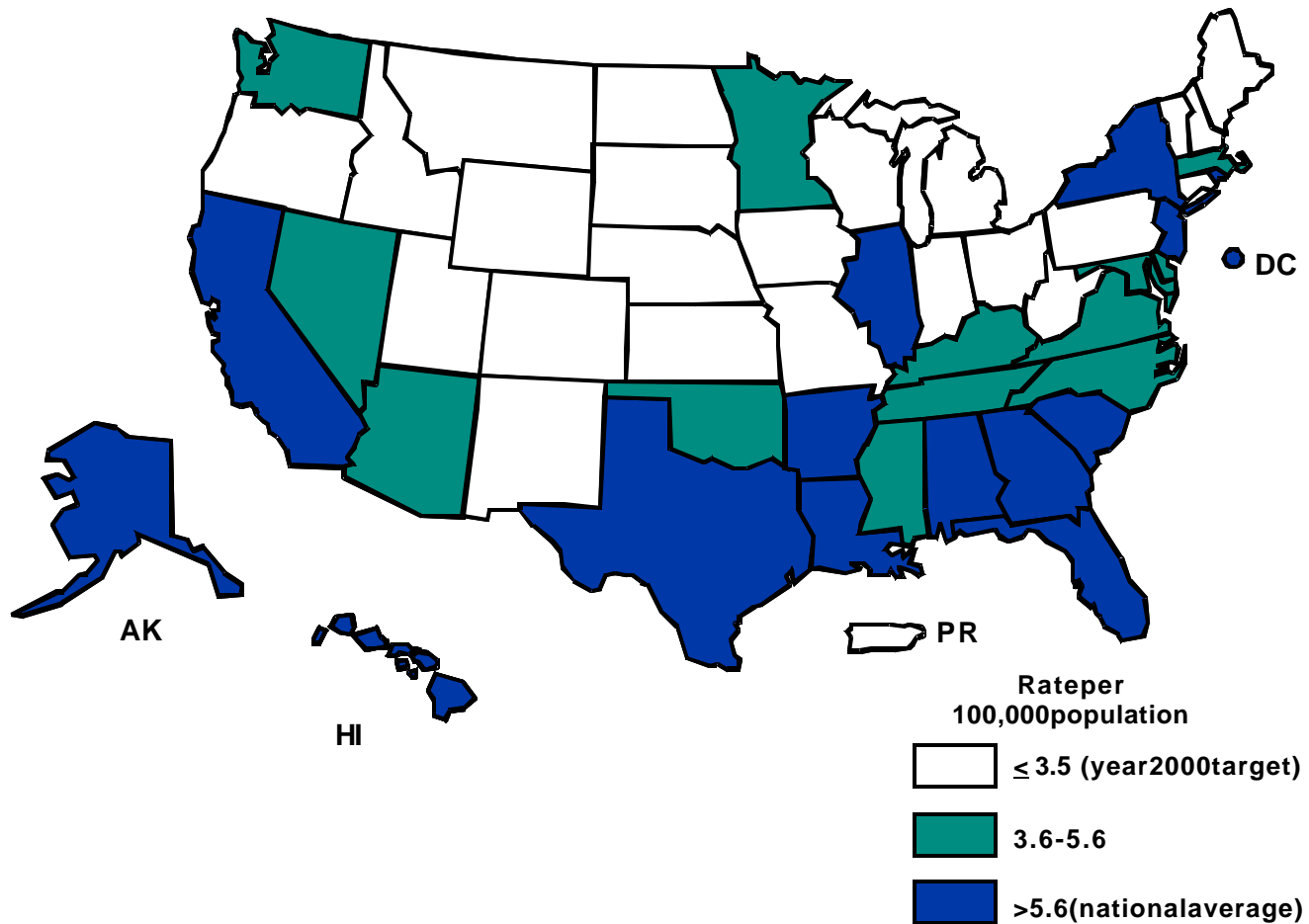


# REPORTED TUBERCULOSIS IN THE UNITED STATES, 2001

Tuberculosis Case Rates: United States, 2001



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**  
**Public Health Service**  
**Centers for Disease Control and Prevention**  
**National Center for HIV, STD, and TB Prevention**  
**Division of Tuberculosis Elimination**  
**Atlanta, Georgia 30333**



## Introduction

Reports of tuberculosis (TB) cases are submitted to the Division of TB 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 other jurisdictions in the Pacific and Caribbean). In January 1993, DTBE, in conjunction with state and local health departments, implemented an expanded TB surveillance system. The expanded system collects additional information for each reported TB case in order to better monitor trends in TB, including drug-resistant TB, in the United States. 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 to provide reporting areas with a comprehensive software system for surveillance, patient management, and program evaluation.

This publication, *Reported Tuberculosis in the United States, 2001*, presents summary data for TB cases reported to DTBE during 2001. It is similar to previous publications (page 5, #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 2001. In the third section, TB case counts and case rates are presented by state 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. The fifth section provides TB case counts and case rates by metropolitan statistical areas (MSAs: see Technical Notes, Appendix A, 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 Division Home Page which is accessible via the Internet: [www.cdc.gov/nchstp/tb](http://www.cdc.gov/nchstp/tb).

This year two new tables (Tables 5 and 16) and seven new figures (Figures 5, 8, 12, 15, 19, 20, and 22) have been added. To help interpret the data, an Executive Commentary (page 2) and Technical Notes (Appendix A) have been included. In addition, the current case definition (*MMWR* 1997;46 [No. RR-10]:40-1) and "Recommendations for Counting Reported Tuberculosis Cases" are provided in Appendices B and C, respectively. The recommendations for counting TB cases, which update the January 1977 recommendations, were first published in *Reported Tuberculosis in the United States, 1996*.

We will continue to adapt and improve this publication to better monitor trends in TB in the United States. Your comments and suggestions that may assist us in this process will be greatly appreciated.

## Executive Commentary

Since 1953, when CDC began conducting public health surveillance for TB in the United States, the TB case rate has declined tenfold from 53 cases per 100,000 to 5.6 per 100,000 in 2001 (Table 1). During 2001, a total of 15,989 cases (5.6 cases per 100,000 population) of TB were reported to CDC from the 50 states and the District of Columbia (DC), representing a 2% decrease from 2000 and a 40% decrease from 1992 when the number of cases and case rate most recently peaked in the United States. However, the case rate among foreign-born persons is now at least eight times higher than among U.S.-born persons (Table 4). To address the high rate, CDC is collaborating with public health partners to implement TB control initiatives among recent international arrivals and residents along the border between the United States and Mexico and to strengthen TB programs in countries with a high incidence of TB disease (1).

The declining numbers of TB cases and TB case rates during the last decade varied by factors such as age, race/ethnicity, and country of origin. The largest declines occurred in children under 15 years of age (from 3.0 per 100,000 in 1991 to 1.5 in 2001) and in adults aged 25 to 44 years (from 12.5 to 6.6), 45 to 64 years (from 13.5 to 7.2), and 65 years and older (from 19.1 to 9.1), each group having decreased approximately 50%. The case rate declined by approximately 25% in those 15 to 24 years of age (from 5.4 to 4.0), and the rate has remained at 4 per 100,000 for the past 4 years (Table 2). Asians and Pacific Islanders had the highest TB case rates, which declined from 44 per 100,000 in 1991 to 33 in 2001. Non-Hispanic blacks had the most substantial decline from 32 in 1991 to 14 in 2001 (Table 3).

In 1991, 73% of reported cases were among U.S.-born persons (8.2 cases per 100,000) while 27% were in foreign-born persons (33.9 per 100,000). In comparison in 2001, there was an equal distribution (50%) in the number of TB cases among these two groups; the respective case rates were 3.1 per 100,000 for U.S.-born persons and 26.6 for foreign-born persons (Table 4). The number of states with  $\geq 50\%$  of their annual total of reported TB cases among foreign-born persons increased from four in 1991 to 23 in 2001. Of these 23 states, California, Hawaii, Massachusetts, Minnesota, New Hampshire, Vermont, and Washington had  $\geq 70\%$  of their annual total of cases among foreign-born persons (Table 20).

During 1997 through 2001, the top five countries of origin of TB cases among foreign-born persons were Mexico, the Philippines, Vietnam, India, and China (Table 5). However, expected cycles in immigration patterns have led to changes in the distribution of TB cases by global region of origin (as designated by the World Health Organization [WHO]) (2). In 2001, of the 7,865 cases of TB in foreign-born persons, 42% occurred among persons from the Americas (Central and South America or the Caribbean), and 31% were in persons from the Western Pacific. These regions also had the largest number of cases in 1991 (48% and 37%, respectively). During 1991 through 2001, the number of cases approximately doubled among persons from the Eastern Mediterranean (2% in 1991 and 5% in 2001) and among persons from Southeast Asia (5% in 1991 and 11% in 2001), while the number of cases among persons from Africa more than tripled (2% in 1991 and 7% in 2001) (Table 16).

Since 1993, when the case report was expanded to include drug susceptibility results, the proportion of patients with MDR TB decreased from 3% to 1% in 2001. However, of the total number of reported MDR TB cases, the proportion occurring in foreign-born persons increased from 31% (150 of 482) in 1993 to 73% (101 of 138) in 2001 (Tables 8 and 9). The proportion of TB patients placed on a recommended initial treatment regimen (i.e., isoniazid, rifampin, pyrazinamide, and streptomycin or ethambutol [3]), increased during 1993 through 2001 (Table 10). The proportions of patients who completed treatment within 1 year, and of persons who were treated with directly observed therapy (at least for a portion of treatment), also increased from 1993 through 1999, the

latest year with available outcome data (Table 10).

During 1991 through 2001, TB case rates in the United States decreased for U.S.-born and foreign-born persons; however, the decrease among foreign-born persons was less substantial. Decreases in the number and proportion of MDR TB cases also occurred. The overall improvement is consistent with the finding of an increasing proportion of patients receiving initial four drug regimens, completing treatment within 1 year, and being treated with directly observed therapy.

Despite the decreased case rate among foreign-born persons, half of the TB cases in the United States in 2001 occurred in this population, and the case rate was eight times greater in this population than among U.S.-born persons. To address the high rate, CDC is collaborating with other national and international public health organizations to 1) improve overseas screening of immigrants and refugees by developing systematic tools for monitoring and evaluating the screening process; 2) improve the current notification system that alerts local health departments about the arrival of immigrants or refugees with suspected TB to assist patients in obtaining a medical evaluation and, if necessary, in completing a course of recommended drugs; 3) improve coordination of and communication about TB control activities between the United States and Mexico to ensure completion of treatment among TB patients who cross the border; and 4) test recent arrivals from high-incidence countries for latent TB infection and ensure completion of treatment. In addition, CDC continues to strengthen collaborations with international partners, including the World Health Organization, to improve TB control in high-incidence countries.

Accelerating progress in national TB elimination activities, however, will require broader prevention efforts to evaluate and address unmet needs in other population risk groups such as persons living with HIV, and persons living in poverty with limited access to medical care and adequate housing and nutrition. In addition, low-incidence areas in the United States need continued support to ensure they maintain the capacity and expertise to respond to cases when they occur (4). CDC has recently updated its comprehensive national action plan to reflect the alignment of its priorities with the Institute of Medicine report (5) and to ensure that priority prevention activities are undertaken with optimal collaboration and coordination among national and international public health partners (6). Commitment and participation by CDC in efforts towards curtailing the global TB epidemic remains a critical component of the national plan.

## References

1. CDC. Tuberculosis morbidity among U.S.-born and foreign-born populations—United States, 2000. *MMWR* 2002;51:101-104.
2. World Health Organization. WHO report 2002: Global tuberculosis control. Geneva, Switzerland: World Health Organization. Available at <http://www.who.int/gtb/publications/globrep02>.
3. American Thoracic Society and CDC. Treatment of tuberculosis and tuberculosis infection in adults and children. *Am J Respir Crit Care Med* 1994;149:1359-1374.
4. Centers for Disease Control and Prevention. Progressing toward tuberculosis elimination in low-incidence areas of the United States: recommendations of the Advisory Council for the Elimination of Tuberculosis. *MMWR* 2002;51(No. RR-5).
5. Institute of Medicine. Ending Neglect: The Elimination of Tuberculosis in the United States. Washington, DC: National Academy Press; 2000.
6. Centers for Disease Control and Prevention. CDC's Response to Ending Neglect: The Elimination of Tuberculosis from the United States. Atlanta, GA: DHHS/CDC; 2002.

**Previous statistical reports in this series:**

1. *Special Tuberculosis Projects, 1961-1965*. Atlanta: CDC; 1966.
2. *Special Tuberculosis Projects, December, 1965*. Atlanta: CDC; 1966.
3. *Special Tuberculosis Projects, June 1966*. Atlanta: NCDC; 1967.
4. *Special Tuberculosis Projects, December, 1966*. Atlanta: NCDC; 1967.
5. Summary Report. Atlanta: NCDC; 1967.
6. *Special Tuberculosis Projects, June 1967*. Atlanta: NCDC; 1968.
7. *Tuberculosis Program Reports, December 1967*. Atlanta: NCDC; 1968.
8. Tuberculin testing during 1966-1967 school year. In: *Tuberculosis Program Reports*. Atlanta: NCDC; 1968.
9. *Tuberculosis Program Reports: Six Month Period Ending June 1968*. Atlanta: NCDC; 1969.
10. Program Performance Analyses, June-December 1968. In: *Tuberculosis Program Reports*. Atlanta: NCDC; 1970.
11. Tuberculin testing data, 1967-1968 school year. In: *Tuberculosis Program Reports*. Atlanta: NCDC; 1970.
12. The project years, 1961-1969, In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
13. Tuberculosis programs (for years 1970-1973). In: *Tuberculosis Program Reports*. Atlanta: CDC; 1971-1974.
14. *Reported Tuberculosis Data* (for years 1962-1973). Atlanta: CDC; 1963-1974.
15. *Tuberculosis Statistics: States and Cities* (for years 1974-1985). Atlanta: CDC; 1971-1986.
16. *Tuberculosis in the United States* (for years 1974-1986). Atlanta: CDC; 1976-1987.
17. Tuberculosis program management in the United States, 1984. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1986.
18. *Tuberculosis Statistics in the United States* (for years 1987-1992). Atlanta: CDC; 1989-1994.
19. *Reported Tuberculosis in the United States* (for years 1993-2000). Atlanta: CDC; 1994-2001.

**Table 1. Tuberculosis Cases and Case Rates per 100,000 Population, Deaths and Death Rates per 100,000 Population: United States, 1953-2001**

Year	Tuberculosis Cases				Tuberculosis Deaths			
	Number	Rate <sup>1</sup>	Percent Change		Number	Rate <sup>1</sup>	Percent Change	
			Number	Rate			Number	Rate
1953	84,304	53.0	--	--	19,707	12.4	--	--
1954	79,775	49.3	-5.4	-7.0	16,527	10.2	-16.1	-17.7
1955	77,368	46.9	-3.0	-4.9	15,016	9.1	-9.1	-10.8
1956	69,895	41.6	-9.7	-11.0	14,137	8.4	-5.9	-7.7
1957	67,149	39.2	-3.9	-5.8	13,390	7.8	-5.3	-7.1
1958	63,534	36.5	-5.4	-6.9	12,417	7.1	-7.3	-9.0
1959	57,535	32.5	-9.4	-11.0	11,474	6.5	-7.6	-8.5
1960	55,494	30.8	-3.5	-5.2	10,866	6.0	-5.3	-7.7
1961	53,726	29.4	-3.2	-4.5	9,938	5.4	-8.5	-10.0
1962	53,315	28.7	-0.8	-2.4	9,506	5.1	-4.3	-5.6
1963	54,042	28.7	+1.4	0.0	9,311	4.9	-2.1	-3.9
1964	50,874	26.6	-5.9	-7.3	8,303	4.3	-10.8	-12.2
1965	49,016	25.3	-3.7	-4.9	7,934	4.1	-4.4	-4.7
1966	47,767	24.4	-2.5	-3.6	7,625	3.9	-3.9	-4.9
1967	45,647	23.1	-4.4	-5.3	6,901	3.5	-9.5	-10.3
1968	42,623	21.3	-6.6	-7.8	6,292	3.1	-8.8	-11.4
1969	39,120	19.4	-8.2	-8.9	5,567	2.8	-11.5	-9.7
1970	37,137	18.3	-5.1	-5.7	5,217	2.6	-6.3	-7.1
1971	35,217	17.1	-5.2	-6.6	4,501	2.2	-13.7	-15.4
1972	32,882	15.8	-6.6	-7.6	4,376	2.1	-2.8	-4.5
1973	30,998	14.8	-5.7	-6.3	3,875	1.8	-11.4	-14.5
1974	30,122	14.2	-2.8	-4.1	3,513	1.7	-9.3	-5.6
1975	33,989	15.9	--	--	3,333	1.6	-5.1	-5.9
1976	32,105	15.0	-5.5	-5.7	3,130	1.5	-6.1	-6.3
1977	30,145	13.9	-6.1	-7.3	2,968	1.4	-5.2	-6.7
1978	28,521	13.1	-5.4	-5.8	2,914	1.3	-1.8	-7.1
1979	27,669	12.6	-3.0	-3.8	2,007 <sup>2</sup>	0.9 <sup>2</sup>	-31.1 <sup>2</sup>	-30.8 <sup>2</sup>
1980	27,749	12.3	+0.3	-2.4	1,978	0.9	-1.4	0.0
1981	27,373	11.9	-1.4	-3.3	1,937	0.8	-2.1	-11.1
1982	25,520	11.0	-6.8	-7.6	1,807	0.8	-6.7	0.0
1983	23,846	10.2	-6.6	-7.3	1,779	0.8	-1.5	0.0
1984	22,255	9.4	-6.7	-7.8	1,729	0.7	-2.8	-12.5
1985	22,201	9.3	-0.2	-1.1	1,752	0.7	+1.3	0.0
1986	22,768	9.4	+2.6	+1.1	1,782	0.7	+1.7	0.0
1987	22,517	9.3	-1.1	-1.1	1,755	0.7	-1.5	0.0
1988	22,436	9.1	-0.4	-2.2	1,921	0.8	+9.5	+14.3
1989	23,495	9.5	+4.7	+4.4	1,970	0.8	+2.6	0.0
1990	25,701	10.3	+9.4	+8.4	1,810	0.7	-8.1	-12.5
1991	26,283	10.4	+2.3	+1.0	1,713	0.7	-5.4	0.0
1992	26,673	10.5	+1.5	+1.0	1,705	0.7	-0.5	0.0
1993	25,287	9.8	-5.2	-6.7	1,631	0.6	-4.3	-14.3
1994	24,361	9.4	-3.7	-4.1	1,478	0.6	-9.4	0.0
1995	22,860	8.7	-6.2	-7.4	1,336	0.5	-9.6	-16.7
1996	21,337	8.0	-6.7	+8.0	1,202	0.5	-10.0	0.0
1997	19,851	7.4	-7.0	-7.5	1,166	0.4	-3.0	-20.0
1998	18,361	6.8	-7.5	-8.1	1,112	0.4	-4.6	0.0
1999	17,531	6.4	-4.5	-5.9	930	0.3	-16.4	-25.0
2000	16,377	5.8	-6.6	-9.4	751 <sup>3</sup>	0.3 <sup>3</sup>	-19.2 <sup>3</sup>	0.0 <sup>3</sup>
2001	15,989	5.6	-2.4	-3.4	...	...	...	...

<sup>1</sup>Per 100,000 population.

<sup>2</sup>The large decrease 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.

<sup>3</sup>Preliminary data obtained from National Center for Health Statistics (NCHS) *National Vital Statistics Report*, Vol. 49, No.12, October 9, 2001.

Ellipses indicate data not available.

**Note:** Official tuberculosis mortality statistics are compiled by the National Center for Health Statistics, CDC. Case data after 1974 are not comparable to prior years due to changes in the surveillance case definitions which became effective in 1975.

See Surveillance Slides #2 and #3.

**Table 2. Tuberculosis Cases and Case Rates per 100,000 Population by Age Group: United States, 1991-2001**

Year	Total Cases	0 -14			15 - 24			25 - 44			45 - 64			65+			Not Stated	
		No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%
1991	26,283	1,662	6	3.0	1,971	7	5.4	10,263	39	12.5	6,297	24	13.5	6,068	23	19.1	22	0
1992	26,673	1,707	6	3.1	1,974	7	5.5	10,444	39	12.7	6,487	24	13.4	6,025	23	18.7	36	0
1993	25,287	1,718	7	3.0	1,841	7	5.1	9,615	38	11.6	6,225	25	12.5	5,847	23	17.8	41	0
1994	24,361	1,695	7	3.0	1,825	7	5.1	9,106	37	11.0	6,141	25	12.1	5,546	23	16.7	48	0
1995	22,860	1,558	7	2.7	1,703	7	4.7	8,241	36	9.9	5,998	26	11.5	5,351	23	16.0	9	0
1996	21,337	1,372	6	2.4	1,656	8	4.6	7,604	36	9.1	5,588	26	10.4	5,103	24	15.1	14	0
1997	19,851	1,265	6	2.2	1,681	8	4.6	6,912	35	8.3	5,297	27	9.6	4,691	24	13.8	5	0
1998	18,361	1,082	6	1.9	1,548	8	4.2	6,365	35	7.6	4,973	27	8.7	4,393	24	12.8	0	0
1999	17,531	1,044	6	1.8	1,516	9	4.0	6,078	35	7.3	4,862	28	8.2	4,028	23	11.7	3	0
2000	16,377	969	6	1.6	1,623	10	4.1	5,588	34	6.6	4,661	28	7.5	3,534	22	10.1	2	0
2001	15,989	931	6	1.5	1,595	10	4.0	5,630	35	6.6	4,534	28	7.2	3,295	21	9.1	4	0

**Note:** Case rates for 2001 based on an extrapolation to the July 2001 population from the July 2000 U.S. Census estimates by age, race, sex, and Hispanic origin.  
See Technical Notes (Appendix A).  
See Surveillance Slides #5 and #6.

