispanic or Latino
- Native Hawaiian/Other Pacific Islander
- White
- \*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.



# Reported TB Cases by Race/Ethnicity\* United States, 2007

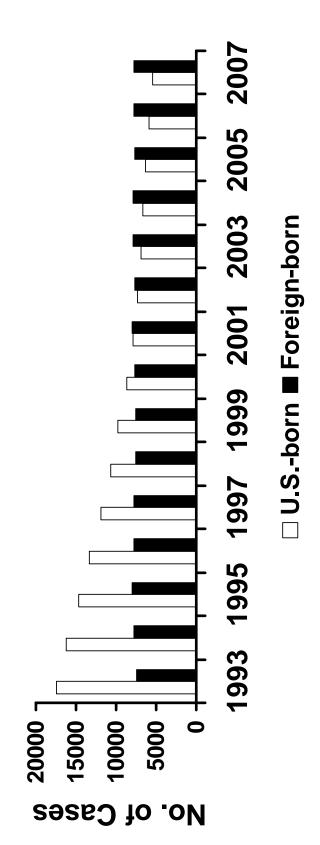




\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.



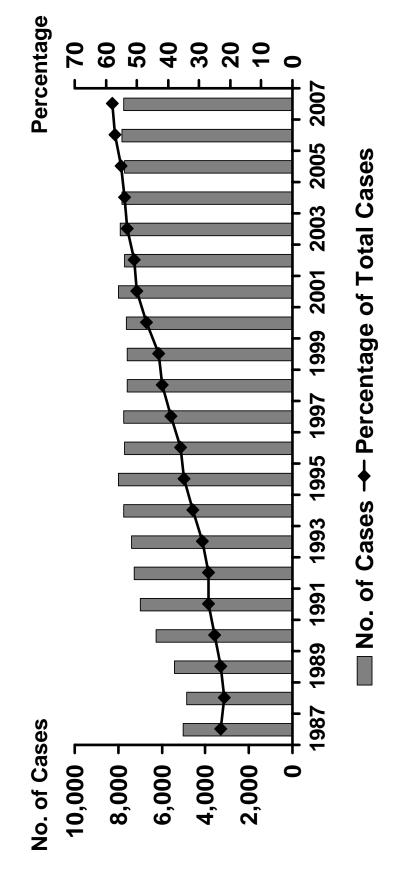
### U.S.-born vs. Foreign-born Persons United States, 1993-2007\* Number of TB Cases in





\*Updated as of April 23, 2008.

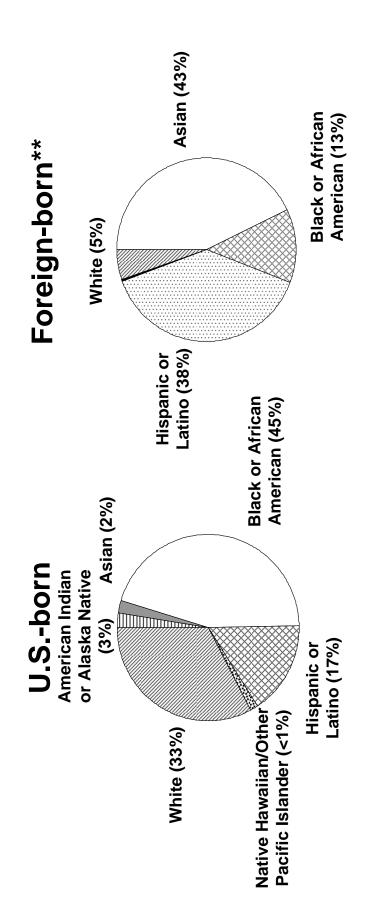
# Trends in TB Cases in Foreign-born Persons, United States, 1987-2007\*





\*Updated as of April 23, 2008.