**Table 3. Tuberculosis Cases and Case Rates per 100,000 Population by Race/Ethnicity: United States, 1991-2001**

Year	Total Cases	White, non-Hispanic			Black, non-Hispanic			Hispanic <sup>1</sup>			American Indian/ Alaska Native			Asian/ Pacific Islander			Unknown or Missing	
		No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%
1991	26,283	7,709	29	4.1	9,536	36	31.9	5,354	20	22.9	342	1	18.5	3,324	13	44.3	18	0
1992	26,673	7,618	29	4.0	9,623	36	31.7	5,437	20	22.4	299	1	16.2	3,649	14	46.3	47	0
1993	25,287	6,922	27	3.6	8,951	35	29.1	5,194	21	20.6	274	1	14.6	3,680	15	44.5	266	1
1994	24,361	6,494	27	3.4	8,345	34	26.8	5,074	21	19.5	332	1	17.4	3,821	16	45.3	295	1
1995	22,860	5,989	26	3.1	7,555	33	23.9	4,847	21	18.0	319	1	16.5	3,997	17	45.9	153	1
1996	21,337	5,506	26	2.8	7,106	33	22.3	4,533	21	16.0	284	1	14.5	3,814	18	41.6	94	0
1997	19,851	4,872	25	2.5	6,610	33	20.5	4,228	21	14.4	264	1	13.4	3,833	19	40.6	44	0
1998	18,361	4,495	24	2.3	5,831	32	17.8	4,099	22	13.6	253	1	12.6	3,623	20	36.6	60	0
1999	17,531	4,224	24	2.2	5,552	32	16.8	3,875	22	12.4	240	1	11.8	3,591	20	35.3	49	0
2000	16,377	3,674	22	1.9	5,161	32	15.2	3,805	23	10.8	236	1	11.4	3,451	21	32.9	50	0
2001	15,989	3,357	21	1.6	4,796	30	13.8	4,001	25	11.9	233	1	11.0	3,552	22	32.7	50	0

<sup>1</sup>Persons of Hispanic origin may be of any race.

**Note:** Case rates for 2001 based on an extrapolation to the July 2001 population from the July 2000 U.S. Census estimates by age, race, sex, and Hispanic origin.  
See Technical Notes (Appendix A).  
See Surveillance Slides #8 and #9.

**Table 4. Tuberculosis Cases and Case Rates per 100,000 Population by Origin: United States, 1991-2001**

Year	Total Cases	U.S.-born Persons			Foreign-born Persons <sup>1</sup>			Unknown	
		No.	%	Rate	No.	%	Rate	No.	%
1991	26,283	19,161	73	8.2	6,982	27	33.9	140	1
1992	26,673	19,225	72	8.2	7,270	27	34.2	178	1
1993	25,287	17,464	69	7.4	7,354	29	33.6	469	2
1994	24,361	16,278	67	6.8	7,627	31	33.9	456	2
1995	22,860	14,772	65	6.1	7,930	35	34.2	158	1
1996	21,337	13,333	62	5.5	7,704	36	32.3	300	1
1997	19,851	11,898	60	4.9	7,702	39	31.2	251	1
1998	18,361	10,675	58	4.3	7,591	41	30.0	95	1
1999	17,531	9,809	56	4.0	7,553	43	29.2	169	1
2000	16,377	8,714	53	3.5	7,554	46	25.8	109	1
2001	15,989	7,845	49	3.1	7,865	49	26.6	279	2

<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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

**Note:** Denominators for computing rates for years 1990-1999 were obtained from *Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990, to July 1, 1999*

(www.census.gov/population/estimates/nation/nativity/fbt001.txt). Denominators for computing rates for 2000 and 2001 were based on an extrapolation from estimates in U.S. Census Bureau *Current Population Reports, P20-534, The Foreign-born Population in the United States: March 2000*.

See Surveillance Slides #11, #14, and #15.

**Table 5. Tuberculosis Cases Among Foreign-born Persons<sup>1</sup> by the Top 30 Countries of Origin: United States, 1997-2001**

Country of Origin	Year									
	2001		2000		1999		1998		1997	
	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Total Cases</b>	<b>7,865</b>	<b>100</b>	<b>7,554</b>	<b>100</b>	<b>7,553</b>	<b>100</b>	<b>7,591</b>	<b>100</b>	<b>7,702</b>	<b>100</b>
Mexico	1,845	23	1,773	23	1,753	23	1,757	23	1,685	22
Philippines	907	12	859	11	913	12	968	13	1,054	14
Vietnam	626	8	669	9	721	10	748	10	817	11
India	604	8	562	7	557	7	503	7	465	6
China	421	5	412	5	366	5	373	5	386	5
Haiti	252	3	297	4	284	4	299	4	284	4
Korea, Rep.	206	3	208	3	220	3	219	3	260	3
Guatemala	137	2	128	2	150	2	132	2	127	2
Ecuador	157	2	138	2	117	2	123	2	125	2
Peru	142	2	128	2	121	2	133	2	122	2
Ethiopia	161	2	136	2	130	2	109	1	108	1
El Salvador	154	2	118	2	103	1	129	2	135	2
Somalia	164	2	158	2	117	2	80	1	101	1
Honduras	133	2	129	2	126	2	125	2	85	1
Dominican Republic	84	1	96	1	105	1	145	2	138	2
Cambodia	83	1	101	1	104	1	98	1	120	2
Lao, PDR	101	1	83	1	97	1	112	1	110	1
Pakistan	87	1	94	1	92	1	79	1	91	1
Cuba	58	1	69	1	59	1	76	1	84	1
Columbia	69	1	62	1	54	1	49	1	64	1
Kenya	84	1	52	1	36	0	53	1	48	1
Taiwan	32	0	41	1	32	0	47	1	73	1
Russian Federation	47	1	51	1	61	1	51	1	52	1
Indonesia	53	1	44	1	64	1	29	0	29	0
Thailand	42	1	37	0	49	1	51	1	36	0
Bosnia and Herzegovina	49	1	35	0	49	1	43	1	38	0
Nigeria	53	1	35	0	43	1	32	0	39	1
Jamaica	26	0	29	0	36	0	45	1	45	1
China, Hong Kong SAR	28	0	37	0	33	0	36	0	37	0
Poland	28	0	35	0	37	0	32	0	34	0
All Others	1,032	13	938	12	924	12	915	12	910	12

<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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

**Note:** The top 30 countries were selected based on the 5-year average number of cases.

Zero (0) denotes <1%.



**Table 6. Tuberculosis Cases by Case Verification Criterion and by Site of Disease: United States, 1991-2001**

Year	Total Cases	Verification Criterion <sup>1</sup>								Site of Disease			
		Positive Culture		Positive Smear		Clinical Case Definition		Provider Diagnosis		Pulmonary <sup>2</sup>		Extrapulmonary	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1991	26,283	21,417	81	388	1	2,992	11	1,486	6	21,937	83	4,327	16
1992	26,673	21,398	80	407	2	3,141	12	1,727	6	22,371	84	4,288	16
1993	25,287	20,081	79	309	1	2,994	12	1,903	8	21,255	84	3,995	16
1994	24,361	19,537	80	236	1	2,794	11	1,794	7	20,385	84	3,964	16
1995	22,860	18,292	80	220	1	2,664	12	1,684	7	18,991	83	3,860	17
1996	21,337	17,234	81	150	1	2,556	12	1,397	7	17,445	82	3,870	18
1997	19,851	16,015	81	177	1	2,355	12	1,304	7	16,285	82	3,554	18
1998	18,361	14,830	81	166	1	2,207	12	1,158	6	14,813	81	3,541	19
1999	17,531	13,997	80	176	1	2,058	12	1,300	7	14,083	80	3,438	20
2000	16,377	13,035	80	169	1	1,901	12	1,272	8	13,142	80	3,220	20
2001	15,989	12,780	80	131	1	1,843	12	1,235	8	12,768	80	3,212	20

<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 B.

<sup>2</sup>Includes cases of both pulmonary and extrapulmonary disease and cases of miliary TB.

Note: See Technical Notes (Appendix A) for a description of national TB surveillance.

**Table 7. Pulmonary Tuberculosis Cases by Sputum Smear and Sputum Culture Results: United States, 1991-2001**

Year	Total Pulmonary Cases <sup>1</sup>	Sputum Smear Results						Sputum Culture Results					
		Positive		Negative		Not Done or Unknown		Positive		Negative		Not Done or Unknown	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1991	21,937	9,095	41	7,281	33	5,561	25	15,022	68	2,232	10	4,683	21
1992	22,371	8,975	40	7,413	33	5,983	27	15,124	68	2,476	11	4,771	21
1993	21,255	9,324	44	7,747	36	4,184	20	14,708	69	2,675	13	3,872	18
1994	20,385	8,845	43	7,770	38	3,770	18	14,080	69	2,618	13	3,687	18
1995	18,991	8,068	42	7,717	41	3,206	17	13,236	70	2,597	14	3,158	17
1996	17,445	7,449	43	7,337	42	2,659	15	12,232	70	2,507	14	2,706	16
1997	16,285	6,882	42	6,878	42	2,525	16	11,481	71	2,226	14	2,578	16
1998	14,813	6,630	45	6,016	41	2,167	15	10,472	71	2,101	14	2,240	15
1999	14,083	6,252	44	5,626	40	2,205	16	9,777	69	2,049	15	2,257	16
2000	13,142	5,865	45	5,332	41	1,945	15	9,214	70	1,912	15	2,016	15
2001	12,768	5,600	44	5,311	42	1,857	15	8,855	69	1,937	15	1,976	15

<sup>1</sup>Includes cases of both pulmonary and extrapulmonary disease and cases of miliary TB.

**Table 8. Resistance to Isoniazid with or without Rifampin Resistance in Reported TB Cases with No Previous TB by Origin: United States, 1993-2001**

Year	Resistant to Isoniazid <sup>1</sup>						Resistant to Isoniazid and Rifampin <sup>1</sup>					
	Total Cases <sup>2</sup>		U. S.-born		Foreign-born <sup>3</sup>		Total Cases <sup>2</sup>		U. S.-born		Foreign-born <sup>3</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1993	1,401	8.4	805	6.8	579	12.4	410	2.5	302	2.6	105	2.3
1994	1,355	8.3	709	6.4	632	12.1	352	2.2	238	2.2	109	2.1
1995	1,171	7.3	554	5.4	616	11.0	252	1.6	168	1.6	84	1.5
1996	1,137	7.4	495	5.2	639	11.3	206	1.3	104	1.1	101	1.8
1997	1,080	7.5	436	5.0	639	11.2	155	1.1	76	0.9	79	1.4
1998	1,011	7.5	366	4.7	643	11.3	130	1.0	55	0.7	74	1.3
1999	904	7.1	284	4.0	618	11.0	128	1.0	39	0.6	89	1.6
2000	881	7.5	267	4.3	611	11.0	118	1.0	37	0.6	81	1.5
2001	781	7.1	238	4.5	532	9.6	114	1.0	32	0.6	78	1.4

<sup>1</sup>Isolates may be resistant to other drugs.

<sup>2</sup>Includes persons of unknown country of birth.

<sup>3</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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

**Note:** Data for all years updated through April 10, 2002.

More than 85% of all cases in each group had drug susceptibility test results reported for an initial isolate.

See Surveillance Slides #18, #19, #20, and #21.

**Table 9. Resistance to Isoniazid with or without Rifampin Resistance in Reported TB Cases with Previous TB by Origin: United States, 1993-2001**

Year	Resistant to Isoniazid <sup>1</sup>						Resistant to Isoniazid and Rifampin <sup>1</sup>					
	Total Cases <sup>2</sup>		U. S.-born		Foreign-born <sup>3</sup>		Total Cases <sup>2</sup>		U. S.-born		Foreign-born <sup>3</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1993	164	16.6	85	12.7	76	25.1	75	7.7	30	4.5	45	15.0
1994	177	17.1	81	11.7	95	28.1	75	7.3	35	5.1	39	11.6
1995	168	17.6	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	12.2	25	6.5	55	19.4	28	4.2	6	1.6	22	7.8
2000	81	12.9	22	6.1	59	22.1	23	3.7	2	0.6	21	7.9
2001	78	13.0	23	7.4	55	19.3	28	4.7	5	1.6	23	8.1

<sup>1</sup>Isolates may be resistant to other drugs.

<sup>2</sup>Includes persons of unknown country of birth.

<sup>3</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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

**Note:** Data for all years updated through April 10, 2002.

More than 85% of all cases in each group had drug susceptibility test results reported for an initial isolate.

**Table 10. Percentage of Reported TB Cases by Initial Drug Regimen, Use of Directly Observed Therapy, and Completion of Therapy (COT): United States, 1993-2001**

Year	Initial Drug Regimen <sup>1,2</sup>			Directly Observed Therapy <sup>3</sup>		Therapy ≤1 Year Indicated <sup>4</sup>	
	IR	IRZ	IRZ,E/S	DOT Only	Both DOT and Self-Administered	COT ≤1 Year	COT
1993	13.0	31.2	40.9	21.7	14.4	63.6	87.5
1994	7.0	23.3	56.3	28.1	20.5	68.5	87.9
1995	5.2	20.3	63.3	37.2	21.5	72.9	89.6
1996	4.2	17.5	67.9	42.5	22.4	75.6	90.3
1997	3.2	15.1	72.4	46.9	23.8	77.7	91.2
1998	2.6	12.9	74.7	47.7	26.5	80.2	92.4
1999	2.2	11.2	77.2	49.5	27.5	79.9	92.0
2000	2.0	10.4	78.6	...	...	...	...
2001	1.6	9.4	78.8	...	...	...	...

<sup>1</sup>Includes cases in persons alive at diagnosis.

<sup>2</sup>I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin. Excluding cases with no information on initial drug regimen, 1% were not started on any drugs, less than 1% were started on one drug, and approximately 10% had an initial multidrug regimen other than IR, IRZ, or IRZ,E/S.

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

<sup>4</sup>Includes cases in 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 (Appendix A) for description of COT calculation.

Ellipses indicate data not available.

**Note:** Data for all years updated through April 10, 2002.

See Surveillance Slides #24 and #25.

**Table 11. Number and Percentage of Reported TB Cases with HIV Test Results and with HIV Coinfection by Age Group: United States, 1993-2000**

Year	25-44 Years Old				All Ages			
	HIV Test Results <sup>1</sup>		HIV Positive <sup>2</sup>		HIV Test Results <sup>1</sup>		HIV Positive <sup>2</sup>	
	No.	%	No.	%	No.	%	No.	%
1993	4,376	46	2,787	29	7,456	30	3,680	15
1994	4,439	49	2,664	29	7,878	33	3,595	15
1995	4,271	52	2,170	26	8,174	36	3,036	13
1996	4,347	57	1,856	25	8,799	41	2,615	12
1997	4,137	60	1,472	21	8,759	44	2,091	11
1998	3,857	61	1,239	20	8,277	45	1,831	10
1999	3,808	63	1,176	19	8,408	48	1,726	10
2000	3,498	63	952	17	8,042	49	1,457	9

<sup>1</sup>Includes cases with positive, negative, or indeterminate HIV test results and cases from California also reported with AIDS. Rhode Island reported HIV test results in 1998, 1999, and 2000. HIV test results were not reported from California. However, California provided HIV status for TB cases reported during 1993-2000 in persons with AIDS (i.e., HIV-positive). Percentages based on all reported TB cases.

<sup>2</sup>Includes cases with HIV-positive test results and California cases also reported with AIDS. Percentages based on all reported TB cases.

**Note:** Data for all years updated through April 10, 2002.

See Surveillance Slides #22 and #23.

**Table 12. Tuberculosis Cases by Race/Ethnicity, Sex, and Age: United States, 2001**

Race/Ethnicity and Sex	All Ages	Age Group						Not Stated
		Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	
<b>Total Cases</b>	<b>15,989</b>	<b>544</b>	<b>387</b>	<b>1,595</b>	<b>5,630</b>	<b>4,534</b>	<b>3,295</b>	<b>4</b>
White, non-Hispanic	3,357	61	28	125	817	1,109	1,216	1
Male	2,213	34	13	64	541	825	735	1
Female	1,144	27	15	61	276	284	481	0
Unknown	0	0	0	0	0	0	0	0
Black, non-Hispanic	4,796	167	147	469	1,863	1,446	704	0
Male	3,022	83	81	236	1,134	1,072	416	0
Female	1,774	84	66	233	729	374	288	0
Unknown	0	0	0	0	0	0	0	0
Hispanic <sup>1</sup>	4,001	255	151	608	1,553	901	531	2
Male	2,580	135	82	386	1,042	635	298	2
Female	1,421	120	69	222	511	266	233	0
Unknown	0	0	0	0	0	0	0	0
American Indian/Alaska Native	233	4	4	13	68	78	66	0
Male	132	4	2	7	40	50	29	0
Female	101	0	2	6	28	28	37	0
Unknown	0	0	0	0	0	0	0	0
Asian/Pacific Islander	3,552	57	57	373	1,315	987	762	1
Male	1,972	29	14	185	698	596	450	0
Female	1,580	28	43	188	617	391	312	1
Unknown	0	0	0	0	0	0	0	0
Not Stated	50	0	0	7	14	13	16	0
Male	24	0	0	4	5	8	7	0
Female	25	0	0	3	9	4	9	0
Unknown	1	0	0	0	0	1	0	0

<sup>1</sup>Persons of Hispanic origin may be of any race.

See Surveillance Slides #6 and #9.

**Table 13. Tuberculosis Case Rates per 100,000 Population by Race/Ethnicity, Sex, and Age: United States, 2001**

Race/Ethnicity and Sex	All Ages	Age Group					
		Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+
<b>Total Cases</b>	<b>5.6</b>	<b>2.8</b>	<b>0.9</b>	<b>4.0</b>	<b>6.6</b>	<b>7.2</b>	<b>9.1</b>
White, non-Hispanic	1.6	0.5	0.1	0.5	1.4	2.3	4.0
Male	2.2	0.5	0.1	0.5	1.8	3.4	5.8
Female	1.1	0.5	0.1	0.5	0.9	1.1	2.7
Black, non-Hispanic	13.8	6.2	2.4	8.2	17.4	22.3	24.1
Male	18.4	6.1	2.6	8.2	22.5	37.2	36.2
Female	9.7	6.3	2.2	8.2	12.8	10.4	16.3
Hispanic <sup>1</sup>	11.9	7.0	2.3	10.4	14.6	17.9	26.4
Male	15.3	7.2	2.5	12.8	19.2	26.3	35.2
Female	8.5	6.7	2.2	7.9	9.9	10.2	20.1
American Indian/Alaska Native	11.0	2.3	1.0	3.4	10.7	20.5	42.0
Male	12.7	4.6	1.0	3.7	12.6	27.6	43.6
Female	9.4	0.0	1.0	3.2	8.8	14.0	40.7
Asian/Pacific Islander	32.7	6.5	3.4	23.7	35.8	44.3	91.2
Male	37.9	6.5	1.6	23.6	40.6	57.4	127.9
Female	27.9	6.4	5.3	23.9	31.5	32.9	64.5

<sup>1</sup>Persons of Hispanic origin may be of any race.

**Note:** Case rates for 2001 based on an extrapolation to the July 2001 population from the July 2000 U.S. Census estimates by age, race, sex, and Hispanic origin.

See Surveillance Slides #5, #7, #8, and #10.