# Race/Ethnicity,\* United States, 2007 Reported TB Cases by Origin and



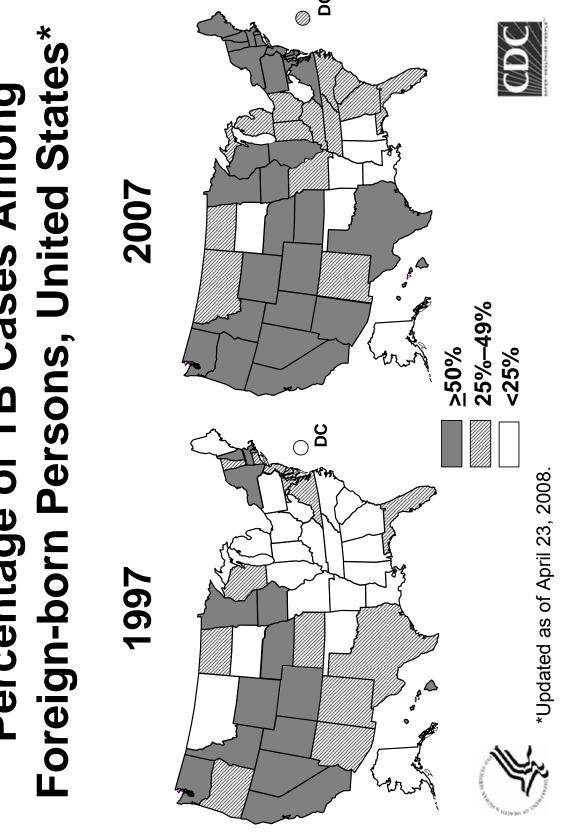


\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

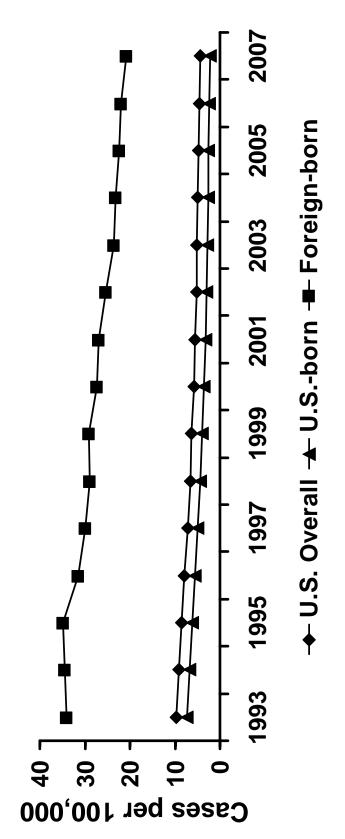
\*American Indian or Alaska Native and Native Hawaiian or Other Pacific slander accounted for less than 1% of foreign-born cases and are not



# Percentage of TB Cases Among



### U.S.-born vs. Foreign-born Persons United States, 1993-2007\* TB Case Rates in

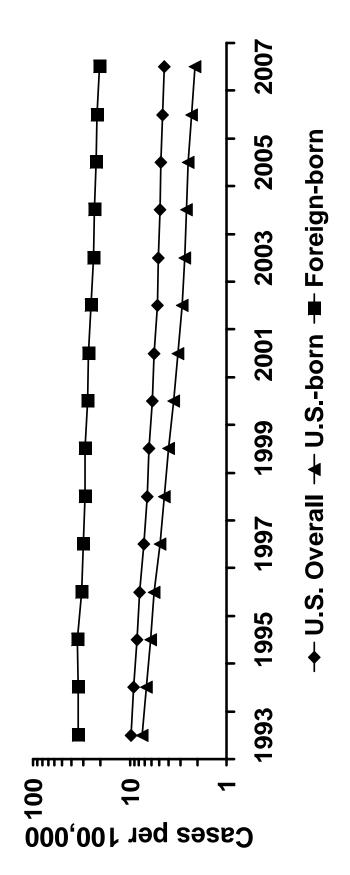






\*Updated as of April 23, 2008.

### U.S.-born vs. Foreign-born Persons United States,\* 1993-2007\*\* TB Case Rates in

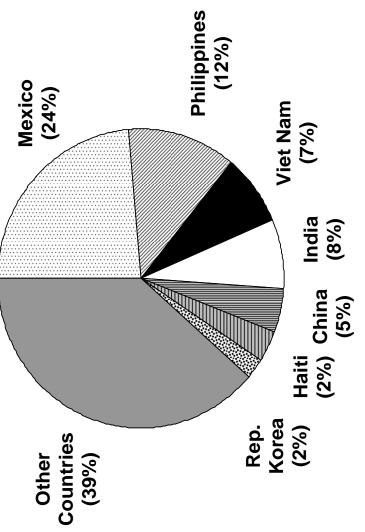




\*Includes the same data as slide 15, but rates presented on a logarithmic scale. \*\*Updated as of April 23, 2008.