**Table 14. Tuberculosis Cases in U.S.-born Persons by Race/Ethnicity, Sex, and Age: United States, 2001**

Race/Ethnicity and Sex	All Ages	Age Group						Not Stated
		Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	
<b>Total Cases</b>	<b>7,845</b>	<b>448</b>	<b>211</b>	<b>420</b>	<b>2,194</b>	<b>2,618</b>	<b>1,953</b>	<b>1</b>
White, non-Hispanic	2,789	49	21	60	626	978	1,054	1
Male	1,886	28	11	32	422	748	644	1
Female	903	21	10	28	204	230	410	0
Unknown	0	0	0	0	0	0	0	0
Black, non-Hispanic	3,624	148	93	208	1,251	1,269	655	0
Male	2,342	70	47	104	777	955	389	0
Female	1,282	78	46	104	474	314	266	0
Unknown	0	0	0	0	0	0	0	0
Hispanic <sup>1</sup>	1,027	211	71	109	223	261	152	0
Male	648	115	42	61	158	188	84	0
Female	379	96	29	48	65	73	68	0
Unknown	0	0	0	0	0	0	0	0
American Indian/Alaska Native	212	4	4	12	57	72	63	0
Male	122	4	2	6	33	48	29	0
Female	90	0	2	6	24	24	34	0
Unknown	0	0	0	0	0	0	0	0
Asian/Pacific Islander	175	36	22	28	33	34	22	0
Male	95	18	6	14	20	25	12	0
Female	80	18	16	14	13	9	10	0
Unknown	0	0	0	0	0	0	0	0
Not Stated	18	0	0	3	4	4	7	0
Male	8	0	0	1	1	3	3	0
Female	10	0	0	2	3	1	4	0
Unknown	0	0	0	0	0	0	0	0

<sup>1</sup> Persons of Hispanic origin may be of any race.

**Table 15. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Race/Ethnicity, Sex, and Age: United States, 2001**

Race/Ethnicity and Sex	All Ages	Age Group						Not Stated
		Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	
<b>Total Cases</b>	<b>7,865</b>	<b>92</b>	<b>171</b>	<b>1,151</b>	<b>3,340</b>	<b>1,839</b>	<b>1,270</b>	<b>2</b>
White, non-Hispanic	535	12	7	63	181	126	146	0
Male	311	6	2	32	114	73	84	0
Female	224	6	5	31	67	53	62	0
Unknown	0	0	0	0	0	0	0	0
Black, non-Hispanic	1,097	18	53	257	585	146	38	0
Male	632	13	33	131	339	93	23	0
Female	465	5	20	126	246	53	15	0
Unknown	0	0	0	0	0	0	0	0
Hispanic <sup>2</sup>	2,895	43	76	488	1,297	625	365	1
Male	1,883	20	38	316	868	434	206	1
Female	1,012	23	38	172	429	191	159	0
Unknown	0	0	0	0	0	0	0	0
American Indian/Alaska Native	18	0	0	1	11	4	2	0
Male	9	0	0	1	7	1	0	0
Female	9	0	0	0	4	3	2	0
Unknown	0	0	0	0	0	0	0	0
Asian/Pacific Islander	3,304	19	35	339	1,260	933	717	1
Male	1,835	9	8	168	667	559	424	0
Female	1,469	10	27	171	593	374	293	1
Unknown	0	0	0	0	0	0	0	0
Not Stated	16	0	0	3	6	5	2	0
Male	8	0	0	2	1	3	2	0
Female	8	0	0	1	5	2	0	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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

<sup>2</sup> Persons of Hispanic origin may be of any race.

**Table 16. Tuberculosis Cases by Country of Origin: United States, 2001**

<b>African Region</b>					
<b>Total Cases=571</b>					
Algeria	3	Gabon	1	Nigeria	53
Angola	0	Gambia	8	Rwanda	1
Benin	1	Ghana	16	St. Helena	0
Botswana	1	Guinea	17	Sao Tome and Principe	0
Burkina Faso	0	Guinea-Bissau	1	Senegal	13
Burundi	0	Kenya	84	Seychelles	0
Cameroon	11	Lesotho	0	Sierra Leone	31
Cape Verde	8	Liberia	43	South Africa	15
Central African Republic	2	Madagascar	1	Swaziland	0
Chad	2	Malawi	4	Tanzania, UR	14
Comoros	2	Mali	5	Togo	3
Congo, Republic of	12	Mauritania	3	Uganda	6
Côte d'Ivoire	3	Mauritius	0	Zambia	18
DR Congo	4	Mozambique	0	Zimbabwe	18
Equatorial Guinea	0	Namibia	0		
Ethiopia	161	Niger	6		

<b>Americas Region</b>					
<b>Total Cases=11,065</b>					
Anguilla	0	Cuba	58	Panama	5
Antigua and Barbuda	0	Dominica	1	Paraguay	1
Argentina	17	Dominican Republic	84	Peru	142
Bahamas	8	Ecuador	157	Puerto Rico	123
Barbados	0	El Salvador	154	St. Kitts and Nevis	3
Belize	6	Grenada	0	St. Lucia	0
Bermuda	1	Guatemala	137	St. Vincent & Grenadines	3
Bolivia	25	Guyana	17	Suriname	0
Brazil	41	Haiti	252	Trinidad and Tobago	17
British Virgin Islands	1	Honduras	133	Turks and Caicos Islands	0
Canada	10	Jamaica	26	Uruguay	3
Cayman Islands	0	Mexico	1,845	U.S. Virgin Islands	5
Chile	8	Montserrat	0	United States of America	7,675
Colombia	69	Netherland Antilles	0	Venezuela	8
Costa Rica	6	Nicaragua	24		

<b>Eastern Mediterranean Region</b>					
<b>Total Cases=400</b>					
Afghanistan	26	Kuwait	1	Somalia	164
Bahrain	1	Lebanon	2	Sudan	48
Cyprus	0	Libyan Arab Jamahiriya	1	Syrian Arab Republic	3
Djibouti	3	Morocco	11	Tunisia	0
Egypt	8	Oman	1	United Arab Emirates	4
Iran, Islamic Republic of	19	Pakistan	87	West Bank and Gaza	0
Iraq	4	Qatar	1	Yemen	12
Jordan	4	Saudi Arabia	0		

**Note:** Regional composition of countries based on WHO Report 2002 *Global Tuberculosis Control, Surveillance, Planning, Financing* (<http://www.who.int/gtb/publications/globrep02/downloadpage.html>).

**Table 16. (Cont'd) Tuberculosis Cases by Country of Origin: United States, 2001**

<b>European Region</b>					
<b>Total Cases=339</b>					
Albania	4	Greece	4	Poland	28
Andorra	0	Hungary	5	Portugal	14
Armenia	8	Iceland	0	Romania	16
Austria	0	Ireland	10	Russian Federation	47
Azerbaijan	1	Israel	1	San Marino	0
Belarus	1	Italy	15	Slovakia	0
Belguim	1	Kazakhstan	1	Slovenia	0
Bosnia and Herzegovina	49	Kyrgyzstan	0	Spain	6
Bulgaria	1	Latvia	1	Sweden	1
Croatia	7	Lithuania	3	Switzerland	1
Czech Republic	0	Luxembourg	0	Tajikistan	0
Denmark	1	Macedonia, TFYR	3	Turkey	12
Estonia	2	Malta	1	Turkmenistan	0
Finland	1	Moldova, Republic of	1	Ukraine	32
France	9	Monaco	0	United Kingdom	12
Georgia	2	Netherlands	4	Uzbekistan	0
Germany	18	Norway	0	Yugoslavia	16

<b>Southeast Asia Region</b>					
<b>Total Cases=826</b>					
Bangladesh	43	Korea, DPR	19	Sri Lanka	3
Bhutan	0	Maldives	0	Thailand	42
India	604	Myanmar	36		
Indonesia	53	Nepal	26		

<b>Western Pacific Region</b>					
<b>Total Cases=2,465</b>					
American Samoa	7	Korea, Rep.	206	Philippines	907
Australia	3	Lao, PDR	101	Pitcairn Island	0
Brunei Darussalam	0	Malaysia	5	Samoa	1
Cambodia	83	Marshall Islands, Republic of	17	Singapore	3
China	421	Micronesia, Federated States of	4	Solomon Islands	0
China, Hong Kong SAR	28	Mongolia	2	Tokelau	0
China, Macao SAR	3	Nauru	1	Tonga	6
Cook Islands	0	New Caledonia	0	Tuvalu	0
Fiji	1	New Zealand	0	Vanuatu	0
French Polynesia	0	Niue	0	Vietnam	626
Guam	11	N. Mariana Islands, Commonwealth of	1	Wallis and Futuna	0
Japan	27	Palau, Republic of	1		
Kiribati	0	Papua New Guinea	0		

**Other<sup>1</sup>**  
**Total Cases=44**

**Unknown**  
**Total Cases=279**

<sup>1</sup>Includes country codes currently available for use in reporting via the National Tuberculosis Surveillance System that are not represented by WHO member states.

**Note:** Regional composition of countries based on WHO Report 2002 *Global Tuberculosis Control: Surveillance, Planning, Financing* (<http://www.who.int/gtb/publications/globrep02/downloadpage.html>).

**Table 17. Tuberculosis Cases and Case Rates per 100,000 Population: States, 2001 and 2000**

State	Cases		Case Rates		Rank According to Rate		Population
	2001	2000	2001	2000	2001	2000	Estimates July 1, 2001
<b>United States</b>	<b>15,989</b>	<b>16,377</b>	<b>5.6</b>	<b>5.8</b>	--	--	<b>284,797,000</b>
Alabama	265	310	5.9	7.0	12	11	4,464,000
Alaska	54	108	8.5	17.2	4	1	635,000
Arizona	289	261	5.4	5.1	17	18	5,307,000
Arkansas	162	199	6.0	7.4	11	6	2,692,000
California	3,332	3,297	9.7	9.7	2	3	34,501,000
Colorado	138	97	3.1	2.3	31	38	4,418,000
Connecticut	121	105	3.5	3.1	29	31	3,425,000
Delaware	33	28	4.1	3.6	26	28	796,000
District of Columbia <sup>1</sup>	74	85	12.9	14.9	--	--	572,000
Florida	1,145	1,171	7.0	7.3	6	8	16,397,000
Georgia	575	703	6.9	8.6	7	5	8,384,000
Hawaii	151	136	12.3	11.2	1	2	1,224,000
Idaho	9	16	0.7	1.2	49	47	1,321,000
Illinois	707	743	5.7	6.0	14	15	12,482,000
Indiana	115	145	1.9	2.4	39	36	6,115,000
Iowa	43	40	1.5	1.4	46	46	2,923,000
Kansas	63	77	2.3	2.9	36	34	2,695,000
Kentucky	152	147	3.7	3.6	27	26	4,066,000
Louisiana	294	331	6.6	7.4	8	7	4,465,000
Maine	20	24	1.6	1.9	44	41	1,287,000
Maryland	262	282	4.9	5.3	19	17	5,375,000
Massachusetts	270	285	4.2	4.5	25	21	6,379,000
Michigan	330	287	3.3	2.9	30	33	9,991,000
Minnesota	239	178	4.8	3.6	21	27	4,972,000
Mississippi	154	173	5.4	6.1	18	14	2,858,000
Missouri	157	211	2.8	3.8	34	25	5,630,000
Montana	20	21	2.2	2.3	38	37	904,000
Nebraska	40	24	2.3	1.4	37	45	1,713,000
Nevada	96	96	4.6	4.8	22	19	2,106,000
New Hampshire	20	22	1.6	1.8	43	43	1,259,000
New Jersey	530	565	6.2	6.7	10	13	8,484,000
New Mexico	54	46	3.0	2.5	32	35	1,829,000
New York	1,676	1,744	8.8	9.2	3	4	19,011,000
North Carolina	398	447	4.9	5.6	20	16	8,186,000
North Dakota	6	5	0.9	0.8	48	49	634,000
Ohio	306	340	2.7	3.0	35	32	11,374,000
Oklahoma	194	154	5.6	4.5	15	22	3,460,000
Oregon	123	119	3.5	3.5	28	29	3,473,000
Pennsylvania	350	383	2.8	3.1	33	30	12,287,000
Rhode Island	60	49	5.7	4.7	13	20	1,059,000
South Carolina	263	286	6.5	7.1	9	10	4,063,000
South Dakota	13	16	1.7	2.1	41	40	757,000
Tennessee	313	383	5.5	6.7	16	12	5,740,000
Texas	1,643	1,506	7.7	7.2	5	9	21,325,000
Utah	35	49	1.5	2.2	45	39	2,270,000
Vermont	7	4	1.1	0.7	47	50	613,000
Virginia	306	292	4.3	4.1	24	24	7,188,000
Washington	261	258	4.4	4.4	23	23	5,988,000
West Virginia	32	33	1.8	1.8	40	42	1,802,000
Wisconsin	86	92	1.6	1.7	42	44	5,402,000
Wyoming	3	4	0.6	0.8	50	48	494,000
American Samoa <sup>1,2</sup>	...	...	...	...	--	--	67,084
Fed. States of Micronesia <sup>1,2</sup>	...	...	...	...	--	--	134,597
Guam <sup>1,2</sup>	63	54	40.0	34.9	--	--	157,557
N. Mariana Islands <sup>1,2</sup>	58	75	77.7	108.3	--	--	74,612
Puerto Rico <sup>1,2</sup>	121	174	3.2	4.6	--	--	3,839,810
Republic of Palau <sup>1,2</sup>	...	...	...	...	--	--	19,092
U.S. Virgin Islands <sup>1,2</sup>	...	...	...	...	--	--	122,211

<sup>1</sup>Not ranked with the states.

<sup>2</sup>Not included in U.S. totals.

Ellipses indicate data not available.

**Note:** Denominators for computing 2001 rates for the states and the District of Columbia were obtained from Table ST-2001EST-01-Time Series of State Population Estimates: April 1, 2000, to July 1, 2001, Population Division, U.S. Census Bureau (<http://eire.census.gov/popest/data/states/tables/ST-EST2001-01.php>). Denominator for computing 2001 rate for Puerto Rico was obtained from U.S. Census Bureau (<http://www.census.gov/ipc/www/pr2001.html>). Denominators for computing 2001 rates for all other areas were obtained from the U.S. Census Bureau International Data Base (<http://www.census.gov/ipc/www/idbnew.html>).

See Surveillance Slide #4.



**Table 18. Tuberculosis Cases by Age Group: States, 2001**

State	Total Cases	Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	Unknown or Missing
<b>United States</b>	<b>15,989</b>	<b>544</b>	<b>387</b>	<b>1,595</b>	<b>5,630</b>	<b>4,534</b>	<b>3,295</b>	<b>4</b>
Alabama	265	9	2	13	69	82	90	0
Alaska	54	1	4	3	17	18	11	0
Arizona	289	14	9	40	88	81	57	0
Arkansas	162	5	5	14	39	47	52	0
California	3,332	132	92	318	1,109	953	727	1
Colorado	138	11	5	20	44	32	26	0
Connecticut	121	2	2	12	47	28	30	0
Delaware	33	1	0	2	12	10	8	0
District of Columbia	74	4	2	10	17	29	12	0
Florida	1,145	32	22	94	448	386	163	0
Georgia	575	26	3	45	233	181	86	1
Hawaii	151	1	1	16	30	56	47	0
Idaho	9	0	1	1	2	3	2	0
Illinois	707	31	14	68	259	216	119	0
Indiana	115	2	1	9	40	33	30	0
Iowa	43	0	1	3	10	13	16	0
Kansas	63	1	2	15	19	11	15	0
Kentucky	152	4	5	10	42	42	48	1
Louisiana	294	6	8	15	91	110	64	0
Maine	20	0	1	1	9	7	2	0
Maryland	262	10	9	34	110	52	47	0
Massachusetts	270	4	7	30	122	61	46	0
Michigan	330	14	6	35	110	88	77	0
Minnesota	239	10	17	55	91	41	25	0
Mississippi	154	5	2	6	43	52	46	0
Missouri	157	2	5	14	48	39	49	0
Montana	20	1	0	3	5	7	4	0
Nebraska	40	2	0	4	17	11	6	0
Nevada	96	2	2	10	30	38	14	0
New Hampshire	20	1	0	5	6	5	3	0
New Jersey	530	11	14	64	225	112	104	0
New Mexico	54	0	0	2	10	18	24	0
New York	1,676	39	36	204	680	446	271	0
North Carolina	398	7	4	37	133	113	104	0
North Dakota	6	0	0	1	0	3	2	0
Ohio	306	7	9	35	77	87	91	0
Oklahoma	194	1	7	25	52	45	51	0
Oregon	123	2	2	11	49	32	27	0
Pennsylvania	350	8	6	21	116	87	111	1
Rhode Island	60	6	2	10	17	16	9	0
South Carolina	263	13	12	16	81	76	65	0
South Dakota	13	0	1	2	5	1	4	0
Tennessee	313	7	5	22	104	81	94	0
Texas	1,643	75	45	151	594	500	278	0
Utah	35	1	2	5	10	11	6	0
Vermont	7	0	1	1	2	1	2	0
Virginia	306	6	6	37	129	74	54	0
Washington	261	11	6	37	91	71	45	0
West Virginia	32	0	0	0	12	8	12	0
Wisconsin	86	4	1	9	35	19	18	0
Wyoming	3	0	0	0	1	1	1	0
American Samoa <sup>1</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>1</sup>	...	...	...	...	...	...	...	...
Guam <sup>1</sup>	63	3	0	3	27	21	9	0
N. Mariana Islands <sup>1</sup>	58	0	0	15	29	12	2	0
Puerto Rico <sup>1</sup>	121	0	0	12	30	47	32	0
Republic of Palau <sup>1</sup>	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>1</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Not included in U.S. totals.

Ellipses indicate data not available.

**Table 19. Tuberculosis Cases by Race/Ethnicity: States, 2001**

State	Total Cases	White, non-Hispanic	Black, non-Hispanic	Hispanic <sup>1</sup>	American Indian or Alaska Native	Asian or Pacific Islander	Unknown or Missing
<b>United States</b>	<b>15,989</b>	<b>3,357</b>	<b>4,796</b>	<b>4,001</b>	<b>233</b>	<b>3,552</b>	<b>50</b>
Alabama	265	107	126	22	0	10	0
Alaska	54	6	0	2	34	12	0
Arizona	289	72	14	135	44	24	0
Arkansas	162	63	61	14	1	19	4
California	3,332	365	292	1,253	15	1,400	7
Colorado	138	27	19	69	2	21	0
Connecticut	121	39	32	26	0	23	1
Delaware	33	9	10	8	0	6	0
District of Columbia	74	5	54	10	0	5	0
Florida	1,145	289	533	239	2	82	0
Georgia	575	110	337	66	2	57	3
Hawaii	151	6	0	1	0	143	1
Idaho	9	5	0	3	0	1	0
Illinois	707	129	277	149	6	143	3
Indiana	115	53	30	17	0	15	0
Iowa	43	17	7	3	2	13	1
Kansas	63	18	8	14	1	17	5
Kentucky	152	107	24	10	1	9	1
Louisiana	294	104	162	8	2	17	1
Maine	20	8	5	0	1	6	0
Maryland	262	33	138	31	1	59	0
Massachusetts	270	72	70	44	1	83	0
Michigan	330	111	155	11	0	51	2
Minnesota	239	21	132	17	6	63	0
Mississippi	154	39	101	5	2	5	2
Missouri	157	65	65	8	0	19	0
Montana	20	10	2	0	6	2	0
Nebraska	40	12	7	10	5	6	0
Nevada	96	27	14	18	1	35	1
New Hampshire	20	7	2	4	0	7	0
New Jersey	530	78	149	150	1	151	1
New Mexico	54	9	0	18	22	4	1
New York	1,676	225	527	490	1	428	5
North Carolina	398	93	197	77	2	29	0
North Dakota	6	2	1	0	3	0	0
Ohio	306	117	141	12	1	35	0
Oklahoma	194	76	41	21	38	17	1
Oregon	123	45	13	33	1	31	0
Pennsylvania	350	119	124	24	1	80	2
Rhode Island	60	19	12	16	0	13	0
South Carolina	263	54	173	21	0	15	0
South Dakota	13	3	3	2	4	1	0
Tennessee	313	139	138	21	0	11	4
Texas	1,643	270	417	780	5	171	0
Utah	35	10	4	13	2	6	0
Vermont	7	2	2	0	0	3	0
Virginia	306	50	99	79	2	74	2
Washington	261	63	46	34	11	105	2
West Virginia	32	27	5	0	0	0	0
Wisconsin	86	19	27	13	3	24	0
Wyoming	3	1	0	0	1	1	0
American Samoa <sup>2</sup>	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>2</sup>	...	...	...	...	...	...	...
Guam <sup>2</sup>	63	0	0	0	0	61	2
N. Mariana Islands <sup>2</sup>	58	1	0	0	0	57	0
Puerto Rico <sup>2</sup>	121	0	1	119	0	1	0
Republic of Palau <sup>2</sup>	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>2</sup>	...	...	...	...	...	...	...

<sup>1</sup>Persons of Hispanic origin may be of any race.

<sup>2</sup>Not included in U.S. totals.

Ellipses indicate data not available.