# Surveillance Slide #17

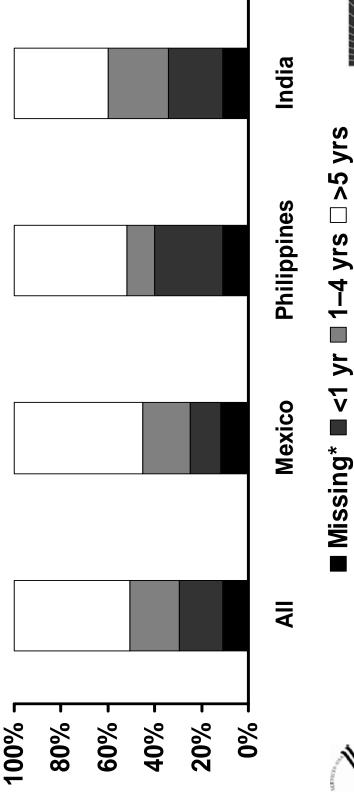
# Countries of Birth of Foreign-born Persons Reported with TB United States, 2007







### Percent of Foreign-born with U.S. Prior to Diagnosis, 2007 TB by Time of Residence in

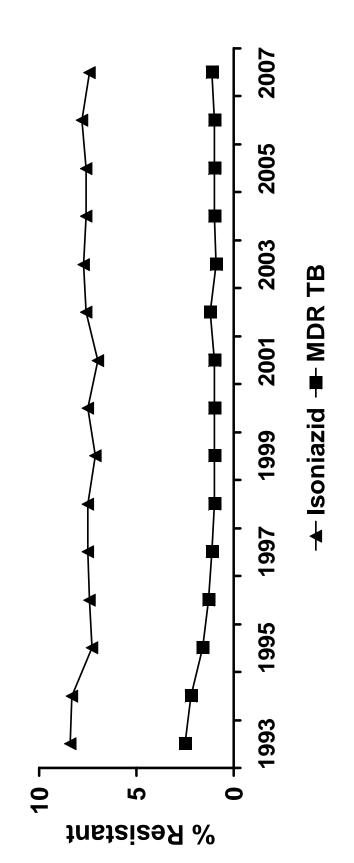




\* Foreign-born TB patients for whom information on length of residence in the U.S. prior to diagnosis is unknown or missing.



# Primary Anti-TB Drug Resistance United States, 1993-2007\*



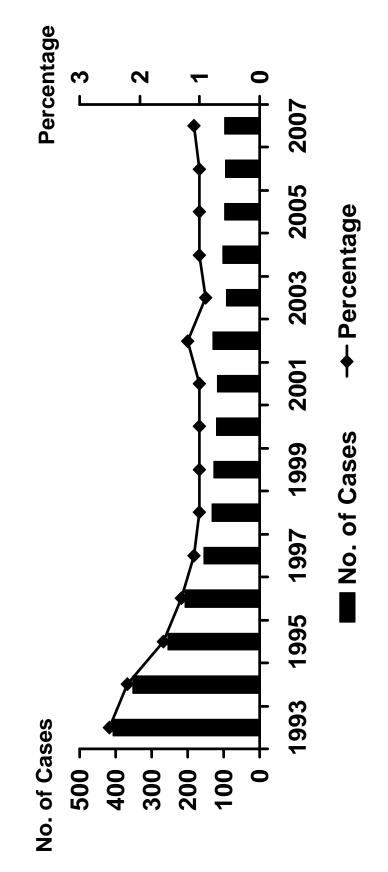


\*Updated as of April 23, 2008.

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 soniazid and rifampin



## United States, 1993-2007\* **Primary MDR TB**



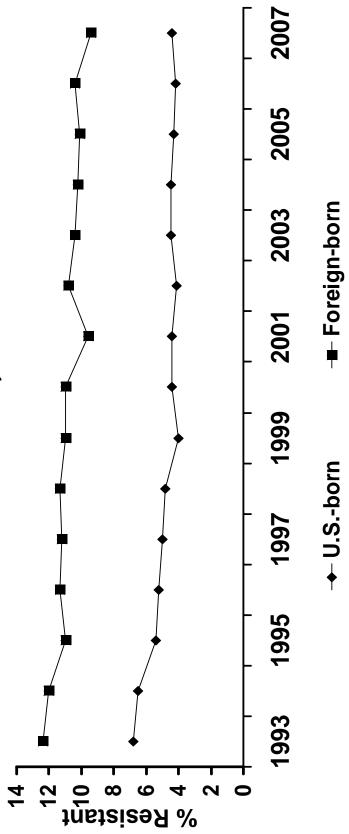


\*Updated as of April 23, 2008.

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



### .S.-born vs. Foreign-born Persons Primary Isoniazid Resistance in United States, 1993-2007\*

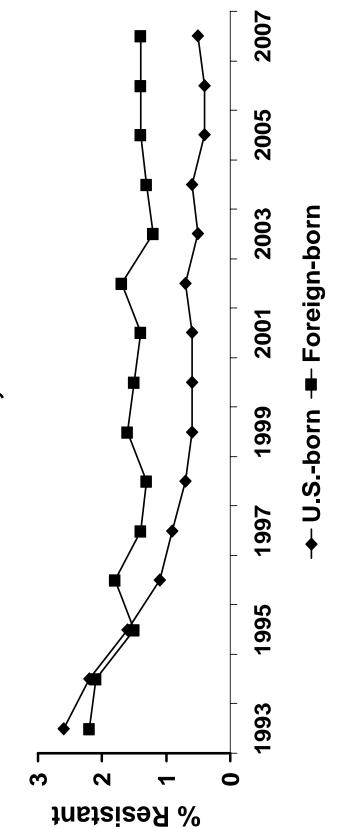




\*Updated as of April 23, 2008.

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

### U.S.-born vs. Foreign-born Persons, United States, 1993-2007\* **Primary MDR TB in**



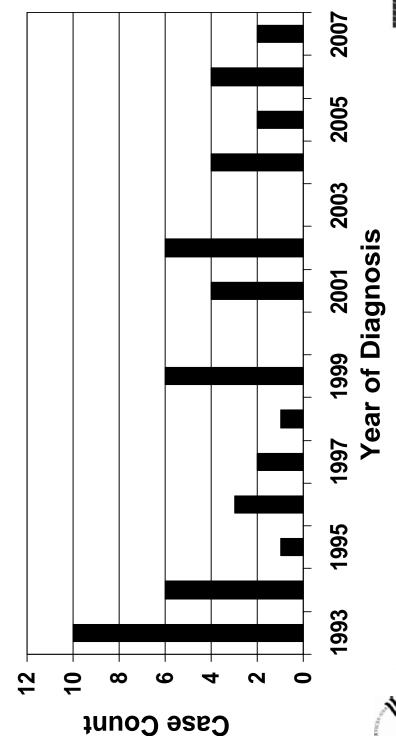


\*Updated as of April 23, 2008.

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, 1993–2007\*



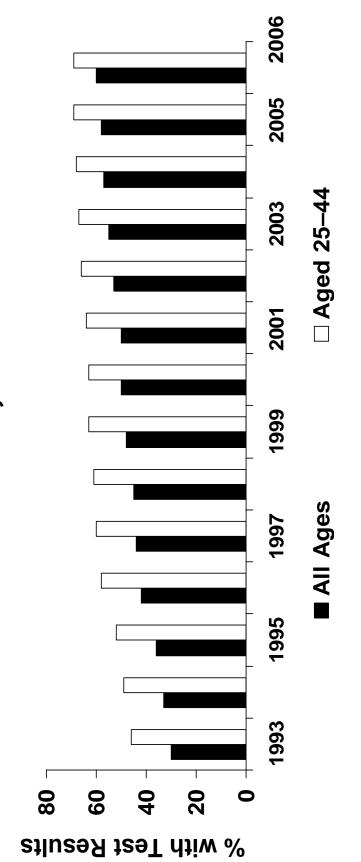


<sup>†</sup>Drug susceptibility test.

\*Reported incident cases as of April 23, 2008.

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

### in Persons with TB by Age Group Reporting of HIV Test Results United States, 1993-2006\*





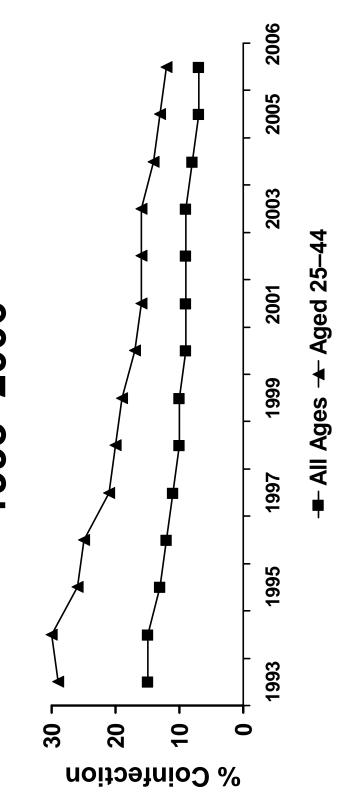
\*Updated as of April 23, 2008.

Note: Includes TB patients with positive, negative, or indeterminate HIV test results. Persons from California reported with AIDS only through 2004.