**Table 20. Tuberculosis Cases, U.S.-born Persons and Foreign-born Persons: States, 2001**

State	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown	
		No.	%	No.	%	No.	%
<b>United States</b>	<b>15,989</b>	<b>7,845</b>	<b>49.1</b>	<b>7,865</b>	<b>49.2</b>	<b>279</b>	<b>1.7</b>
Alabama	265	233	87.9	32	12.1	0	0.0
Alaska	54	41	75.9	12	22.2	1	1.9
Arizona	289	152	52.6	133	46.0	4	1.4
Arkansas	162	136	84.0	17	10.5	9	5.6
California	3,332	840	25.2	2,465	74.0	27	0.8
Colorado	138	53	38.4	85	61.6	0	0.0
Connecticut	121	51	42.1	66	54.5	4	3.3
Delaware	33	13	39.4	20	60.6	0	0.0
District of Columbia	74	48	64.9	26	35.1	0	0.0
Florida	1,145	672	58.7	471	41.1	2	0.2
Georgia	575	416	72.3	158	27.5	1	0.2
Hawaii	151	37	24.5	109	72.2	5	3.3
Idaho	9	6	66.7	3	33.3	0	0.0
Illinois	707	447	63.2	259	36.6	1	0.1
Indiana	115	75	65.2	40	34.8	0	0.0
Iowa	43	20	46.5	23	53.5	0	0.0
Kansas	63	27	42.9	34	54.0	2	3.2
Kentucky	152	124	81.6	27	17.8	1	0.7
Louisiana	294	271	92.2	22	7.5	1	0.3
Maine	20	9	45.0	11	55.0	0	0.0
Maryland	262	109	41.6	153	58.4	0	0.0
Massachusetts	270	63	23.3	207	76.7	0	0.0
Michigan	330	213	64.5	117	35.5	0	0.0
Minnesota	239	46	19.2	192	80.3	1	0.4
Mississippi	154	140	90.9	12	7.8	2	1.3
Missouri	157	110	70.1	47	29.9	0	0.0
Montana	20	16	80.0	3	15.0	1	5.0
Nebraska	40	16	40.0	23	57.5	1	2.5
Nevada	96	38	39.6	57	59.4	1	1.0
New Hampshire	20	5	25.0	15	75.0	0	0.0
New Jersey	530	196	37.0	333	62.8	1	0.2
New Mexico	54	42	77.8	12	22.2	0	0.0
New York	1,676	521	31.1	953	56.9	202	12.1
North Carolina	398	272	68.3	125	31.4	1	0.3
North Dakota	6	4	66.7	1	16.7	1	16.7
Ohio	306	222	72.5	84	27.5	0	0.0
Oklahoma	194	162	83.5	31	16.0	1	0.5
Oregon	123	55	44.7	68	55.3	0	0.0
Pennsylvania	350	200	57.1	149	42.6	1	0.3
Rhode Island	60	21	35.0	38	63.3	1	1.7
South Carolina	263	231	87.8	32	12.2	0	0.0
South Dakota	13	8	61.5	5	38.5	0	0.0
Tennessee	313	269	85.9	44	14.1	0	0.0
Texas	1,643	934	56.8	708	43.1	1	0.1
Utah	35	13	37.1	22	62.9	0	0.0
Vermont	7	1	14.3	6	85.7	0	0.0
Virginia	306	117	38.2	184	60.1	5	1.6
Washington	261	74	28.4	186	71.3	1	0.4
West Virginia	32	32	100.0	0	0.0	0	0.0
Wisconsin	86	42	48.8	44	51.2	0	0.0
Wyoming	3	2	66.7	1	33.3	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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

See Surveillance Slide #13.

**Table 21. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Country of Origin: States, 2001**

State	Total Cases	Country of Origin								Unknown or Missing
		Mexico	Philippines	Vietnam	India	China	Haiti	South Korea	All Others <sup>2</sup>	
<b>United States</b>	<b>7,865</b>	<b>1,845</b>	<b>907</b>	<b>626</b>	<b>604</b>	<b>421</b>	<b>252</b>	<b>206</b>	<b>2,997</b>	<b>7</b>
Alabama	32	11	1	2	5	0	0	0	13	0
Alaska	12	0	8	0	0	0	0	0	4	0
Arizona	133	82	9	6	5	2	0	2	27	0
Arkansas	17	3	2	0	1	0	0	0	10	1
California	2,465	791	496	274	120	184	0	86	513	1
Colorado	85	35	3	6	5	3	0	1	32	0
Connecticut	66	4	3	4	4	2	7	1	41	0
Delaware	20	5	2	0	3	0	3	1	6	0
District of Columbia	26	1	0	2	1	0	0	1	21	0
Florida	471	62	30	20	14	8	128	2	207	0
Georgia	158	36	11	12	21	2	2	1	73	0
Hawaii	109	1	89	3	0	4	0	9	3	0
Idaho	3	2	0	0	0	0	0	0	1	0
Illinois	259	75	29	16	51	8	0	5	74	1
Indiana	40	12	3	2	2	1	0	0	20	0
Iowa	23	1	3	3	1	1	0	1	13	0
Kansas	34	10	1	3	6	1	0	0	13	0
Kentucky	27	7	1	3	4	0	1	0	11	0
Louisiana	22	3	3	4	4	2	0	0	6	0
Maine	11	0	0	3	0	0	0	1	7	0
Maryland	153	5	12	9	14	6	2	5	100	0
Massachusetts	207	5	3	22	23	17	12	1	124	0
Michigan	117	5	13	7	14	6	0	3	69	0
Minnesota	192	8	4	14	5	6	1	2	152	0
Mississippi	12	4	0	3	1	0	0	0	4	0
Missouri	47	4	2	8	3	0	0	2	28	0
Montana	3	0	0	0	0	0	0	0	3	0
Nebraska	23	6	1	2	0	1	0	0	13	0
Nevada	57	14	27	0	2	2	0	0	12	0
New Hampshire	15	3	2	0	3	2	1	0	4	0
New Jersey	333	16	30	7	79	7	19	10	165	0
New Mexico	12	8	1	2	1	0	0	0	0	0
New York	953	51	32	16	68	111	68	33	573	1
North Carolina	125	58	4	5	13	0	0	1	44	0
North Dakota	1	0	0	0	0	0	0	0	1	0
Ohio	84	1	3	6	14	5	1	1	53	0
Oklahoma	31	11	1	5	4	0	0	0	10	0
Oregon	68	25	4	11	1	6	0	0	21	0
Pennsylvania	149	6	2	19	27	9	2	8	74	2
Rhode Island	38	1	3	2	2	1	1	0	28	0
South Carolina	32	12	5	0	4	1	0	1	9	0
South Dakota	5	1	0	0	0	1	0	0	3	0
Tennessee	44	10	2	2	4	2	0	2	22	0
Texas	708	388	22	67	32	6	3	5	185	0
Utah	22	7	3	1	2	0	0	0	9	0
Vermont	6	0	0	1	2	0	0	0	3	0
Virginia	184	18	9	27	17	5	1	7	100	0
Washington	186	28	26	27	12	6	0	13	73	1
West Virginia	0	0	0	0	0	0	0	0	0	0
Wisconsin	44	9	2	0	10	2	0	1	20	0
Wyoming	1	0	0	0	0	1	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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

<sup>2</sup>Includes 145 countries.

See Surveillance Slide #16.

**Table 22. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Number of Years in the United States: States, 2001**

State	Total Cases	<1 Year		1 - 4		5 - 9		10 - 19		20+		Unknown or Missing	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>United States</b>	<b>7,865</b>	<b>1,710</b>	<b>21.7</b>	<b>1,693</b>	<b>21.5</b>	<b>1,028</b>	<b>13.1</b>	<b>1,235</b>	<b>15.7</b>	<b>1,065</b>	<b>13.5</b>	<b>1,134</b>	<b>14.4</b>
Alabama	32	13	40.6	10	31.3	0	0.0	3	9.4	3	9.4	3	9.4
Alaska	12	3	25.0	2	16.7	2	16.7	1	8.3	0	0.0	4	33.3
Arizona	133	31	23.3	32	24.1	14	10.5	19	14.3	18	13.5	19	14.3
Arkansas	17	3	17.6	3	17.6	0	0.0	5	29.4	1	5.9	5	29.4
California	2,465	479	19.4	381	15.5	345	14.0	516	20.9	435	17.6	309	12.5
Colorado	85	31	36.5	14	16.5	6	7.1	2	2.4	6	7.1	26	30.6
Connecticut	66	14	21.2	12	18.2	9	13.6	7	10.6	6	9.1	18	27.3
Delaware	20	7	35.0	4	20.0	0	0.0	0	0.0	2	10.0	7	35.0
District of Columbia	26	6	23.1	5	19.2	4	15.4	2	7.7	2	7.7	7	26.9
Florida	471	109	23.1	100	21.2	63	13.4	74	15.7	69	14.6	56	11.9
Georgia	158	28	17.7	40	25.3	28	17.7	17	10.8	11	7.0	34	21.5
Hawaii	109	32	29.4	9	8.3	20	18.3	18	16.5	22	20.2	8	7.3
Idaho	3	0	0.0	1	33.3	0	0.0	0	0.0	2	66.7	0	0.0
Illinois	259	41	15.8	74	28.6	43	16.6	42	16.2	42	16.2	17	6.6
Indiana	40	11	27.5	13	32.5	5	12.5	5	12.5	2	5.0	4	10.0
Iowa	23	1	4.3	8	34.8	3	13.0	1	4.3	3	13.0	7	30.4
Kansas	34	18	52.9	5	14.7	2	5.9	2	5.9	3	8.8	4	11.8
Kentucky	27	11	40.7	5	18.5	4	14.8	1	3.7	5	18.5	1	3.7
Louisiana	22	6	27.3	4	18.2	4	18.2	2	9.1	4	18.2	2	9.1
Maine	11	5	45.5	1	9.1	0	0.0	1	9.1	1	9.1	3	27.3
Maryland	153	49	32.0	39	25.5	22	14.4	25	16.3	4	2.6	14	9.2
Massachusetts	207	56	27.1	52	25.1	37	17.9	36	17.4	26	12.6	0	0.0
Michigan	117	36	30.8	41	35.0	5	4.3	9	7.7	22	18.8	4	3.4
Minnesota	192	61	31.8	59	30.7	37	19.3	15	7.8	10	5.2	10	5.2
Mississippi	12	4	33.3	1	8.3	2	16.7	0	0.0	3	25.0	2	16.7
Missouri	47	14	29.8	17	36.2	7	14.9	4	8.5	4	8.5	1	2.1
Montana	3	1	33.3	1	33.3	0	0.0	0	0.0	1	33.3	0	0.0
Nebraska	23	3	13.0	10	43.5	7	30.4	1	4.3	2	8.7	0	0.0
Nevada	57	13	22.8	9	15.8	5	8.8	18	31.6	10	17.5	2	3.5
New Hampshire	15	6	40.0	4	26.7	0	0.0	4	26.7	0	0.0	1	6.7
New Jersey	333	65	19.5	82	24.6	35	10.5	32	9.6	24	7.2	95	28.5
New Mexico	12	3	25.0	0	0.0	0	0.0	3	25.0	3	25.0	3	25.0
New York	953	185	19.4	225	23.6	103	10.8	135	14.2	102	10.7	203	21.3
North Carolina	125	24	19.2	47	37.6	19	15.2	13	10.4	7	5.6	15	12.0
North Dakota	1	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ohio	84	30	35.7	21	25.0	7	8.3	10	11.9	5	6.0	11	13.1
Oklahoma	31	4	12.9	11	35.5	4	12.9	5	16.1	0	0.0	7	22.6
Oregon	68	15	22.1	16	23.5	10	14.7	3	4.4	2	2.9	22	32.4
Pennsylvania	149	30	20.1	34	22.8	9	6.0	11	7.4	16	10.7	49	32.9
Rhode Island	38	14	36.8	1	2.6	1	2.6	0	0.0	1	2.6	21	55.3
South Carolina	32	10	31.3	8	25.0	9	28.1	5	15.6	0	0.0	0	0.0
South Dakota	5	3	60.0	1	20.0	1	20.0	0	0.0	0	0.0	0	0.0
Tennessee	44	12	27.3	20	45.5	3	6.8	2	4.5	1	2.3	6	13.6
Texas	708	126	17.8	156	22.0	94	13.3	123	17.4	152	21.5	57	8.1
Utah	22	9	40.9	8	36.4	3	13.6	0	0.0	2	9.1	0	0.0
Vermont	6	2	33.3	1	16.7	1	16.7	1	16.7	0	0.0	1	16.7
Virginia	184	42	22.8	46	25.0	20	10.9	31	16.8	5	2.7	40	21.7
Washington	186	28	15.1	48	25.8	31	16.7	26	14.0	22	11.8	31	16.7
West Virginia	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wisconsin	44	15	34.1	12	27.3	4	9.1	5	11.4	4	9.1	4	9.1
Wyoming	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0

<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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.  
See Surveillance Slide #17.

**Table 23. Tuberculosis Cases by Form of Disease: States, 2001**

State	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Cases with Both Pulmonary and Extrapulmonary Disease		
		No.	%	No.	%	Total <sup>3</sup>		Miliary No.
						No.	%	
<b>United States</b>	<b>15,989</b>	<b>11,589</b>	<b>72.5</b>	<b>3,212</b>	<b>20.1</b>	<b>1,179</b>	<b>7.4</b>	<b>285</b>
Alabama	265	224	84.5	35	13.2	6	2.3	0
Alaska	54	47	87.0	5	9.3	2	3.7	0
Arizona	289	223	77.2	45	15.6	21	7.3	6
Arkansas	162	138	85.2	18	11.1	6	3.7	1
California	3,332	2,471	74.2	626	18.8	235	7.1	44
Colorado	138	81	58.7	33	23.9	24	17.4	3
Connecticut	121	86	71.1	22	18.2	13	10.7	7
Delaware	33	24	72.7	7	21.2	2	6.1	0
District of Columbia	74	50	67.6	22	29.7	2	2.7	0
Florida	1,145	909	79.4	172	15.0	63	5.5	13
Georgia	575	429	74.6	114	19.8	32	5.6	6
Hawaii	151	127	84.1	20	13.2	4	2.6	0
Idaho	9	5	55.6	2	22.2	2	22.2	0
Illinois	707	498	70.4	169	23.9	40	5.7	10
Indiana	115	80	69.6	28	24.3	7	6.1	3
Iowa	43	31	72.1	7	16.3	4	9.3	1
Kansas	63	46	73.0	15	23.8	2	3.2	0
Kentucky	152	124	81.6	20	13.2	8	5.3	3
Louisiana	294	243	82.7	35	11.9	16	5.4	1
Maine	20	14	70.0	5	25.0	1	5.0	0
Maryland	262	181	69.1	42	16.0	39	14.9	14
Massachusetts	270	161	59.6	92	34.1	17	6.3	9
Michigan	330	229	69.4	74	22.4	27	8.2	5
Minnesota	239	121	50.6	95	39.7	23	9.6	14
Mississippi	154	119	77.3	31	20.1	3	1.9	0
Missouri	157	113	72.0	29	18.5	15	9.6	4
Montana	20	13	65.0	3	15.0	4	20.0	1
Nebraska	40	29	72.5	8	20.0	3	7.5	3
Nevada	96	77	80.2	15	15.6	2	2.1	0
New Hampshire	20	11	55.0	9	45.0	0	0.0	0
New Jersey	530	369	69.6	119	22.5	42	7.9	9
New Mexico	54	42	77.8	9	16.7	3	5.6	0
New York	1,676	1,159	69.2	380	22.7	137	8.2	29
North Carolina	398	286	71.9	80	20.1	32	8.0	14
North Dakota	6	3	50.0	2	33.3	1	16.7	0
Ohio	306	216	70.6	74	24.2	16	5.2	5
Oklahoma	194	127	65.5	41	21.1	26	13.4	4
Oregon	123	79	64.2	27	22.0	17	13.8	11
Pennsylvania	350	229	65.4	82	23.4	39	11.1	10
Rhode Island	60	40	66.7	16	26.7	4	6.7	1
South Carolina	263	180	68.4	51	19.4	32	12.2	9
South Dakota	13	11	84.6	2	15.4	0	0.0	0
Tennessee	313	233	74.4	44	14.1	36	11.5	4
Texas	1,643	1,229	74.8	293	17.8	121	7.4	30
Utah	35	24	68.6	6	17.1	5	14.3	0
Vermont	7	4	57.1	3	42.9	0	0.0	0
Virginia	306	218	71.2	77	25.2	8	2.6	1
Washington	261	151	57.9	84	32.2	25	9.6	7
West Virginia	32	25	78.1	3	9.4	4	12.5	0
Wisconsin	86	59	68.6	20	23.3	7	8.1	3
Wyoming	3	1	33.3	1	33.3	1	33.3	0
American Samoa <sup>4</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	...	...	...	...	...	...	...	...
Guam <sup>4</sup>	63	58	92.1	3	4.8	2	3.2	1
N. Mariana Islands <sup>4</sup>	58	45	77.6	8	13.8	5	8.6	1
Puerto Rico <sup>4</sup>	121	106	87.6	13	10.7	2	1.7	0
Republic of Palau <sup>4</sup>	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Includes cases with pulmonary listed as major site of disease and no additional site of disease.<sup>2</sup>Includes cases with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, or other site, excluding pulmonary, listed as major site of disease.<sup>3</sup>Includes military cases.<sup>4</sup>Not included in U.S. totals.

Ellipses indicate data not available.

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

**Table 24. Extrapulmonary Tuberculosis Cases by Site of Disease: States, 2001**

State	Total Extrapulmonary Cases	Site of Disease						
		Pleural	Lymphatic	Bone and/ or Joint	Genito- urinary	Meningeal	Peritoneal	Other
<b>United States</b>	<b>3,212</b>	<b>589</b>	<b>1,365</b>	<b>329</b>	<b>191</b>	<b>194</b>	<b>148</b>	<b>396</b>
Alabama	35	6	6	8	3	5	2	5
Alaska	5	0	2	0	1	0	1	1
Arizona	45	6	15	8	3	4	4	5
Arkansas	18	7	3	0	4	0	0	4
California	626	99	273	73	41	39	30	71
Colorado	33	3	19	2	4	4	0	1
Connecticut	22	1	14	2	2	1	0	2
Delaware	7	2	2	1	0	0	1	1
District of Columbia	22	6	13	1	0	1	0	1
Florida	172	35	70	13	14	13	4	23
Georgia	114	20	46	12	8	8	7	13
Hawaii	20	5	7	1	0	0	4	3
Idaho	2	1	1	0	0	0	0	0
Illinois	169	30	81	16	5	6	4	27
Indiana	28	5	9	6	0	2	1	5
Iowa	7	0	2	0	2	1	1	1
Kansas	15	3	6	1	0	0	0	5
Kentucky	20	7	8	1	1	0	0	3
Louisiana	35	9	8	2	1	0	2	13
Maine	5	1	3	0	1	0	0	0
Maryland	42	8	24	4	1	4	1	0
Massachusetts	92	21	40	11	4	2	5	9
Michigan	74	11	34	10	5	3	2	9
Minnesota	95	23	40	2	4	5	4	17
Mississippi	31	17	6	0	1	1	2	4
Missouri	29	5	12	4	3	0	3	2
Montana	3	2	1	0	0	0	0	0
Nebraska	8	1	6	0	1	0	0	0
Nevada	15	1	5	1	0	2	3	3
New Hampshire	9	0	5	2	0	0	1	1
New Jersey	119	13	67	17	7	4	3	8
New Mexico	9	1	3	0	1	2	0	2
New York	380	61	171	43	21	21	20	43
North Carolina	80	24	29	10	3	1	3	10
North Dakota	2	0	1	1	0	0	0	0
Ohio	74	13	27	12	2	4	4	12
Oklahoma	41	6	19	4	4	2	0	6
Oregon	27	8	7	1	4	3	2	2
Pennsylvania	82	17	29	10	3	7	2	14
Rhode Island	16	2	8	0	0	0	1	5
South Carolina	51	10	16	5	5	3	5	7
South Dakota	2	0	0	0	1	0	0	1
Tennessee	44	13	12	3	3	4	3	6
Texas	293	57	112	27	13	31	14	39
Utah	6	0	1	0	2	2	1	0
Vermont	3	1	0	1	0	0	0	1
Virginia	77	11	47	5	4	7	2	1
Washington	84	15	41	9	6	1	6	6
West Virginia	3	0	1	0	2	0	0	0
Wisconsin	20	2	12	0	1	1	0	4
Wyoming	1	0	1	0	0	0	0	0
American Samoa <sup>1</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>1</sup>	...	...	...	...	...	...	...	...
Guam <sup>1</sup>	3	0	2	0	1	0	0	0
N. Mariana Islands <sup>1</sup>	8	4	2	0	1	0	1	0
Puerto Rico <sup>1</sup>	13	5	3	2	0	1	0	2
Republic of Palau <sup>1</sup>	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>1</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Not included in U.S. totals.

Ellipses indicate data not available.