(HIV test results are not reported from California)



### **Estimated HIV Coinfection in Persons** Reported with TB, United States, 1993-2006\*



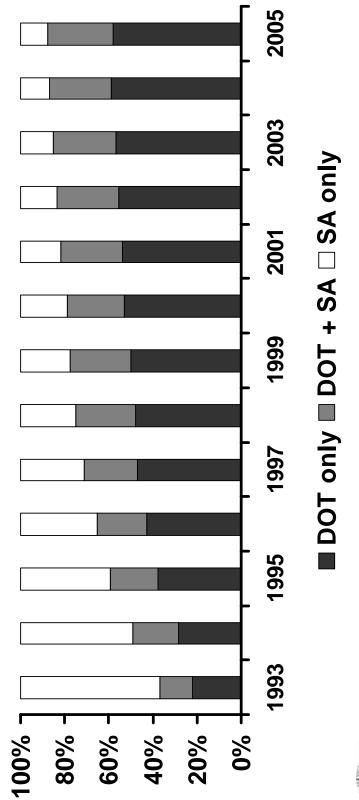




\*Updated as of April 23, 2008.

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, 1993-2005\*

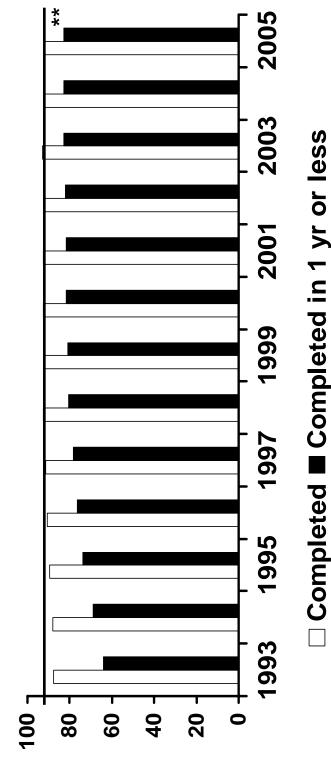




\*Updated as of April 23, 2008.

Directly observed therapy (DOT); Self-administered therapy (SA)

# United States, 1993-2005\* **Completion of TB Therapy**



Percentage

\*Updated as of April 23, 2008.

Note: Persons with initial isolate resistant to rifampin and children under 15 years old with meningeal, bone or joint, or miliary disease excluded. \*\*Healthy People 2010 target: 90% completed in 1 yr or less.



### **Tuberculosis in the United States**

### National Tuberculosis Surveillance System Highlights from 2007

- Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2007. 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 from data collected through the National Tuberculosis Surveillance System for 2007. Since 1953, through the cooperation of state and local health departments, CDC has collected information on the newly reported cases of tuberculosis (TB) disease in the United States. The data presented here were primarily collected via the expanded TB case report introduced in 1993. 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 April 23, 2008. All case counts and rates for years 1993–2006 have been updated.
- **Slide 2. Reported TB Cases, United States, 1982–2007.** 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 2007 marked the fifteenth 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 2007, a total of 13,299 cases were reported from the 50 states and the District of Columbia. This represents a decline of 3.3% from 2006 and of approximately 50% from 1992.
- **Slide 3. TB Morbidity, United States, 2002-2007.** This slide provides the total number of reported U.S. TB cases and the associated TB rates for each of the past 6 years. Rate is defined as cases per 100,000 population. The number of TB cases decreased from 15,056 in 2002 to 13,299 in 2007, and the TB rate also decreased, from 5.2 in 2002 to 4.4 in 2007.
- **Slide 4. TB Case Rates, United States, 2007.** This map shows TB rates for 2007. Twenty-six states had a rate of less than or equal to 3.5 TB cases per 100,000, the interim goal for the year 2000 established by the Advisory Council for the Elimination of Tuberculosis. This group of states has remained fairly constant over the last decade; five states (CT, MI, NM, OR, and PA) joined the group in 2000, one state (MO) joined the group in 2001 (also in 1998 for one year only), and one state (KY) joined the group in 2003. Fifteen states and the District of Columbia (DC) reported a rate above the 2007 national average of 4.4 cases per 100,000: AK, AZ, CA, FL, GA, HI, LA, MD, MN, MS, NJ, NY, SC, TX, and WA. These 15 states and DC accounted for 67% of the national total and experienced substantial overall decreases in cases and rates from 1992 through 2007.
- Slide 5. TB Case Rates by Age Group, United States, 1993–2007. This slide shows the declining trend in TB rates by age group over the last 15 years. The largest declines occurred in persons 65 years and older (from 17.7 per 100,000 in 1993 to 6.8 in 2007), in adults aged 45 to 64 years (from 12.4 to 5.3), in adults aged 25 to 44 years (from 11.5 to 5.2), and in children under 15 years of age (from 2.9 to 1.3), each group having decreased more than 50%. The rate declined by 26% in those 15 to 24 years of age (from 5.0 to 3.7).
- **Slide 6. Reported TB Cases by Age Group, United States, 2007.** This pie chart shows the age distribution of persons reported with TB in 2007. Six percent were children under 15 years of age and 12% were 15- to 24-year-olds, whereas 33% were 25 to 44 years of age, 30% were 45- to 64-year-olds, and 19% were at least 65 years old.
- **Slide 7. TB Case Rates by Age Group and Sex, United States, 2007.** This slide graphs the TB rates in 2007 by age group and sex. It shows that rates tended to increase with age, ranging from a low of less than 2 per 100,000 in children to a high of approximately 10 per 100,000 in men 65 years and older. The rates in men 45 years and older were more than twice those in same-age women.