**Table 25. Tuberculosis Cases in Residents of Correctional Facilities: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Percent of Cases in Residents of Correctional Facilities <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>15,920</b>	<b>99.6</b>	<b>3.3</b>
Alabama	265	265	100.0	2.3
Alaska	54	54	100.0	5.6
Arizona	289	289	100.0	5.5
Arkansas	162	162	100.0	1.2
California	3,332	3,324	99.8	3.5
Colorado	138	138	100.0	1.4
Connecticut	121	120	99.2	2.5
Delaware	33	33	100.0	0.0
District of Columbia	74	74	100.0	1.4
Florida	1,145	1,139	99.5	5.4
Georgia	575	572	99.5	5.4
Hawaii	151	149	98.7	0.0
Idaho	9	9	100.0	0.0
Illinois	707	703	99.4	2.4
Indiana	115	115	100.0	0.9
Iowa	43	43	100.0	0.0
Kansas	63	60	95.2	0.0
Kentucky	152	152	100.0	3.3
Louisiana	294	293	99.7	3.4
Maine	20	20	100.0	0.0
Maryland	262	262	100.0	1.5
Massachusetts	270	269	99.6	1.1
Michigan	330	330	100.0	0.9
Minnesota	239	239	100.0	0.4
Mississippi	154	134	87.0	3.0
Missouri	157	157	100.0	3.2
Montana	20	20	100.0	0.0
Nebraska	40	40	100.0	2.5
Nevada	96	96	100.0	1.0
New Hampshire	20	20	100.0	0.0
New Jersey	530	528	99.6	0.4
New Mexico	54	54	100.0	0.0
New York State <sup>2</sup>	415	415	100.0	2.9
New York City	1,261	1,257	99.7	2.4
North Carolina	398	398	100.0	1.3
North Dakota	6	6	100.0	0.0
Ohio	306	306	100.0	4.2
Oklahoma	194	194	100.0	2.6
Oregon	123	123	100.0	1.6
Pennsylvania	350	347	99.1	2.9
Rhode Island	60	60	100.0	0.0
South Carolina	263	263	100.0	2.3
South Dakota	13	13	100.0	0.0
Tennessee	313	313	100.0	2.6
Texas	1,643	1,643	100.0	6.8
Utah	35	34	97.1	0.0
Vermont	7	7	100.0	0.0
Virginia	306	296	96.7	1.0
Washington	261	261	100.0	3.8
West Virginia	32	32	100.0	3.1
Wisconsin	86	86	100.0	5.8
Wyoming	3	3	100.0	33.3
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	63	100.0	3.2
N. Mariana Islands <sup>3</sup>	58	58	100.0	0.0
Puerto Rico <sup>3</sup>	121	121	100.0	3.3
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Resident of correctional facility at time of diagnosis. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup>Excludes New York City.

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

Ellipses indicate data not available.



**Table 26. Tuberculosis Cases by Homeless Status: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Homeless Status		Percent of Cases in Homeless Persons <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>15,255</b>	<b>95.4</b>	<b>6.1</b>
Alabama	265	265	100.0	2.6
Alaska	54	54	100.0	1.9
Arizona	289	283	97.9	15.5
Arkansas	162	162	100.0	1.2
California	3,332	3,300	99.0	7.1
Colorado	138	138	100.0	5.8
Connecticut	121	116	95.9	9.5
Delaware	33	33	100.0	6.1
District of Columbia	74	74	100.0	8.1
Florida	1,145	1,140	99.6	9.3
Georgia	575	549	95.5	10.9
Hawaii	151	151	100.0	0.0
Idaho	9	8	88.9	0.0
Illinois	707	693	98.0	3.3
Indiana	115	115	100.0	3.5
Iowa	43	43	100.0	4.7
Kansas	63	58	92.1	6.9
Kentucky	152	148	97.4	6.8
Louisiana	294	282	95.9	5.0
Maine	20	19	95.0	10.5
Maryland	262	261	99.6	2.3
Massachusetts	270	264	97.8	3.0
Michigan	330	324	98.2	4.3
Minnesota	239	237	99.2	5.5
Mississippi	154	122	79.2	4.9
Missouri	157	155	98.7	10.3
Montana	20	20	100.0	15.0
Nebraska	40	40	100.0	10.0
Nevada	96	96	100.0	7.3
New Hampshire	20	20	100.0	10.0
New Jersey	530	525	99.1	2.3
New Mexico	54	54	100.0	9.3
New York State <sup>2</sup>	415	397	95.7	2.3
New York City	1,261	750	59.5	--
North Carolina	398	396	99.5	8.1
North Dakota	6	6	100.0	0.0
Ohio	306	304	99.3	5.3
Oklahoma	194	194	100.0	6.7
Oregon	123	122	99.2	23.0
Pennsylvania	350	336	96.0	1.8
Rhode Island	60	60	100.0	0.0
South Carolina	263	262	99.6	3.1
South Dakota	13	13	100.0	7.7
Tennessee	313	310	99.0	11.0
Texas	1,643	1,643	100.0	5.1
Utah	35	35	100.0	14.3
Vermont	7	7	100.0	0.0
Virginia	306	294	96.1	2.0
Washington	261	260	99.6	8.1
West Virginia	32	28	87.5	10.7
Wisconsin	86	86	100.0	8.1
Wyoming	3	3	100.0	0.0
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	61	96.8	0.0
N. Mariana Islands <sup>3</sup>	58	58	100.0	0.0
Puerto Rico <sup>3</sup>	121	121	100.0	4.1
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Homeless within past 12 months. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 27. Tuberculosis Cases in Residents of Long-term Care Facilities: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Residence in Long-term Care Facilities		Percent of Cases in Residents of Long-term Care Facilities <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>15,918</b>	<b>99.6</b>	<b>2.8</b>
Alabama	265	265	100.0	3.4
Alaska	54	54	100.0	1.9
Arizona	289	289	100.0	4.8
Arkansas	162	162	100.0	4.9
California	3,332	3,322	99.7	2.0
Colorado	138	138	100.0	2.9
Connecticut	121	118	97.5	5.1
Delaware	33	33	100.0	0.0
District of Columbia	74	74	100.0	0.0
Florida	1,145	1,138	99.4	1.2
Georgia	575	572	99.5	3.7
Hawaii	151	150	99.3	1.3
Idaho	9	9	100.0	11.1
Illinois	707	704	99.6	3.3
Indiana	115	115	100.0	2.6
Iowa	43	43	100.0	4.7
Kansas	63	60	95.2	3.3
Kentucky	152	152	100.0	6.6
Louisiana	294	292	99.3	1.7
Maine	20	20	100.0	0.0
Maryland	262	262	100.0	5.0
Massachusetts	270	270	100.0	1.5
Michigan	330	330	100.0	3.3
Minnesota	239	239	100.0	1.7
Mississippi	154	134	87.0	3.0
Missouri	157	156	99.4	1.9
Montana	20	20	100.0	5.0
Nebraska	40	40	100.0	2.5
Nevada	96	96	100.0	2.1
New Hampshire	20	20	100.0	0.0
New Jersey	530	530	100.0	1.5
New Mexico	54	54	100.0	3.7
New York State <sup>2</sup>	415	415	100.0	3.1
New York City	1,261	1,255	99.5	1.8
North Carolina	398	398	100.0	5.3
North Dakota	6	6	100.0	16.7
Ohio	306	306	100.0	5.6
Oklahoma	194	194	100.0	3.1
Oregon	123	123	100.0	2.4
Pennsylvania	350	345	98.6	3.8
Rhode Island	60	60	100.0	0.0
South Carolina	263	263	100.0	4.2
South Dakota	13	13	100.0	7.7
Tennessee	313	313	100.0	4.8
Texas	1,643	1,643	100.0	3.2
Utah	35	35	100.0	0.0
Vermont	7	7	100.0	0.0
Virginia	306	299	97.7	2.0
Washington	261	261	100.0	1.9
West Virginia	32	32	100.0	6.3
Wisconsin	86	86	100.0	3.5
Wyoming	3	3	100.0	0.0
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	63	100.0	0.0
N. Mariana Islands <sup>3</sup>	58	58	100.0	0.0
Puerto Rico <sup>3</sup>	121	121	100.0	6.6
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Resident of long-term care facility at time of diagnosis. 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>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 28. Tuberculosis Cases by Injecting Drug Use: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Percent of Cases in Injecting Drug Users <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>14,871</b>	<b>93.0</b>	<b>2.3</b>
Alabama	265	265	100.0	2.6
Alaska	54	49	90.7	0.0
Arizona	289	275	95.2	4.0
Arkansas	162	159	98.1	1.3
California	3,332	3,210	96.3	2.7
Colorado	138	138	100.0	0.7
Connecticut	121	106	87.6	6.6
Delaware	33	33	100.0	0.0
District of Columbia	74	73	98.6	0.0
Florida	1,145	1,109	96.9	3.8
Georgia	575	502	87.3	1.8
Hawaii	151	120	79.5	0.0
Idaho	9	8	88.9	0.0
Illinois	707	651	92.1	2.6
Indiana	115	115	100.0	5.2
Iowa	43	12	27.9	--
Kansas	63	51	81.0	3.9
Kentucky	152	150	98.7	0.7
Louisiana	294	282	95.9	2.5
Maine	20	19	95.0	0.0
Maryland	262	259	98.9	2.7
Massachusetts	270	264	97.8	0.8
Michigan	330	314	95.2	3.2
Minnesota	239	236	98.7	0.4
Mississippi	154	127	82.5	0.0
Missouri	157	154	98.1	1.9
Montana	20	19	95.0	0.0
Nebraska	40	39	97.5	0.0
Nevada	96	95	99.0	0.0
New Hampshire	20	20	100.0	0.0
New Jersey	530	527	99.4	3.8
New Mexico	54	52	96.3	1.9
New York State <sup>2</sup>	415	382	92.0	1.3
New York City	1,261	849	67.3	--
North Carolina	398	382	96.0	1.6
North Dakota	6	5	83.3	20.0
Ohio	306	302	98.7	1.3
Oklahoma	194	194	100.0	4.1
Oregon	123	119	96.7	2.5
Pennsylvania	350	299	85.4	1.3
Rhode Island	60	60	100.0	0.0
South Carolina	263	260	98.9	0.0
South Dakota	13	13	100.0	0.0
Tennessee	313	303	96.8	1.7
Texas	1,643	1,591	96.8	2.2
Utah	35	34	97.1	5.9
Vermont	7	7	100.0	0.0
Virginia	306	277	90.5	1.4
Washington	261	253	96.9	2.0
West Virginia	32	22	68.8	--
Wisconsin	86	84	97.7	0.0
Wyoming	3	2	66.7	--
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	61	96.8	0.0
N. Mariana Islands <sup>3</sup>	58	58	100.0	0.0
Puerto Rico <sup>3</sup>	121	121	100.0	17.4
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Injecting drug use within past 12 months. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 29. Tuberculosis Cases by Noninjecting Drug Use: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Percent of Cases in Noninjecting Drug Users <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>14,780</b>	<b>92.4</b>	<b>7.2</b>
Alabama	265	265	100.0	8.7
Alaska	54	49	90.7	0.0
Arizona	289	276	95.5	7.6
Arkansas	162	157	96.9	1.9
California	3,332	3,198	96.0	6.5
Colorado	138	138	100.0	6.5
Connecticut	121	104	86.0	8.7
Delaware	33	33	100.0	3.0
District of Columbia	74	73	98.6	2.7
Florida	1,145	1,105	96.5	14.0
Georgia	575	502	87.3	10.0
Hawaii	151	120	79.5	0.8
Idaho	9	7	77.8	14.3
Illinois	707	638	90.2	13.0
Indiana	115	115	100.0	3.5
Iowa	43	11	25.6	--
Kansas	63	54	85.7	20.4
Kentucky	152	149	98.0	7.4
Louisiana	294	276	93.9	14.1
Maine	20	19	95.0	5.3
Maryland	262	260	99.2	5.8
Massachusetts	270	263	97.4	1.5
Michigan	330	310	93.9	5.2
Minnesota	239	236	98.7	3.4
Mississippi	154	118	76.6	10.2
Missouri	157	152	96.8	7.9
Montana	20	20	100.0	10.0
Nebraska	40	36	90.0	0.0
Nevada	96	86	89.6	1.2
New Hampshire	20	20	100.0	5.0
New Jersey	530	526	99.2	6.8
New Mexico	54	52	96.3	1.9
New York State <sup>2</sup>	415	380	91.6	3.9
New York City	1,261	845	67.0	--
North Carolina	398	383	96.2	9.1
North Dakota	6	5	83.3	20.0
Ohio	306	301	98.4	5.0
Oklahoma	194	194	100.0	9.8
Oregon	123	119	96.7	6.7
Pennsylvania	350	289	82.6	2.4
Rhode Island	60	60	100.0	0.0
South Carolina	263	260	98.9	8.8
South Dakota	13	13	100.0	0.0
Tennessee	313	302	96.5	8.9
Texas	1,643	1,588	96.7	6.5
Utah	35	34	97.1	2.9
Vermont	7	7	100.0	0.0
Virginia	306	272	88.9	2.2
Washington	261	252	96.6	2.4
West Virginia	32	22	68.8	--
Wisconsin	86	84	97.7	7.1
Wyoming	3	2	66.7	--
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	59	93.7	0.0
N. Mariana Islands <sup>3</sup>	58	58	100.0	6.9
Puerto Rico <sup>3</sup>	121	121	100.0	22.3
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Noninjecting drug use within past 12 months. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 30. Tuberculosis Cases by Excess Alcohol Use: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Percent of Cases in Persons with Excess Alcohol Use <sup>1</sup>
		No.	%	
<b>United States</b>	<b>15,989</b>	<b>14,843</b>	<b>92.8</b>	<b>15.2</b>
Alabama	265	265	100.0	20.0
Alaska	54	49	90.7	26.5
Arizona	289	278	96.2	21.2
Arkansas	162	158	97.5	11.4
California	3,332	3,210	96.3	11.7
Colorado	138	138	100.0	13.0
Connecticut	121	104	86.0	18.3
Delaware	33	33	100.0	6.1
District of Columbia	74	73	98.6	15.1
Florida	1,145	1,111	97.0	26.6
Georgia	575	498	86.6	17.7
Hawaii	151	121	80.1	24.8
Idaho	9	9	100.0	11.1
Illinois	707	645	91.2	13.0
Indiana	115	115	100.0	20.0
Iowa	43	11	25.6	--
Kansas	63	57	90.5	22.8
Kentucky	152	149	98.0	18.8
Louisiana	294	268	91.2	29.5
Maine	20	20	100.0	5.0
Maryland	262	257	98.1	5.8
Massachusetts	270	265	98.1	6.4
Michigan	330	315	95.5	11.1
Minnesota	239	237	99.2	6.8
Mississippi	154	126	81.8	31.7
Missouri	157	154	98.1	17.5
Montana	20	20	100.0	30.0
Nebraska	40	38	95.0	7.9
Nevada	96	95	99.0	10.5
New Hampshire	20	20	100.0	5.0
New Jersey	530	524	98.9	9.7
New Mexico	54	53	98.1	17.0
New York State <sup>2</sup>	415	373	89.9	8.3
New York City	1,261	850	67.4	--
North Carolina	398	383	96.2	19.6
North Dakota	6	5	83.3	0.0
Ohio	306	300	98.0	14.3
Oklahoma	194	194	100.0	10.8
Oregon	123	119	96.7	17.6
Pennsylvania	350	287	82.0	10.1
Rhode Island	60	59	98.3	1.7
South Carolina	263	259	98.5	31.3
South Dakota	13	13	100.0	30.8
Tennessee	313	304	97.1	19.7
Texas	1,643	1,596	97.1	19.0
Utah	35	34	97.1	14.7
Vermont	7	7	100.0	0.0
Virginia	306	279	91.2	5.0
Washington	261	254	97.3	7.1
West Virginia	32	23	71.9	--
Wisconsin	86	85	98.8	12.9
Wyoming	3	3	100.0	33.3
American Samoa <sup>3</sup>	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...
Guam <sup>3</sup>	63	63	100.0	1.6
N. Mariana Islands <sup>3</sup>	58	57	98.3	21.1
Puerto Rico <sup>3</sup>	121	121	100.0	19.8
Republic of Palau <sup>3</sup>	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...

<sup>1</sup>Excess alcohol use within past 12 months. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 31. Tuberculosis Cases by Initial Drug Regimen: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases Alive at Diagnosis	Cases with Information on Initial Drug Regimen		Percent of Cases with Initial Drug Regimen <sup>1,2</sup>		
			No.	%	IR	IRZ	IRZ,E/S
<b>United States</b>	<b>15,989</b>	<b>15,614</b>	<b>15,541</b>	<b>99.5</b>	<b>1.6</b>	<b>9.4</b>	<b>78.8</b>
Alabama	265	255	255	100.0	0.8	65.5	27.8
Alaska	54	53	53	100.0	0.0	7.5	92.5
Arizona	289	283	283	100.0	0.0	7.4	83.0
Arkansas	162	158	149	94.3	26.8	40.9	26.8
California	3,332	3,281	3,276	99.8	0.9	4.7	87.1
Colorado	138	136	136	100.0	0.7	2.2	86.8
Connecticut	121	118	118	100.0	2.5	9.3	82.2
Delaware	33	33	33	100.0	0.0	9.1	84.8
District of Columbia	74	73	73	100.0	0.0	8.2	82.2
Florida	1,145	1,107	1,107	100.0	0.9	7.3	82.5
Georgia	575	561	557	99.3	0.4	9.0	80.4
Hawaii	151	147	146	99.3	4.1	11.0	71.2
Idaho	9	9	9	100.0	11.1	0.0	77.8
Illinois	707	693	691	99.7	1.0	9.4	78.7
Indiana	115	107	107	100.0	0.9	19.6	74.8
Iowa	43	40	39	97.5	0.0	25.6	69.2
Kansas	63	58	58	100.0	6.9	6.9	74.1
Kentucky	152	148	148	100.0	3.4	12.8	77.0
Louisiana	294	282	278	98.6	0.7	16.9	76.6
Maine	20	20	19	95.0	0.0	15.8	68.4
Maryland	262	253	253	100.0	0.0	2.8	93.7
Massachusetts	270	267	266	99.6	1.1	6.8	84.2
Michigan	330	319	319	100.0	6.0	25.7	61.4
Minnesota	239	238	238	100.0	0.4	10.5	84.5
Mississippi	154	150	146	97.3	0.7	11.0	83.6
Missouri	157	152	152	100.0	1.3	7.2	81.6
Montana	20	19	18	94.7	0.0	22.2	72.2
Nebraska	40	36	36	100.0	2.8	22.2	55.6
Nevada	96	93	93	100.0	0.0	1.1	94.6
New Hampshire	20	20	19	95.0	0.0	10.5	89.5
New Jersey	530	520	517	99.4	2.3	8.7	76.8
New Mexico	54	50	50	100.0	0.0	38.0	60.0
New York State <sup>3</sup>	415	406	406	100.0	0.5	6.7	86.7
New York City	1,261	1,236	1,236	100.0	0.7	3.2	77.1
North Carolina	398	389	389	100.0	0.3	2.6	88.2
North Dakota	6	6	6	100.0	0.0	16.7	83.3
Ohio	306	300	299	99.7	2.3	25.8	62.2
Oklahoma	194	187	186	99.5	11.8	20.4	53.8
Oregon	123	122	122	100.0	0.8	7.4	87.7
Pennsylvania	350	339	330	97.3	0.6	7.6	70.3
Rhode Island	60	60	60	100.0	1.7	3.3	80.0
South Carolina	263	254	254	100.0	0.8	13.4	78.7
South Dakota	13	12	12	100.0	8.3	16.7	75.0
Tennessee	313	299	299	100.0	1.0	14.7	77.3
Texas	1,643	1,611	1,599	99.3	2.6	7.6	72.3
Utah	35	34	34	100.0	0.0	5.9	85.3
Vermont	7	7	7	100.0	0.0	14.3	85.7
Virginia	306	301	291	96.7	1.7	6.2	84.9
Washington	261	258	255	98.8	1.6	5.9	85.5
West Virginia	32	29	29	100.0	0.0	20.7	72.4
Wisconsin	86	82	82	100.0	1.2	12.2	80.5
Wyoming	3	3	3	100.0	0.0	33.3	66.7
American Samoa <sup>4</sup>	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	...	...	...	...	...	...	...
Guam <sup>4</sup>	63	62	61	98.4	0.0	1.6	88.5
N. Mariana Islands <sup>4</sup>	58	57	57	100.0	1.8	1.8	89.5
Puerto Rico <sup>4</sup>	121	110	110	100.0	0.0	0.0	98.2
Republic of Palau <sup>4</sup>	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...	...

<sup>1</sup>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>2</sup>I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin.

<sup>3</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Note:** Excluding cases with no information on initial drug regimen, 279 (1.8%) were not started on any drugs, 15 (0.1%) were started on one drug, and 1,284 (8.3%) had an initial multidrug regimen other than IR, IRZ, or IRZ,E/S.

**Table 32. Isoniazid-Resistant Tuberculosis Cases with or without Rifampin Resistance: 59 Reporting Areas, 2001**

Reporting Area	Total Culture Positive Cases	Cases with Initial Drug Susceptibility Testing Performed		Resistance <sup>1</sup>			
		No.	%	Isoniazid		Isoniazid and Rifampin	
				No.	%	No.	%
<b>United States</b>	<b>12,780</b>	<b>11,787</b>	<b>92.2</b>	<b>870</b>	<b>7.4</b>	<b>145</b>	<b>1.2</b>
Alabama	224	201	89.7	15	7.5	1	0.5
Alaska	45	45	100.0	2	4.4	0	0.0
Arizona	228	223	97.8	12	5.4	3	1.3
Arkansas	115	104	90.4	4	3.8	0	0.0
California	2,602	2,443	93.9	220	9.0	27	1.1
Colorado	103	103	100.0	10	9.7	2	1.9
Connecticut	111	106	95.5	7	6.6	1	0.9
Delaware	24	24	100.0	3	12.5	0	0.0
District of Columbia	61	53	86.9	4	7.5	0	0.0
Florida	953	894	93.8	87	9.7	6	0.7
Georgia	454	405	89.2	26	6.4	2	0.5
Hawaii	124	111	89.5	7	6.3	1	0.9
Idaho	7	7	100.0	0	0.0	0	0.0
Illinois	561	510	90.9	40	7.8	5	1.0
Indiana	93	93	100.0	3	3.2	0	0.0
Iowa	34	25	73.5	--	--	--	--
Kansas	50	46	92.0	4	8.7	2	4.3
Kentucky	133	127	95.5	6	4.7	3	2.4
Louisiana	241	196	81.3	4	2.0	0	0.0
Maine	10	9	90.0	1	11.1	0	0.0
Maryland	220	201	91.4	13	6.5	2	1.0
Massachusetts	219	213	97.3	16	7.5	5	2.3
Michigan	248	236	95.2	11	4.7	7	3.0
Minnesota	194	191	98.5	23	12.0	4	2.1
Mississippi	114	105	92.1	7	6.7	2	1.9
Missouri	126	122	96.8	5	4.1	1	0.8
Montana	16	15	93.8	0	0.0	0	0.0
Nebraska	40	35	87.5	1	2.9	0	0.0
Nevada	82	72	87.8	5	6.9	1	1.4
New Hampshire	17	17	100.0	2	11.8	0	0.0
New Jersey	442	423	95.7	40	9.5	8	1.9
New Mexico	49	49	100.0	4	8.2	0	0.0
New York State <sup>2</sup>	287	284	99.0	25	8.8	6	2.1
New York City	972	903	92.9	85	9.4	26	2.9
North Carolina	331	319	96.4	9	2.8	1	0.3
North Dakota	5	5	100.0	0	0.0	0	0.0
Ohio	242	236	97.5	10	4.2	0	0.0
Oklahoma	149	136	91.3	9	6.6	0	0.0
Oregon	103	103	100.0	8	7.8	1	1.0
Pennsylvania	304	255	83.9	24	9.4	6	2.4
Rhode Island	34	34	100.0	5	14.7	0	0.0
South Carolina	194	184	94.8	3	1.6	1	0.5
South Dakota	12	12	100.0	1	8.3	0	0.0
Tennessee	251	231	92.0	9	3.9	0	0.0
Texas	1,329	1,203	90.5	53	4.4	10	0.8
Utah	27	27	100.0	2	7.4	0	0.0
Vermont	7	7	100.0	1	14.3	0	0.0
Virginia	261	121	46.4	--	--	--	--
Washington	227	218	96.0	23	10.6	5	2.3
West Virginia	31	31	100.0	4	12.9	0	0.0
Wisconsin	71	71	100.0	5	7.0	2	2.8
Wyoming	3	3	100.0	0	0.0	0	0.0
American Samoa <sup>3</sup>	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...	...	...	...
Guam <sup>3</sup>	43	40	93.0	8	20.0	4	10.0
N. Mariana Islands <sup>3</sup>	32	30	93.8	7	23.3	4	13.3
Puerto Rico <sup>3</sup>	109	100	91.7	8	8.0	2	2.0
Republic of Palau <sup>3</sup>	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...	...	...

<sup>1</sup>Isolates may be resistant to other drugs. 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>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 33. Tuberculosis Cases, Aged 25 - 44, by HIV Status: 59 Reporting Areas, 2001**

Reporting Area	Total Cases	Cases with Information on HIV Status <sup>1</sup>		Percent of Cases in HIV-Positive Persons <sup>2</sup>
		No.	%	
<b>United States</b>	<b>5,630</b>	<b>3,254</b>	<b>57.8</b>	--
Alabama	69	66	95.7	16.7
Alaska	17	10	58.8	--
Arizona	88	71	80.7	11.3
Arkansas	39	36	92.3	13.9
California	1,109	0	0.0	--
Colorado	44	42	95.5	4.8
Connecticut	47	37	78.7	24.3
Delaware	12	8	66.7	--
District of Columbia	17	17	100.0	47.1
Florida	448	394	87.9	39.6
Georgia	233	205	88.0	25.9
Hawaii	30	2	6.7	--
Idaho	2	0	0.0	--
Illinois	259	166	64.1	--
Indiana	40	22	55.0	--
Iowa	10	5	50.0	--
Kansas	19	9	47.4	--
Kentucky	42	29	69.0	--
Louisiana	91	76	83.5	21.1
Maine	9	8	88.9	25.0
Maryland	110	93	84.5	19.4
Massachusetts	122	65	53.3	--
Michigan	110	68	61.8	--
Minnesota	91	74	81.3	5.4
Mississippi	43	30	69.8	--
Missouri	48	40	83.3	15.0
Montana	5	2	40.0	--
Nebraska	17	9	52.9	--
Nevada	30	27	90.0	18.5
New Hampshire	6	6	100.0	0.0
New Jersey	225	123	54.7	--
New Mexico	10	7	70.0	--
New York State <sup>3</sup>	136	103	75.7	16.5
New York City	544	277	50.9	--
North Carolina	133	115	86.5	25.2
North Dakota	0	0	0.0	--
Ohio	77	52	67.5	--
Oklahoma	52	46	88.5	17.4
Oregon	49	43	87.8	16.3
Pennsylvania	116	65	56.0	--
Rhode Island	17	15	88.2	20.0
South Carolina	81	79	97.5	15.2
South Dakota	5	4	80.0	0.0
Tennessee	104	93	89.4	36.6
Texas	594	420	70.7	--
Utah	10	7	70.0	--
Vermont	2	1	50.0	--
Virginia	129	80	62.0	--
Washington	91	70	76.9	5.7
West Virginia	12	7	58.3	--
Wisconsin	35	29	82.9	17.2
Wyoming	1	1	100.0	0.0
American Samoa <sup>4</sup>	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	...	...	...	...
Guam <sup>4</sup>	27	2	7.4	--
N. Mariana Islands <sup>4</sup>	29	27	93.1	0.0
Puerto Rico <sup>4</sup>	30	29	96.7	65.5
Republic of Palau <sup>4</sup>	...	...	...	...
U.S. Virgin Islands <sup>4</sup>	...	...	...	...

<sup>1</sup>Includes only those cases with negative, positive, or indeterminate HIV test results.

<sup>2</sup>Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>3</sup>Excludes New York City.

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

Ellipses indicate data not available.



**Table 34. Tuberculosis Cases by Occupation: 59 Reporting Areas, 2001**

Reporting Area	Cases with Information on								
	Total Cases	Occupation		Percent of Cases by Occupation					
		No.	%	Unemployed Past 24 Mos.	Health Care Worker	Correctional Employee	Migrant Worker	Other Occupation	Multiple Occupations
<b>United States</b>	<b>15,989</b>	<b>14,776</b>	<b>92.4</b>	<b>56.6</b>	<b>2.8</b>	<b>0.1</b>	<b>1.5</b>	<b>38.9</b>	<b>0.1</b>
Alabama	265	265	100.0	68.7	2.6	0.0	0.8	27.9	0.0
Alaska	54	22	40.7	--	--	--	--	--	--
Arizona	289	282	97.6	50.4	1.8	0.0	1.8	45.7	0.4
Arkansas	162	157	96.9	90.4	1.3	0.6	0.0	7.6	0.0
California	3,332	3,185	95.6	59.7	2.2	0.1	2.5	35.4	0.0
Colorado	138	138	100.0	52.9	3.6	0.0	3.6	39.1	0.7
Connecticut	121	112	92.6	50.9	1.8	0.0	0.0	46.4	0.9
Delaware	33	31	93.9	38.7	3.2	0.0	3.2	54.8	0.0
District of Columbia	74	74	100.0	77.0	0.0	1.4	0.0	21.6	0.0
Florida	1,145	1,131	98.8	45.4	2.1	0.3	4.2	47.7	0.4
Georgia	575	487	84.7	52.4	2.1	0.0	0.6	44.8	0.2
Hawaii	151	116	76.8	45.7	0.9	0.0	0.0	53.4	0.0
Idaho	9	9	100.0	44.4	0.0	0.0	11.1	44.4	0.0
Illinois	707	602	85.1	60.0	4.7	0.0	0.3	35.0	0.0
Indiana	115	115	100.0	47.0	0.0	0.0	0.9	52.2	0.0
Iowa	43	40	93.0	60.0	2.5	0.0	0.0	37.5	0.0
Kansas	63	55	87.3	41.8	1.8	0.0	0.0	56.4	0.0
Kentucky	152	149	98.0	67.8	2.0	0.7	2.7	26.8	0.0
Louisiana	294	277	94.2	61.0	1.1	0.0	0.4	37.5	0.0
Maine	20	20	100.0	45.0	5.0	0.0	0.0	50.0	0.0
Maryland	262	258	98.5	57.0	1.9	0.0	0.4	40.7	0.0
Massachusetts	270	257	95.2	47.9	6.6	0.0	1.2	44.4	0.0
Michigan	330	313	94.8	55.0	6.1	0.0	0.6	38.3	0.0
Minnesota	239	233	97.5	53.2	0.9	0.0	0.4	45.1	0.4
Mississippi	154	129	83.8	56.6	1.6	0.0	0.0	41.1	0.8
Missouri	157	155	98.7	59.4	5.2	0.0	0.0	35.5	0.0
Montana	20	19	95.0	57.9	5.3	0.0	0.0	36.8	0.0
Nebraska	40	38	95.0	36.8	5.3	0.0	0.0	57.9	0.0
Nevada	96	89	92.7	43.8	0.0	0.0	0.0	56.2	0.0
New Hampshire	20	19	95.0	36.8	15.8	0.0	0.0	47.4	0.0
New Jersey	530	526	99.2	57.0	3.0	0.0	0.2	39.7	0.0
New Mexico	54	53	98.1	69.8	3.8	0.0	0.0	26.4	0.0
New York State <sup>2</sup>	415	382	92.0	51.6	2.6	0.0	1.6	44.2	0.0
New York City	1,261	816	64.7	--	--	--	--	--	--
North Carolina	398	388	97.5	51.8	3.6	0.3	2.1	42.0	0.3
North Dakota	6	6	100.0	66.7	0.0	0.0	0.0	33.3	0.0
Ohio	306	304	99.3	58.9	3.0	0.0	0.0	37.8	0.3
Oklahoma	194	190	97.9	53.2	3.2	0.0	0.5	43.2	0.0
Oregon	123	121	98.4	52.9	4.1	0.0	8.3	33.9	0.8
Pennsylvania	350	281	80.3	60.5	4.3	0.0	0.4	34.5	0.4
Rhode Island	60	58	96.7	74.1	3.4	0.0	0.0	22.4	0.0
South Carolina	263	259	98.5	60.6	3.1	0.0	1.2	35.1	0.0
South Dakota	13	13	100.0	53.8	0.0	0.0	0.0	46.2	0.0
Tennessee	313	305	97.4	62.0	1.3	0.0	0.0	36.7	0.0
Texas	1,643	1,611	98.1	58.9	2.9	0.3	0.6	37.2	0.1
Utah	35	33	94.3	63.6	0.0	0.0	0.0	36.4	0.0
Vermont	7	7	100.0	85.7	0.0	0.0	0.0	14.3	0.0
Virginia	306	285	93.1	36.8	1.8	0.4	2.5	58.6	0.0
Washington	261	243	93.1	44.4	4.9	0.4	4.9	44.4	0.8
West Virginia	32	29	90.6	75.9	0.0	0.0	0.0	24.1	0.0
Wisconsin	86	86	100.0	55.8	4.7	0.0	0.0	39.5	0.0
Wyoming	3	3	100.0	33.3	0.0	0.0	0.0	66.7	0.0
American Samoa <sup>3</sup>	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...	...	...	...	...	...
Guam <sup>3</sup>	63	50	79.4	66.0	4.0	0.0	0.0	30.0	0.0
N. Mariana Islands <sup>3</sup>	58	57	98.3	17.5	0.0	0.0	0.0	82.5	0.0
Puerto Rico <sup>3</sup>	121	121	100.0	81.8	1.7	0.8	0.0	15.7	0.0
Republic of Palau <sup>3</sup>	...	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...	...	...	...	...

<sup>1</sup>Occupation within past 24 months. 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>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 35. Tuberculosis Cases by Type of Health Care Provider: 59 Reporting Areas, 1999**

Reporting Area	Cases with Information on Type of Health Care Provider				Percent of Cases by Type of Health Care Provider <sup>1</sup>		
	Total Cases	Cases Alive at Diagnosis	Cases		Health Department		Both Health Department and Private/Other
			No.	%	Private/Other	Private/Other	
<b>United States</b>	<b>17,504</b>	<b>16,965</b>	<b>16,692</b>	<b>98.4</b>	<b>46.5</b>	<b>25.9</b>	<b>27.6</b>
Alabama	314	301	298	99.0	59.4	12.8	27.9
Alaska	61	61	61	100.0	32.8	3.3	63.9
Arizona	262	250	249	99.6	58.6	28.1	13.3
Arkansas	181	175	167	95.4	66.5	1.8	31.7
California	3,606	3,514	3,475	98.9	51.8	28.5	19.7
Colorado	88	86	86	100.0	72.1	9.3	18.6
Connecticut	121	120	120	100.0	40.8	56.7	2.5
Delaware	34	34	34	100.0	67.6	20.6	11.8
District of Columbia	70	67	67	100.0	49.3	26.9	23.9
Florida	1,275	1,227	1,216	99.1	59.4	15.5	25.1
Georgia	670	651	641	98.5	56.0	12.2	31.8
Hawaii	184	178	173	97.2	42.2	13.9	43.9
Idaho	16	16	13	81.3	23.1	53.8	23.1
Illinois	822	806	785	97.4	45.5	37.1	17.5
Indiana	150	147	147	100.0	6.1	6.8	87.1
Iowa	58	57	42	73.7	--	--	--
Kansas	69	66	64	97.0	92.2	6.3	1.6
Kentucky	209	200	198	99.0	57.1	14.6	28.3
Louisiana	357	344	324	94.2	34.3	11.7	54.0
Maine	23	23	23	100.0	43.5	4.3	52.2
Maryland	292	285	285	100.0	80.0	7.7	12.3
Massachusetts	270	264	262	99.2	56.5	13.7	29.8
Michigan	349	334	332	99.4	33.4	27.1	39.5
Minnesota	201	198	198	100.0	53.0	45.5	1.5
Mississippi	215	208	207	99.5	69.6	3.9	26.6
Missouri	208	203	202	99.5	26.7	24.3	49.0
Montana	14	13	13	100.0	76.9	7.7	15.4
Nebraska	18	18	18	100.0	0.0	100.0	0.0
Nevada	93	92	88	95.7	81.8	12.5	5.7
New Hampshire	19	18	17	94.4	0.0	0.0	100.0
New Jersey	571	548	530	96.7	46.0	48.3	5.7
New Mexico	64	57	57	100.0	59.6	14.0	26.3
New York State <sup>2</sup>	376	363	353	97.2	44.5	35.1	20.4
New York City	1,448	1,413	1,387	98.2	32.6	24.3	43.1
North Carolina	488	477	473	99.2	37.0	10.4	52.6
North Dakota	7	7	7	100.0	0.0	28.6	71.4
Ohio	317	305	302	99.0	49.0	37.1	13.9
Oklahoma	208	197	187	94.9	89.8	6.4	3.7
Oregon	123	120	119	99.2	38.7	15.1	46.2
Pennsylvania	453	430	415	96.5	55.2	23.1	21.7
Rhode Island	53	53	52	98.1	88.5	11.5	0.0
South Carolina	315	302	299	99.0	75.3	10.7	14.0
South Dakota	21	19	19	100.0	52.6	0.0	47.4
Tennessee	382	371	371	100.0	22.1	12.4	65.5
Texas	1,639	1,585	1,556	98.2	21.7	51.9	26.4
Utah	40	36	36	100.0	38.9	2.8	58.3
Vermont	3	3	3	100.0	0.0	33.3	66.7
Virginia	334	325	325	100.0	43.7	47.1	9.2
Washington	258	250	248	99.2	50.0	21.4	28.6
West Virginia	42	40	40	100.0	15.0	22.5	62.5
Wisconsin	110	105	105	100.0	1.0	1.9	97.1
Wyoming	3	3	3	100.0	0.0	33.3	66.7
American Samoa <sup>3</sup>	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	...	...	...	...	...	...	...
Guam <sup>3</sup>	69	67	61	91.0	91.8	3.3	4.9
N. Mariana Islands <sup>3</sup>	66	64	63	98.4	98.4	0.0	1.6
Puerto Rico <sup>3</sup>	200	180	179	99.4	73.2	21.8	5.0
Republic of Palau <sup>3</sup>	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...	...	...

<sup>1</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>2</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 36. Tuberculosis Cases by Directly Observed Therapy: 59 Reporting Areas, 1999**

Reporting Area	Total Cases	Cases with Initial Drug Regimen Prescribed <sup>1</sup>	Cases with Information on Directly Observed Therapy		Percent of Cases by Administration of Therapy <sup>2</sup>	
			No.	%	DOT Only	Both DOT and Self-Administered
<b>United States</b>	<b>17,504</b>	<b>16,862</b>	<b>16,521</b>	<b>98.0</b>	<b>49.5</b>	<b>27.5</b>
Alabama	314	301	298	99.0	64.1	32.9
Alaska	61	61	60	98.4	81.7	18.3
Arizona	262	249	249	100.0	65.5	12.9
Arkansas	181	171	164	95.9	46.3	14.0
California	3,606	3,486	3,427	98.3	47.4	21.7
Colorado	88	86	86	100.0	82.6	10.5
Connecticut	121	120	119	99.2	65.5	4.2
Delaware	34	34	34	100.0	67.6	17.6
District of Columbia	70	67	67	100.0	50.7	9.0
Florida	1,275	1,215	1,207	99.3	42.4	42.9
Georgia	670	648	623	96.1	58.6	30.3
Hawaii	184	178	173	97.2	38.7	38.7
Idaho	16	16	14	87.5	64.3	21.4
Illinois	822	799	779	97.5	52.8	10.7
Indiana	150	147	147	100.0	56.5	13.6
Iowa	58	57	52	91.2	32.7	30.8
Kansas	69	66	64	97.0	73.4	18.8
Kentucky	209	198	196	99.0	53.1	31.6
Louisiana	357	340	315	92.6	61.9	26.3
Maine	23	23	23	100.0	78.3	0.0
Maryland	292	285	285	100.0	89.1	3.2
Massachusetts	270	262	260	99.2	31.9	21.9
Michigan	349	333	332	99.7	28.6	31.9
Minnesota	201	198	198	100.0	40.9	36.4
Mississippi	215	208	208	100.0	98.1	1.9
Missouri	208	201	196	97.5	65.3	24.0
Montana	14	13	13	100.0	84.6	7.7
Nebraska	18	18	18	100.0	22.2	22.2
Nevada	93	90	86	95.6	36.0	9.3
New Hampshire	19	18	18	100.0	55.6	38.9
New Jersey	571	546	528	96.7	9.5	47.2
New Mexico	64	57	57	100.0	57.9	17.5
New York State <sup>2</sup>	376	363	360	99.2	52.8	33.1
New York City	1,448	1,400	1,370	97.9	1.8	62.6
North Carolina	488	477	473	99.2	67.0	28.1
North Dakota	7	7	7	100.0	28.6	28.6
Ohio	317	301	300	99.7	54.7	14.7
Oklahoma	208	197	191	97.0	86.4	7.9
Oregon	123	119	118	99.2	61.0	11.9
Pennsylvania	453	428	403	94.2	53.3	20.6
Rhode Island	53	53	53	100.0	94.3	1.9
South Carolina	315	302	299	99.0	81.3	7.0
South Dakota	21	19	19	100.0	73.7	5.3
Tennessee	382	371	370	99.7	38.9	47.0
Texas	1,639	1,576	1,505	95.5	65.8	28.6
Utah	40	36	36	100.0	86.1	5.6
Vermont	3	3	3	100.0	100.0	0.0
Virginia	334	323	322	99.7	61.2	6.8
Washington	258	248	248	100.0	64.9	13.7
West Virginia	42	40	40	100.0	15.0	20.0
Wisconsin	110	105	105	100.0	59.0	19.0
Wyoming	3	3	3	100.0	0.0	66.7
American Samoa <sup>4</sup>	...	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	...	...	...	...	...	...
Guam <sup>4</sup>	69	67	61	91.0	1.6	98.4
N. Mariana Islands <sup>4</sup>	66	63	63	100.0	98.4	1.6
Puerto Rico <sup>4</sup>	200	177	176	99.4	64.2	1.7
Republic of Palau <sup>4</sup>	...	...	...	...	...	...
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...