Slide 8. TB Case Rates by Race/Ethnicity, United States, 1993–2007. This slide shows the declining trend in TB rates by race/ethnicity during the last 15 years. Asians and Pacific Islanders had the highest TB rates, which declined from 44.1 per 100,000 in 1993 to 26.2 in 2007, and had the smallest percentage decline over the time period (41%). Rates declined by approximately 50% or more over the time period in the other racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 28.5 in 1993 to 9.4 in 2007; among Hispanics, from 19.9 to 8.5; among American Indians and Alaska Natives, from 13.9 to 5.9; and among non-Hispanic whites, from 3.6 to 1.1. Since 2003, the Asian and Pacific Islander race category has included persons who reported race as either 1) Asian only or 2) Native Hawaiian or Other Pacific Islander only. Although these categories were reported separately beginning in 2003, they were merged for this slide to allow for continuity in reporting trends.

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, 2007.** This slide presents TB rates in 2007 by age group and race/ethnicity. Risk increased with age across racial and ethnic groups, 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, 96% of cases in the Asian group occurred in foreign-born persons, compared with 77% of cases in Hispanics and 32% 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, 2007.** In 2007, 83% of all reported TB cases occurred in racial and ethnic minorities (29% in Hispanics, 26% in non-Hispanic blacks or African-Americans, 26% in Asians, 1% in American Indians or Alaska Natives, and <1% in Native Hawaiians or Other Pacific Islanders), whereas 17% of cases occurred in non-Hispanic whites. Persons reporting two or more races totaled less than 1% of all cases. This is the fourth year that Hispanics have constituted the single 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, 1993–2007.** This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2007. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 58% in 2007. Overall, the number of cases in foreign-born persons remained virtually level, with approximately 7,000–8,000 cases each year, whereas the number in U.S.-born persons decreased from more than 17,000 in 1993 to less than 5,500 in 2007.
- **Slide 12. Trends in TB Cases in Foreign-born Persons, United States, 1987–2007.** This slide shows trends in TB cases in foreign-born persons in the United States from 1986, when information on country of birth was first reported by all areas submitting reports to CDC, through 2007. The number of TB cases in foreign-born persons increased from nearly 5,000 in 1986 to 7,000–8,000 each year since 1991. The percentage of TB cases accounted for by foreign-born persons increased from 22% in 1986 to 58% in 2007.
- Slide 13. Reported TB Cases by Origin and Race/Ethnicity, United States, 2007. Among U.S.-born persons with TB in 2007, 45% were non-Hispanic black or African-American, 33% were non-Hispanic white, 16% were Hispanic or Latino, 3% were American Indian or Alaska Native, 2% were Asian, and 1% were Native Hawaiian or Other Pacific Islander. Among the foreign-born, 43% were Asian, 38% 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, 1997 and 2007.** The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 1997 and 2007 in these side-by-side maps. The number of states with at least 50% of cases in foreign-born persons increased from 14 in 1997 to 28 in 2007. The number of states with at least 70% of cases in foreign-born persons increased from two (HI and MN) in 1997 to thirteen (CA, CO, DE, MA, MN,NE, NH, NJ, NY, OR, RI, VA, and WA) in 2007 (not shown on slide).
- **Slide 15. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2007.** TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2007, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 2.1, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 20.7.
- **Slide 16. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2007.** 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, 2007. This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2007, 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. The seven top countries accounted for 62% of the total, with Mexico accounting for 24%; the Philippines, 12%; Viet Nam, 7%; India, 8%; China, 5%; Haiti, 2%; and Republic of Korea, 3%. Persons from more than 135 other countries each accounted for 2% or less of the total, but altogether accounted for 39% of foreign-born persons reported with TB.
- Slide 18. Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2007. The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2007 is shown in these stacked bars. Overall, 20% had been in the United States for less than 1 year, 21% between 1 and 4 years, and 49% for at least 5 years. The distribution is also shown for the top three countries of birth: Mexico, the Philippines, and India. Among persons born in Mexico, 13% had been in the United States for less than 1 year, 21% between 1 and 4 years, and 54% for at least 5 years. Among persons born in the Philippines, 29% had been in the United States for less than 1 year, 12% between 1 and 4 years, and 47% for at least 5 years. Among persons born in India, 23% had been in the United States for less than 1 year, 26% between 1 and 4 years, and 40% for at least 5 years.
- **Slide 19. Primary Anti-TB Drug Resistance, United States, 1993–2007.** Primary drug resistance is shown for the past 15 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 8.4%. However, resistance to at least isoniazid and rifampin combined, known as multidrug-resistant TB (MDR TB), decreased from 2.4% in 1993 to 1.1% in 1997, and remained at approximately 1.1 % up to and including 2007.
- **Slide 20. Primary MDR TB, United States, 1993–2007.** 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 2007. The number of MDR TB cases, represented by bars, steadily declined from 410 in 1993 to 116 in 2001. Since then the total number of MDR TB cases has fluctuated from 91 to 126 cases, with 98 cases reported for 2007. The percentage of primary MDR TB, shown by the line, decreased from 2.4% in 1993 to approximately 1.1% in 1997, and remained approximately at 1.1% up to and including 2007.