<sup>1</sup>Includes patients alive at diagnosis with an initial drug regimen of one or more drugs prescribed.

<sup>2</sup>Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>3</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Table 37. Completion of Tuberculosis Therapy (COT): 59 Reporting Areas, 1999**

Reporting Area	Total Cases	Therapy ≤1 Year Indicated <sup>1</sup>			Therapy >1 Year Indicated <sup>2</sup>		Overall	
		No. <sup>3</sup>	COT ≤1 Year(%)	COT(%)	No. <sup>3</sup>	COT(%)	No. <sup>3</sup>	COT(%)
<b>United States</b>	<b>17,504</b>	<b>15,208</b>	<b>79.9</b>	<b>92.0</b>	<b>221</b>	<b>76.9</b>	<b>15,429</b>	<b>91.8</b>
Alabama	314	260	80.4	94.6	1	100.0	261	94.6
Alaska	61	59	88.1	94.9	0	...	59	94.9
Arizona	262	231	82.7	95.7	3	100.0	234	95.7
Arkansas	181	156	82.7	89.7	0	...	156	89.7
California	3,606	3,187	79.1	92.2	52	73.1	3,239	91.9
Colorado	88	80	88.8	96.3	2	100.0	82	96.3
Connecticut	121	108	78.7	95.4	3	66.7	111	94.6
Delaware	34	30	83.3	93.3	0	...	30	93.3
District of Columbia	70	57	84.2	91.2	2	50.0	59	89.8
Florida	1,275	1,076	83.8	94.6	17	100.0	1,093	94.7
Georgia	670	594	77.3	88.7	7	71.4	601	88.5
Hawaii	184	168	67.3	85.1	2	0.0	170	84.1
Idaho	16	13	76.9	76.9	0	...	13	76.9
Illinois	822	700	81.3	90.1	8	100.0	708	90.3
Indiana	150	133	79.7	93.2	3	100.0	136	93.4
Iowa	58	54	81.5	87.0	1	100.0	55	87.3
Kansas	69	62	80.6	90.3	3	100.0	65	90.8
Kentucky	209	177	80.2	93.2	2	50.0	179	92.7
Louisiana	357	311	74.6	84.2	0	...	311	84.2
Maine	23	19	94.7	94.7	0	...	19	94.7
Maryland	292	256	86.3	93.4	7	57.1	263	92.4
Massachusetts	270	247	80.6	91.5	2	100.0	249	91.6
Michigan	349	293	83.6	96.9	8	87.5	301	96.7
Minnesota	201	184	87.5	96.2	5	80.0	189	95.8
Mississippi	215	187	84.0	94.1	0	...	187	94.1
Missouri	208	174	79.3	93.1	2	100.0	176	93.2
Montana	14	10	90.0	90.0	0	...	10	90.0
Nebraska	18	18	55.6	83.3	0	...	18	83.3
Nevada	93	81	77.8	82.7	1	100.0	82	82.9
New Hampshire	19	17	94.1	94.1	0	...	17	94.1
New Jersey	571	492	71.5	90.7	6	83.3	498	90.6
New Mexico	64	48	87.5	97.9	0	...	48	97.9
New York State <sup>4</sup>	376	332	74.1	89.8	2	100.0	334	89.8
New York City	1,448	1,249	81.5	90.7	32	53.1	1,281	89.8
North Carolina	488	431	88.6	95.6	7	85.7	438	95.4
North Dakota	7	7	57.1	100.0	0	...	7	100.0
Ohio	317	262	71.4	90.1	1	100.0	263	90.1
Oklahoma	208	180	73.9	90.6	1	100.0	181	90.6
Oregon	123	114	78.1	89.5	1	100.0	115	89.6
Pennsylvania	453	370	75.7	91.1	8	75.0	378	90.7
Rhode Island	53	44	68.2	93.2	1	100.0	45	93.3
South Carolina	315	264	69.7	92.0	0	...	264	92.0
South Dakota	21	17	82.4	94.1	0	...	17	94.1
Tennessee	382	319	84.0	95.9	2	100.0	321	96.0
Texas	1,639	1,439	79.8	92.0	19	78.9	1,458	91.8
Utah	40	34	73.5	88.2	0	...	34	88.2
Vermont	3	2	50.0	100.0	0	...	2	100.0
Virginia	334	292	85.3	88.7	4	100.0	296	88.9
Washington	258	235	81.3	93.6	3	66.7	238	93.3
West Virginia	42	36	66.7	94.4	0	...	36	94.4
Wisconsin	110	96	86.5	97.9	3	66.7	99	97.0
Wyoming	3	3	100.0	100.0	0	...	3	100.0
American Samoa <sup>5</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>5</sup>	...	...	...	...	...	...	...	...
Guam <sup>5</sup>	69	65	...	...	0	...	65	...
N. Mariana Islands <sup>5</sup>	66	62	82.3	83.9	0	...	62	83.9
Puerto Rico <sup>5</sup>	200	148	82.4	94.6	1	100.0	149	94.6
Republic of Palau <sup>5</sup>	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>5</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Initial isolate susceptible to rifampin (n=11,516) or susceptibility unknown (n=328); culture-negative (n=2,541); culture status unknown (n=822); age unknown (n=1).

<sup>2</sup>Initial isolate rifampin resistant, or pediatric (aged <15) case with meningeal, bone or joint, or miliary disease.

<sup>3</sup>Number of cases in persons alive at diagnosis, with initial drug 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 on reason therapy stopped reported for ≥90% of cases.

<sup>4</sup>Excludes New York City.

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

Ellipses indicate data not available.

**Note:** See Technical Notes (Appendix A) for description of COT calculation.

**Table 38. Tuberculosis Cases in Selected Cities: 2001 and 2000**

City	Cases <sup>1</sup>	
	2001	2000
Albuquerque, NM	9	7
Anaheim, Calif	45	38
Arlington, Tex	24	20
Atlanta, Ga	120	127
Austin, Tex	77	65
Baltimore, Md	60	67
Birmingham, Ala	45	50
Boston, Mass	75	82
Buffalo, NY	8	10
Charlotte, NC	39	64
Chicago, Ill	377	400
Cincinnati, Ohio	16	22
Cleveland, Ohio	49	68
Colorado Springs, Colo	6	6
Columbus, Ohio	64	71
Corpus Christi, Tex	24	23
Dallas, Tex	194	142
Denver, Colo	55	40
Detroit, Mich	109	111
El Paso, Tex	60	52
Fort Worth, Tex	74	62
Fresno, Calif	69	68
Honolulu, Hawaii	63	59
Houston, Tex	392	364
Indianapolis, Ind	35	37
Jacksonville, Fla	88	102
Kansas City, Mo	30	42
Las Vegas, Nev	64	65
Long Beach, Calif	50	63
Los Angeles, Calif	420	443
Louisville, Ky	29	27
Memphis, Tenn	76	78
Mesa, Ariz	19	14
Miami, Fla	134	98
Milwaukee, Wis	28	37
Minneapolis, Minn	102	80
Nashville, Tenn	60	70
Newark, NJ	64	73
New Orleans, La	63	97
New York, NY	1,261	1,332
Norfolk, Va	8	12
Oakland, Calif	71	101
Oklahoma City, Okla	51	44
Omaha, Neb	18	9
Philadelphia, Pa	143	159
Phoenix, Ariz	100	104
Pittsburgh, Pa	18	9
Portland, Ore	44	43
Sacramento, Calif	98	93
St. Louis, Mo	38	47
St. Paul, Minn	38	19
San Antonio, Tex	76	84
San Diego, Calif	202	169
San Francisco, Calif	182	170
San Jose, Calif	137	150
Santa Ana, Calif	61	49
Seattle, Wash	79	77
Tampa, Fla	60	64
Toledo, Ohio	9	6
Tucson, Ariz	35	22
Tulsa, Okla	22	16
Virginia Beach, Va	5	14
Washington, DC	74	85
Wichita, Kan	23	25
<b>Total - 64 Cities</b>	<b>6,169</b>	<b>6,247</b>
San Juan, Puerto Rico	9	32

<sup>1</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 39. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with  $\geq$ 500,000 Population, 2001 and 2000**

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates
	2001	2000	2001	2000	2001
Akron, Ohio	19	16	2.7	2.3	696,960
Albany-Schenectady, NY	17	29	1.9	3.3	877,895
Albuquerque, NM	12	6	1.7	0.8	723,296
Allentown, Pa	14	15	2.2	2.4	643,489
Ann Arbor, Mich	7	14	1.2	2.4	590,910
Atlanta, Ga	313	403	7.3	9.8	4,262,584
Austin, Tex	105	81	8.0	6.5	1,313,231
Bakersfield, Calif	49	49	7.2	7.4	676,367
Baltimore, Md	116	119	4.5	4.7	2,572,945
Baton Rouge, La	20	22	3.3	3.6	607,523
Bergen-Passaic, NJ	86	78	6.2	5.7	1,377,757
Birmingham, Ala	70	80	7.5	8.7	928,108
Boston, Mass	261	276	4.3	4.6	6,099,037
Buffalo, NY	23	20	2.0	1.7	1,162,917
Charleston, SC	32	38	5.8	6.9	554,831
Charlotte, NC	75	104	4.9	6.9	1,544,944
Chicago, Ill	625	657	7.5	7.9	8,342,190
Cincinnati, Ohio	31	44	1.9	2.7	1,657,508
Cleveland, Ohio	79	108	3.5	4.8	2,245,681
Colorado Springs, Colo	7	7	1.3	1.4	533,428
Columbia, SC	25	27	4.6	5.0	543,543
Columbus, Ohio	84	85	5.4	5.5	1,559,597
Dallas, Tex	299	229	8.2	6.5	3,646,217
Dayton, Ohio	23	16	2.4	1.7	946,085
Daytona Beach, Fla	25	...	4.9	...	509,545
Denver, Colo	91	63	4.2	3.0	2,160,841
Detroit, Mich	199	194	4.5	4.4	4,448,235
El Paso, Tex	67	56	9.7	8.2	688,039
Fort Lauderdale, Fla	102	102	6.1	6.3	1,668,560
Fort Wayne, Ind	13	12	2.6	2.4	504,279
Fort Worth, Tex	114	101	6.5	5.9	1,754,520
Fresno, Calif	109	105	11.6	11.4	942,149
Gary, Ind	9	24	1.4	3.8	634,217
Grand Rapids, Mich	35	33	3.2	3.0	1,103,488
Greensboro, NC	50	41	3.9	3.3	1,268,603
Greenville, SC	34	42	3.5	4.4	978,213
Harrisburg, Pa	15	21	2.4	3.3	631,761
Hartford, Conn	40	29	3.5	2.5	1,157,645
Honolulu, Hawaii	124	108	14.1	12.3	881,295
Houston, Tex	464	432	10.8	10.3	4,290,277
Indianapolis, Ind	43	48	2.6	3.0	1,632,452
Jacksonville, Fla	99	125	8.7	11.4	1,131,490
Jersey City, NJ	84	85	13.8	14.0	607,554
Kansas City, Mo	50	73	2.8	4.1	1,803,445
Knoxville, Tenn	30	28	4.3	4.1	697,656
Las Vegas, Nev	74	88	4.5	5.6	1,660,516
Little Rock, Ark	24	21	4.1	3.6	590,024
Los Angeles, Calif	1,113	1,140	11.5	12.0	9,637,494
Louisville, Ky	38	36	3.7	3.5	1,030,841
McAllen, Tex	74	80	12.5	14.0	590,285
Memphis, Tenn	94	92	8.2	8.1	1,144,971
Miami, Fla	291	280	12.7	12.4	2,289,683
Middlesex, NJ	75	84	6.3	7.2	1,184,281
Milwaukee, Wis	32	46	2.1	3.1	1,502,461
Minneapolis-St. Paul, Minn	201	137	6.7	4.6	3,015,573

**Table 39. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population:  
Metropolitan Statistical Areas with  $\geq$ 500,000 Population, 2001 and 2000**

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2001
	2001	2000	2001	2000	
Mobile, Ala	34	31	6.2	5.7	545,572
Monmouth-Ocean City, NJ	33	41	2.9	3.6	1,150,184
Nashville, Tenn	89	96	7.1	7.8	1,251,830
Nassau-Suffolk, NY	162	137	5.8	5.0	2,773,621
New Haven, Conn	73	54	4.3	3.2	1,713,742
New Orleans, La	107	142	8.0	10.6	1,332,694
New York, NY	1,356	1,427	14.5	15.3	9,333,651
Newark, NJ	178	194	8.7	9.5	2,041,824
Norfolk, Va	38	57	2.4	3.6	1,583,170
Oakland, Calif	313	309	12.9	12.9	2,433,952
Oklahoma City, Okla	60	64	5.5	5.9	1,092,342
Omaha, Neb	23	12	3.2	1.7	723,210
Orange County, Calif	278	246	9.6	8.6	2,890,444
Orlando, Fla	138	140	8.1	8.5	1,707,175
Philadelphia, Pa	223	263	4.4	5.2	5,116,830
Phoenix, Ariz	174	172	5.1	5.3	3,383,644
Pittsburgh, Pa	59	38	2.5	1.6	2,347,163
Portland, Ore	71	83	3.6	4.3	1,965,436
Providence, RI	58	49	6.0	5.1	973,702
Raleigh-Durham, NC	74	84	6.0	7.1	1,231,528
Richmond, Va	36	16	3.6	1.6	1,009,962
Riverside-San Bernardino, Calif	149	175	4.4	5.4	3,402,125
Rochester, NY	37	40	3.4	3.6	1,096,741
Sacramento, Calif	138	126	8.1	7.7	1,699,868
St. Louis, Mo	75	107	2.9	4.1	2,617,637
Salt Lake City, Utah	30	41	2.2	3.1	1,348,606
San Antonio, Tex	82	99	5.0	6.2	1,626,538
San Diego, Calif	332	296	11.6	10.5	2,862,819
San Francisco, Calif	275	227	16.0	13.1	1,720,450
San Jose, Calif	215	235	12.9	14.0	1,668,309
Sarasota, Fla	27	25	4.4	4.2	609,846
Scranton, Pa	15	15	2.4	2.4	619,790
Seattle, Wash	167	148	6.8	6.1	2,438,799
Springfield, Mass	15	16	2.5	2.6	608,738
Stockton, Calif	51	72	8.6	12.8	595,324
Syracuse, NY	20	26	2.7	3.6	731,252
Tacoma, Wash	22	34	3.1	4.9	719,407
Tampa-St. Petersburg, Fla	121	127	4.9	5.3	2,450,337
Toledo, Ohio	10	9	1.6	1.5	617,554
Tucson, Ariz	45	23	5.2	2.7	863,049
Tulsa, Okla	34	24	4.2	3.0	810,726
Vallejo, Calif	37	30	7.0	5.8	532,091
Ventura, Calif	52	44	6.7	5.8	770,630
Washington, DC	380	385	7.5	7.8	5,053,594
West Palm Beach, Fla	79	76	6.8	6.7	1,165,049
Wichita, Kan	22	29	4.0	5.3	548,741
Wilmington, Del	16	17	2.7	2.9	594,679
Youngstown, Ohio	11	17	1.9	2.9	590,618
<b>Total - 103 Areas</b>	<b>12,239</b>	<b>12,367</b>	<b>6.8</b>	<b>6.9</b>	<b>181,212,429</b>
San Juan, Puerto Rico	55	68	2.8	3.5	1,983,746

**Note:** In 2001, there were 103 metropolitan statistical areas with populations of 500,000 or more. In 2000, the Daytona Beach, Florida, metropolitan statistical area had a population under 500,000.

Ellipses indicate data not applicable.

**Table 40. Tuberculosis Cases by Form of Disease: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Cases with Both Pulmonary and Extrapulmonary Disease		
		No.	%	No.	%	Total <sup>3</sup>		Miliary No.
						No.	%	
Akron, Ohio	19	12	63.2	7	36.8	0	0.0	0
Albany-Schenectady, NY	17	11	64.7	5	29.4	1	5.9	1
Albuquerque, NM	12	8	66.7	3	25.0	1	8.3	0
Allentown, Pa	14	10	71.4	3	21.4	1	7.1	1
Ann Arbor, Mich	7	5	71.4	1	14.3	1	14.3	0
Atlanta, Ga	313	227	72.5	68	21.7	18	5.8	3
Austin, Tex	105	72	68.6	25	23.8	8	7.6	1
Bakersfield, Calif	49	36	73.5	9	18.4	4	8.2	0
Baltimore, Md	116	85	73.3	13	11.2	18	15.5	6
Baton Rouge, La	20	16	80.0	4	20.0	0	0.0	0
Bergen-Passaic, NJ	86	63	73.3	18	20.9	5	5.8	1
Birmingham, Ala	70	56	80.0	13	18.6	1	1.4	0
Boston, Mass	261	153	58.6	92	35.2	16	6.1	9
Buffalo, NY	23	14	60.9	9	39.1	0	0.0	0
Charleston, SC	32	14	43.8	13	40.6	5	15.6	1
Charlotte, NC	75	53	70.7	14	18.7	8	10.7	2
Chicago, Ill	625	442	70.7	149	23.8	34	5.4	9
Cincinnati, Ohio	31	19	61.3	11	35.5	1	3.2	0
Cleveland, Ohio	79	49	62.0	21	26.6	9	11.4	3
Colorado Springs, Colo	7	5	71.4	1	14.3	1	14.3	0
Columbia, SC	25	22	88.0	1	4.0	2	8.0	1
Columbus, Ohio	84	61	72.6	19	22.6	4	4.8	0
Dallas, Tex	299	210	70.2	56	18.7	33	11.0	6
Dayton, Ohio	23	16	69.6	7	30.4	0	0.0	0
Daytona Beach, Fla	25	22	88.0	1	4.0	2	8.0	0
Denver, Colo	91	45	49.5	24	26.4	22	24.2	3
Detroit, Mich	199	138	69.3	44	22.1	17	8.5	2
El Paso, Tex	67	52	77.6	10	14.9	5	7.5	3
Fort Lauderdale, Fla	102	77	75.5	21	20.6	4	3.9	1
Fort Wayne, Ind	13	10	76.9	2	15.4	1	7.7	0
Fort Worth, Tex	114	93	81.6	18	15.8	3	2.6	1
Fresno, Calif	109	90	82.6	11	10.1	8	7.3	1
Gary, Ind	9	6	66.7	2	22.2	1	11.1	1
Grand Rapids, Mich	35	23	65.7	9	25.7	3	8.6	1
Greensboro, NC	50	35	70.0	11	22.0	4	8.0	1
Greenville, SC	34	24	70.6	3	8.8	7	20.6	1
Harrisburg, Pa	15	11	73.3	1	6.7	3	20.0	0
Hartford, Conn	40	29	72.5	6	15.0	5	12.5	4
Honolulu, Hawaii	124	103	83.1	18	14.5	3	2.4	0
Houston, Tex	464	339	73.1	94	20.3	31	6.7	9
Indianapolis, Ind	43	28	65.1	15	34.9	0	0.0	0
Jacksonville, Fla	99	80	80.8	16	16.2	3	3.0	0
Jersey City, NJ	84	60	71.4	14	16.7	10	11.9	3
Kansas City, Mo	50	37	74.0	11	22.0	2	4.0	0
Knoxville, Tenn	30	25	83.3	5	16.7	0	0.0	0
Las Vegas, Nev	74	59	79.7	14	18.9	1	1.4	0
Little Rock, Ark	24	22	91.7	2	8.3	0	0.0	0
Los Angeles, Calif	1,113	850	76.4	185	16.6	78	7.0	19
Louisville, Ky	38	28	73.7	8	21.1	2	5.3	1
McAllen, Tex	74	58	78.4	11	14.9	5	6.8	2
Memphis, Tenn	94	62	66.0	15	16.0	17	18.1	2
Miami, Fla	291	218	74.9	54	18.6	19	6.5	9
Middlesex, NJ	75	46	61.3	24	32.0	5	6.7	1
Milwaukee, Wis	32	23	71.9	6	18.8	3	9.4	2
Minneapolis-St. Paul, Minn	201	104	51.7	76	37.8	21	10.4	12

<sup>1</sup>Includes cases with pulmonary listed as major site of disease and no additional site of disease.

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

<sup>3</sup>Includes miliary cases.