- **Slide 21. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2007.** 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 12.3% in 1993 to 9.4% in 2007. In U.S.-born persons, the percentage decreased from 6.8% in 1993 to 4.4% in 2007.
- **Slide 22. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2007.** 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 reported in foreign-born persons increased from approximately 25% of all MDR TB cases in 1993 to approximately 70% of all MDR TB cases in 1999, and continued to increase to approximately 80% in 2007 (not shown on slide). Among the U.S.-born, the percentage with MDR TB remained between 0.5% and 0.7% from 1998 through 2004 and dropped to 0.5% in 2007. The percentage among foreign-born persons has fluctuated year by year, while averaging approximately 1.4% from 1998 through 2007.
- Slide 23. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2007. This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993-2007, reported as of April 23, 2008. Two XDR TB cases were reported in 2007. The most reported in a single year was 10 in 1993, while there were no cases reported in 2000 and 2003. 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, 1993–2006. This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2006. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 60% in 2006, the latest year with available data. Among adults aged 25–44 years, the percentage increased from 46% to 69% in 2006. 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, 1993–2006. This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2006, the latest year with available data. 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 7% overall and from 29% to 12% in persons aged 25 to 44 years during this period.
- **Slide 26.** Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2005. 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% in 1993 to 57% in 2005, 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 2005, 86% of patients received at least some portion of their treatment as DOT.
- **Slide 27.** Completion of TB Therapy, United States, 1993–2005. The reporting areas began providing information on completion of therapy in 1993 through the individual TB case report form. The calculations exclude patients with an initial isolate resistant to rifampin as well as children with meningeal, bone or joint, or miliary disease. Overall completion of therapy has remained at approximately 92% from 1998 through 2005. Completion in 1 year or less increased from 64% in 1993 to approximately 83% in 1998—2005, 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<sup>1</sup>

### **Tuberculosis (Revised 9/96)**

### **Clinical description**

A chronic bacterial infection caused by *Mycobacterium tuberculosis*, 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; and
- Other signs and symptoms compatible with tuberculosis, such as an abnormal, unstable (i.e., worsening or improving) chest radiograph, or clinical evidence of current disease; and
- Treatment with two or more antituberculosis medications; and
- A completed diagnostic evaluation.

### Laboratory criteria for diagnosis

- Isolation of *M. tuberculosis* from a clinical specimen,\* or
- Demonstration of *M. tuberculosis* 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.

### **Case classification**

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

### Comment

Only one case should be counted in a person within any consecutive 12-month period. However, a case in a patient who had previously had verified disease should be reported again if more than 12 months have elapsed since the patient was discharged from treatment. A case should also be reported again if the patient was lost to supervision for >12 months and 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.

<sup>&</sup>lt;sup>1</sup>CDC. Case definitions for infectious conditions under public health surveillance. *Morbid Mortal Weekly Report* 1997;46(No. RR-10):40-41.

<sup>\*</sup>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.

<sup>&</sup>lt;sup>†</sup>Nucleic acid amplification (NAA) tests must be accompanied by culture for mycobacteria 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.

### **Appendix B**

### Recommendations for Counting Reported Tuberculosis Cases (Revised July 1997)

Since publication of the "Recommendations for Counting Reported Tuberculosis Cases" in January 1977, 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; it clarifies the parameters for counting TB cases among (a) immigrants, resident aliens, and border crossers, (b) military personnel stationed in the United States and abroad, and (c) persons diagnosed within the Indian Health Service and correctional facilities.

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. These verified TB cases are then counted and reported to the Centers for Disease Control and Prevention (CDC).

- **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 "Case Definition for Public Health Surveillance." This notification is essential in order for TB programs to
  - Ensure case supervision,
  - Ensure completion of appropriate therapy,
  - Ensure completion of timely contact investigations,
  - Evaluate program effectiveness, and
  - 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 and/or clinical evidence of active disease due to *M. tuberculosis* complex.\*

<sup>\*</sup>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* 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 and be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, and *M. canetti* 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 because the transmission is iatrogenic (treatment-induced), rather than person-to-person or communicable.

### 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 that are approved by the Food and Drug Administration (FDA).

### OR

- Demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained; 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

### **AND**

- One of the following:
  - (1) Signs and symptoms compatible with current TB disease, such as an abnormal, unstable (worsening or improving) chest radiograph, 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 case definition described herein was developed for use in this document and is not intended to replace the case definition for TB as stated in the current "Case Definitions for Infectious Conditions Under Public Health Surveillance."

In addition, 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 "Case Definitions for Infectious Conditions Under Public Health Surveillance" publication. CDC's national morbidity reports have traditionally included all 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 7 reporting areas (American Samoa, Federated States of Micronesia, Guam, 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 by the CDC "Case Definitions for Infectious Conditions Under 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, count only one episode as a case for that year. However, if TB disease recurs in a person, and if more than 12 months have elapsed since the person was discharged from or lost to supervision, the TB is considered a separate episode and should be counted as a new case. *Note*: Discharged from supervision implies completion of therapy.

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 a case 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

### **COUNT**

Immigrants and refugees who have been screened overseas for TB and

- have been classified as Class B (B1, B2, or B3)<sup>4</sup> or resident aliens,
- are not already on anti-TB medications for treatment of TB disease, and
- are examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications, and
- should be counted by the locality of their current residence at the time of diagnosis regardless of citizenship status.

Border crossers\* and permanent resident aliens 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 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** plan to remain in the United States for 90 days or more should be counted by the locality of current residence.

\*Border crosser — defined, in part, by the U.S. Citizenship and Immigration Services (USCIS)<sup>3</sup> as "a nonresident alien entering the United States 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

TB cases in immigrants or refugees who have been classified as Class A with a waiver (TB, Infectious, Noncommunicable for travel purposes)<sup>4</sup> should not be counted as new cases even if the persons receive routine initial work-ups in the United States. TB in persons who are temporarily (<90 days) in the United States, for whom therapy may have been started but who plan to return to their native country to continue therapy, should not be counted in the United States.

### 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 7 reporting areas (American Samoa, Federated States of Micronesia, Guam, 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 inclu-

- sion 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 "Case Definitions for Infectious Conditions Under 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 (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.

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 and be transmissible from person to person, M. bovis, M. africanum, M. microti, and M. canetti 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 because the transmission is iatrogenic (treatment-induced), rather than person-to-person or communicable.

**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, Northern Mariana Islands, Marshall 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)<sup>3</sup> as "any person not a citizen or national of the United States."

**Border crosser -** defined, in part, by the USCIS<sup>3</sup> as "a nonresident alien entering the United States 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.

**No TB Classification -** Applicants with normal tuberculosis screening examinations.

**Class A TB with waiver -** All applicants who have tuberculosis disease and have been granted a waiver.

### Class B1 TB, Pulmonary -

### No treatment

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

### **Completed treatment**

Applicants who were diagnosed with pulmonary tuberculosis 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 -** Applicants with evidence of extrapulmonary tuberculosis. Document the anatomic site of infection.

Class B2 TB, LTBI Evaluation - Applicants who have a tuberculin skin test  $\geq 10$  mm but otherwise have a negative evaluation for tuberculosis. 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  $\leq 10$  mm).

**Class B3 TB, Contact Evaluation -** 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<sup>3</sup> 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 -** A provision allows applicants undergoing pulmonary or laryngeal tuberculosis treatment to petition for a Class A waiver. Waivers should be pursued for any immigrant or refugee who has a complicated clinical course and would benefit from receiving treatment of their tuberculosis in the United States. Applicants diagnosed with tuberculosis disease who are both smear- and culture-negative and will be traveling to the United States prior to start of treatment do not need to complete the waiver process.

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- 2. CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(No. RR 10):40–41.
- 3. Statistical Yearbook of the Immigration and Naturalization Service, 1994. Washington, DC: US Department of Homeland Security, U.S. Citizenship and Immigration Services; http://uscis.gov.
- 4. *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.

### **Notes**

- 1. Reference to details of FDA-approved labeling for NAA (IIa) was deleted from this document in September 2002.
- 2. A note of clarification was added to Section III, Counting TB Cases, in September 2003.

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