**Table 40. (Cont'd) Tuberculosis Cases by Form of Disease: Metropolitan Statistical Areas with ≥500,000 Population, 2001**

Metropolitan Statistical Area	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Cases with Both Pulmonary and Extrapulmonary Disease		
		No.	%	No.	%	Total <sup>3</sup>		Miliary No.
						No.	%	
Mobile, Ala	34	27	79.4	6	17.6	1	2.9	0
Monmouth-Ocean City, NJ	33	25	75.8	6	18.2	2	6.1	0
Nashville, Tenn	89	69	77.5	14	15.7	6	6.7	0
Nassau-Suffolk, NY	162	115	71.0	42	25.9	5	3.1	1
New Haven, Conn	73	51	69.9	15	20.5	7	9.6	3
New Orleans, La	107	89	83.2	9	8.4	9	8.4	0
New York, NY	1,356	943	69.5	296	21.8	117	8.6	27
Newark, NJ	178	129	72.5	36	20.2	13	7.3	3
Norfolk, Va	38	30	78.9	7	18.4	1	2.6	0
Oakland, Calif	313	230	73.5	55	17.6	28	8.9	6
Oklahoma City, Okla	60	40	66.7	12	20.0	8	13.3	3
Omaha, Neb	23	17	73.9	5	21.7	1	4.3	1
Orange County, Calif	278	194	69.8	65	23.4	19	6.8	1
Orlando, Fla	138	117	84.8	14	10.1	7	5.1	1
Philadelphia, Pa	223	136	61.0	58	26.0	29	13.0	4
Phoenix, Ariz	174	137	78.7	23	13.2	14	8.0	2
Pittsburgh, Pa	59	39	66.1	14	23.7	6	10.2	4
Portland, Ore	71	37	52.1	22	31.0	12	16.9	7
Providence, RI	58	39	67.2	15	25.9	4	6.9	1
Raleigh-Durham, NC	74	52	70.3	18	24.3	4	5.4	3
Richmond, Va	36	29	80.6	5	13.9	1	2.8	0
Riverside-San Bernardino, Calif	149	117	78.5	24	16.1	8	5.4	1
Rochester, NY	37	25	67.6	7	18.9	5	13.5	0
Sacramento, Calif	138	111	80.4	21	15.2	6	4.3	1
St. Louis, Mo	75	52	69.3	17	22.7	6	8.0	4
Salt Lake City, Utah	30	21	70.0	5	16.7	4	13.3	0
San Antonio, Tex	82	61	74.4	13	15.9	8	9.8	1
San Diego, Calif	332	239	72.0	62	18.7	31	9.3	3
San Francisco, Calif	275	203	73.8	56	20.4	16	5.8	3
San Jose, Calif	215	141	65.6	65	30.2	9	4.2	2
Sarasota, Fla	27	25	92.6	1	3.7	1	3.7	0
Scranton, Pa	15	11	73.3	1	6.7	3	20.0	1
Seattle, Wash	167	93	55.7	57	34.1	16	9.6	4
Springfield, Mass	15	10	66.7	4	26.7	1	6.7	0
Stockton, Calif	51	40	78.4	7	13.7	4	7.8	0
Syracuse, NY	20	12	60.0	6	30.0	2	10.0	0
Tacoma, Wash	22	15	68.2	6	27.3	1	4.5	0
Tampa-St. Petersburg, Fla	121	94	77.7	15	12.4	12	9.9	0
Toledo, Ohio	10	8	80.0	2	20.0	0	0.0	0
Tucson, Ariz	45	35	77.8	10	22.2	0	0.0	0
Tulsa, Okla	34	27	79.4	4	11.8	3	8.8	0
Vallejo, Calif	37	28	75.7	7	18.9	2	5.4	0
Ventura, Calif	52	32	61.5	8	15.4	12	23.1	3
Washington, DC	380	249	65.5	105	27.6	25	6.6	6
West Palm Beach, Fla	79	58	73.4	19	24.1	2	2.5	0
Wichita, Kan	22	16	72.7	4	18.2	2	9.1	0
Wilmington, Del	16	10	62.5	5	31.3	1	6.3	0
Youngstown, Ohio	11	7	63.6	3	27.3	1	9.1	0
<b>Total - 103 Areas</b>	<b>12,239</b>	<b>8,741</b>	<b>71.4</b>	<b>2,564</b>	<b>20.9</b>	<b>931</b>	<b>7.6</b>	<b>219</b>
San Juan, Puerto Rico	55	49	89.1	6	10.9	0	0.0	0

<sup>1</sup>Includes cases with pulmonary listed as major site of disease and no additional site of disease.

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

<sup>3</sup>Includes military cases.

**Note:** 3 (<0.1%) cases had missing and/or unknown site of disease.

**Table 41. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	Unknown or Missing
Akron, Ohio	19	1	0	2	5	5	6	0
Albany-Schenectady, NY	17	0	0	1	6	7	3	0
Albuquerque, NM	12	0	0	2	4	2	4	0
Allentown, Pa	14	0	0	1	3	6	4	0
Ann Arbor, Mich	7	0	0	0	4	3	0	0
Atlanta, Ga	313	16	2	33	148	86	27	1
Austin, Tex	105	7	2	20	42	21	13	0
Bakersfield, Calif	49	1	2	3	18	20	5	0
Baltimore, Md	116	5	4	13	50	21	23	0
Baton Rouge, La	20	1	1	2	3	10	3	0
Bergen-Passaic, NJ	86	5	1	10	33	18	19	0
Birmingham, Ala	70	1	0	3	25	18	23	0
Boston, Mass	261	5	6	30	121	56	43	0
Buffalo, NY	23	2	0	3	6	2	10	0
Charleston, SC	32	2	1	1	5	10	13	0
Charlotte, NC	75	2	3	8	32	16	14	0
Chicago, Ill	625	26	11	59	233	197	99	0
Cincinnati, Ohio	31	0	0	2	9	11	9	0
Cleveland, Ohio	79	0	2	5	16	27	29	0
Colorado Springs, Colo	7	1	0	0	2	1	3	0
Columbia, SC	25	0	0	1	12	6	6	0
Columbus, Ohio	84	6	6	20	21	15	16	0
Dallas, Tex	299	12	7	33	133	89	25	0
Dayton, Ohio	23	0	0	4	5	8	6	0
Daytona Beach, Fla	25	3	1	2	8	8	3	0
Denver, Colo	91	5	5	12	30	19	20	0
Detroit, Mich	199	8	5	17	62	59	48	0
El Paso, Tex	67	2	1	7	18	19	20	0
Fort Lauderdale, Fla	102	2	1	11	45	28	15	0
Fort Wayne, Ind	13	0	0	2	6	5	0	0
Fort Worth, Tex	114	8	6	10	41	37	12	0
Fresno, Calif	109	13	5	9	28	31	23	0
Gary, Ind	9	1	0	0	1	2	5	0
Grand Rapids, Mich	35	2	0	8	14	3	8	0
Greensboro, NC	50	2	0	8	18	16	6	0
Greenville, SC	34	5	1	1	8	12	7	0
Harrisburg, Pa	15	0	1	1	5	4	4	0
Hartford, Conn	40	0	1	1	10	14	14	0
Honolulu, Hawaii	124	1	1	11	27	46	38	0
Houston, Tex	464	14	16	40	178	159	57	0
Indianapolis, Ind	43	0	0	3	17	14	9	0
Jacksonville, Fla	99	1	1	6	45	32	14	0
Jersey City, NJ	84	0	2	13	39	19	11	0
Kansas City, Mo	50	0	3	9	17	12	9	0
Knoxville, Tenn	30	0	0	2	4	10	14	0
Las Vegas, Nev	74	3	1	9	28	25	8	0
Little Rock, Ark	24	1	0	2	5	8	8	0
Los Angeles, Calif	1,113	32	23	105	357	336	260	0
Louisville, Ky	38	1	1	1	16	11	8	0
McAllen, Tex	74	7	1	7	18	19	22	0
Memphis, Tenn	94	4	4	8	39	24	15	0
Miami, Fla	291	10	11	20	115	98	37	0
Middlesex, NJ	75	1	0	8	41	13	12	0
Milwaukee, Wis	32	0	0	3	16	7	6	0
Minneapolis-St. Paul, Minn	201	10	13	46	79	32	21	0

**Table 41. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	Under 5	5 - 14	15 - 24	25 - 44	45 - 64	65+	Unknown or Missing
Mobile, Ala	34	0	0	1	11	14	8	0
Monmouth-Ocean City, NJ	33	0	1	7	13	3	9	0
Nashville, Tenn	89	1	1	3	49	23	12	0
Nassau-Suffolk, NY	162	5	4	18	54	49	32	0
New Haven, Conn	73	1	1	11	32	14	14	0
New Orleans, La	107	3	5	6	40	32	21	0
New York, NY	1,356	30	27	166	583	344	206	0
Newark, NJ	178	2	6	21	72	43	34	0
Norfolk, Va	38	0	0	2	10	14	12	0
Oakland, Calif	313	9	14	19	129	85	57	0
Oklahoma City, Okla	60	1	2	5	22	20	10	0
Omaha, Neb	23	1	0	4	9	5	4	0
Orange County, Calif	278	13	9	35	101	72	48	0
Orlando, Fla	138	4	2	11	55	51	15	0
Philadelphia, Pa	223	8	4	13	92	52	53	1
Phoenix, Ariz	174	9	4	29	61	43	28	0
Pittsburgh, Pa	59	1	0	2	19	13	24	0
Portland, Ore	71	2	1	9	36	13	10	0
Providence, RI	58	6	2	10	17	16	7	0
Raleigh-Durham, NC	74	4	0	14	33	17	6	0
Richmond, Va	36	1	2	2	14	9	8	0
Riverside-San Bernardino, Calif	149	8	6	7	54	34	40	0
Rochester, NY	37	0	3	4	12	13	5	0
Sacramento, Calif	138	5	2	9	46	41	35	0
St. Louis, Mo	75	1	4	5	30	19	16	0
Salt Lake City, Utah	30	1	2	5	10	8	4	0
San Antonio, Tex	82	6	1	5	21	22	27	0
San Diego, Calif	332	18	16	45	102	90	61	0
San Francisco, Calif	275	7	3	25	75	84	81	0
San Jose, Calif	215	9	2	16	102	48	38	0
Sarasota, Fla	27	0	0	1	12	9	5	0
Scranton, Pa	15	0	0	2	1	4	8	0
Seattle, Wash	167	5	5	24	67	41	25	0
Springfield, Mass	15	0	1	4	2	4	4	0
Stockton, Calif	51	1	3	5	11	21	10	0
Syracuse, NY	20	1	1	5	5	4	4	0
Tacoma, Wash	22	1	1	3	4	8	5	0
Tampa-St. Petersburg, Fla	121	6	1	10	37	47	20	0
Toledo, Ohio	10	0	0	1	4	2	3	0
Tucson, Ariz	45	0	1	5	11	16	12	0
Tulsa, Okla	34	1	1	2	7	11	12	0
Vallejo, Calif	37	4	3	4	6	9	11	0
Ventura, Calif	52	1	1	6	16	15	13	0
Washington, DC	380	12	11	58	161	87	51	0
West Palm Beach, Fla	79	2	1	9	31	21	15	0
Wichita, Kan	22	0	0	5	9	4	4	0
Wilmington, Del	16	1	0	1	8	4	2	0
Youngstown, Ohio	11	0	1	0	1	3	6	0
<b>Total - 103 Areas</b>	<b>12,239</b>	<b>420</b>	<b>307</b>	<b>1,292</b>	<b>4,568</b>	<b>3,378</b>	<b>2,272</b>	<b>2</b>
San Juan, Puerto Rico	55	0	0	7	13	19	16	0

**Table 42. Tuberculosis Cases by Race/Ethnicity: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	White, non-Hispanic	Black, non-Hispanic	Hispanic <sup>1</sup>	American Indian or Alaska Native	Asian or Pacific Islander	Unknown or Missing
Akron, Ohio	19	8	8	0	0	3	0
Albany-Schenectady, NY	17	8	6	1	0	2	0
Albuquerque, NM	12	3	0	4	2	3	0
Allentown, Pa	14	10	1	2	0	1	0
Ann Arbor, Mich	7	1	2	0	0	4	0
Atlanta, Ga	313	41	190	41	2	38	1
Austin, Tex	105	16	24	44	1	20	0
Bakersfield, Calif	49	6	4	32	0	7	0
Baltimore, Md	116	17	71	10	0	18	0
Baton Rouge, La	20	6	10	2	0	2	0
Bergen-Passaic, NJ	86	18	10	24	0	34	0
Birmingham, Ala	70	26	35	5	0	4	0
Boston, Mass	261	67	67	42	1	84	0
Buffalo, NY	23	8	5	2	0	8	0
Charleston, SC	32	6	20	2	0	4	0
Charlotte, NC	75	8	45	11	0	11	0
Chicago, Ill	625	94	256	139	4	129	3
Cincinnati, Ohio	31	11	13	2	1	4	0
Cleveland, Ohio	79	25	46	2	0	6	0
Colorado Springs, Colo	7	3	1	2	0	1	0
Columbia, SC	25	3	19	1	0	2	0
Columbus, Ohio	84	20	49	6	0	9	0
Dallas, Tex	299	25	138	101	1	34	0
Dayton, Ohio	23	8	7	1	0	7	0
Daytona Beach, Fla	25	10	13	0	0	2	0
Denver, Colo	91	16	17	39	1	18	0
Detroit, Mich	199	63	106	2	0	27	1
El Paso, Tex	67	5	0	56	0	6	0
Fort Lauderdale, Fla	102	31	51	18	0	2	0
Fort Wayne, Ind	13	6	6	0	0	1	0
Fort Worth, Tex	114	19	44	34	0	17	0
Fresno, Calif	109	20	8	53	1	27	0
Gary, Ind	9	6	2	1	0	0	0
Grand Rapids, Mich	35	13	9	6	0	7	0
Greensboro, NC	50	9	20	20	0	1	0
Greenville, SC	34	12	16	3	0	3	0
Harrisburg, Pa	15	7	1	0	0	6	1
Hartford, Conn	40	13	11	5	0	10	1
Honolulu, Hawaii	124	6	0	0	0	117	1
Houston, Tex	464	77	149	163	0	75	0
Indianapolis, Ind	43	14	12	8	0	9	0
Jacksonville, Fla	99	29	53	3	0	14	0
Jersey City, NJ	84	8	18	35	0	23	0
Kansas City, Mo	50	9	24	8	0	7	2
Knoxville, Tenn	30	20	8	1	0	1	0
Las Vegas, Nev	74	18	14	15	0	26	1
Little Rock, Ark	24	10	11	0	0	3	0
Los Angeles, Calif	1,113	98	106	511	0	398	0
Louisville, Ky	38	20	13	1	0	4	0
McAllen, Tex	74	2	0	72	0	0	0
Memphis, Tenn	94	12	72	6	0	2	2
Miami, Fla	291	21	150	110	1	9	0
Middlesex, NJ	75	8	12	10	1	44	0
Milwaukee, Wis	32	2	17	3	1	9	0
Minneapolis-St. Paul, Minn	201	14	117	15	1	54	0

<sup>1</sup> Persons of Hispanic origin may be of any race.

**Table 42. (Cont'd) Tuberculosis Cases by Race/Ethnicity: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	White, non-Hispanic	Black, non-Hispanic	Hispanic <sup>1</sup>	American Indian or Alaska Native	Asian or Pacific Islander	Unknown or Missing
Mobile, Ala	34	12	19	1	0	2	0
Monmouth-Ocean City, NJ	33	12	3	7	0	10	1
Nashville, Tenn	89	33	43	7	0	4	2
Nassau-Suffolk, NY	162	38	34	60	0	30	0
New Haven, Conn	73	24	19	19	0	11	0
New Orleans, La	107	34	60	3	0	9	1
New York, NY	1,356	128	437	415	1	370	5
Newark, NJ	178	17	79	60	0	22	0
Norfolk, Va	38	5	27	1	0	4	1
Oakland, Calif	313	19	76	48	2	168	0
Oklahoma City, Okla	60	21	7	7	13	12	0
Omaha, Neb	23	7	6	6	0	4	0
Orange County, Calif	278	24	3	106	0	145	0
Orlando, Fla	138	40	71	16	0	11	0
Philadelphia, Pa	223	41	106	19	1	55	1
Phoenix, Ariz	174	47	11	86	11	19	0
Pittsburgh, Pa	59	27	18	0	0	14	0
Portland, Ore	71	15	12	18	0	26	0
Providence, RI	58	17	12	16	0	13	0
Raleigh-Durham, NC	74	6	36	19	0	13	0
Richmond, Va	36	9	17	5	0	5	0
Riverside-San Bernardino, Calif	149	27	11	72	1	37	1
Rochester, NY	37	11	15	4	0	7	0
Sacramento, Calif	138	28	12	22	2	69	5
St. Louis, Mo	75	20	41	4	0	10	0
Salt Lake City, Utah	30	10	4	12	1	3	0
San Antonio, Tex	82	12	8	60	0	2	0
San Diego, Calif	332	49	20	164	1	98	0
San Francisco, Calif	275	27	31	37	3	177	0
San Jose, Calif	215	6	7	37	0	165	0
Sarasota, Fla	27	7	12	6	0	2	0
Scranton, Pa	15	10	1	2	0	2	0
Seattle, Wash	167	33	38	15	5	74	2
Springfield, Mass	15	5	2	4	0	4	0
Stockton, Calif	51	8	3	17	0	23	0
Syracuse, NY	20	7	12	0	0	1	0
Tacoma, Wash	22	4	2	2	0	14	0
Tampa-St. Petersburg, Fla	121	46	40	20	0	15	0
Toledo, Ohio	10	4	3	1	0	2	0
Tucson, Ariz	45	17	2	20	3	3	0
Tulsa, Okla	34	18	9	2	4	0	1
Vallejo, Calif	37	3	7	8	0	19	0
Ventura, Calif	52	14	0	24	0	13	1
Washington, DC	380	34	144	91	3	107	1
West Palm Beach, Fla	79	17	45	13	0	4	0
Wichita, Kan	22	7	2	2	1	10	0
Wilmington, Del	16	4	5	5	0	2	0
Youngstown, Ohio	11	7	4	0	0	0	0
<b>Total - 103 Areas</b>	<b>12,239</b>	<b>2,047</b>	<b>3,683</b>	<b>3,237</b>	<b>70</b>	<b>3,167</b>	<b>35</b>
San Juan, Puerto Rico	55	0	0	54	0	1	0

<sup>1</sup> Persons of Hispanic origin may be of any race.

**Table 43. Tuberculosis Cases, U.S.-born Persons and Foreign-born Persons:  
Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown	
		No.	%	No.	%	No.	%
Akron, Ohio	19	15	78.9	4	21.1	0	0.0
Albany-Schenectady, NY	17	13	76.5	4	23.5	0	0.0
Albuquerque, NM	12	6	50.0	6	50.0	0	0.0
Allentown, Pa	14	8	57.1	6	42.9	0	0.0
Ann Arbor, Mich	7	1	14.3	6	85.7	0	0.0
Atlanta, Ga	313	196	62.6	117	37.4	0	0.0
Austin, Tex	105	49	46.7	56	53.3	0	0.0
Bakersfield, Calif	49	16	32.7	33	67.3	0	0.0
Baltimore, Md	116	65	56.0	51	44.0	0	0.0
Baton Rouge, La	20	15	75.0	5	25.0	0	0.0
Bergen-Passaic, NJ	86	29	33.7	57	66.3	0	0.0
Birmingham, Ala	70	60	85.7	10	14.3	0	0.0
Boston, Mass	261	59	22.6	202	77.4	0	0.0
Buffalo, NY	23	10	43.5	13	56.5	0	0.0
Charleston, SC	32	28	87.5	4	12.5	0	0.0
Charlotte, NC	75	46	61.3	29	38.7	0	0.0
Chicago, Ill	625	387	61.9	237	37.9	1	0.2
Cincinnati, Ohio	31	24	77.4	7	22.6	0	0.0
Cleveland, Ohio	79	66	83.5	13	16.5	0	0.0
Colorado Springs, Colo	7	5	71.4	2	28.6	0	0.0
Columbia, SC	25	21	84.0	4	16.0	0	0.0
Columbus, Ohio	84	42	50.0	42	50.0	0	0.0
Dallas, Tex	299	151	50.5	148	49.5	0	0.0
Dayton, Ohio	23	13	56.5	10	43.5	0	0.0
Daytona Beach, Fla	25	22	88.0	3	12.0	0	0.0
Denver, Colo	91	29	31.9	62	68.1	0	0.0
Detroit, Mich	199	145	72.9	54	27.1	0	0.0
El Paso, Tex	67	18	26.9	49	73.1	0	0.0
Fort Lauderdale, Fla	102	46	45.1	56	54.9	0	0.0
Fort Wayne, Ind	13	8	61.5	5	38.5	0	0.0
Fort Worth, Tex	114	64	56.1	50	43.9	0	0.0
Fresno, Calif	109	42	38.5	67	61.5	0	0.0
Gary, Ind	9	8	88.9	1	11.1	0	0.0
Grand Rapids, Mich	35	10	28.6	25	71.4	0	0.0
Greensboro, NC	50	28	56.0	22	44.0	0	0.0
Greenville, SC	34	28	82.4	6	17.6	0	0.0
Harrisburg, Pa	15	8	53.3	7	46.7	0	0.0
Hartford, Conn	40	18	45.0	22	55.0	0	0.0
Honolulu, Hawaii	124	25	20.2	96	77.4	3	2.4
Houston, Tex	464	269	58.0	195	42.0	0	0.0
Indianapolis, Ind	43	25	58.1	18	41.9	0	0.0
Jacksonville, Fla	99	77	77.8	22	22.2	0	0.0
Jersey City, NJ	84	23	27.4	60	71.4	1	1.2
Kansas City, Mo	50	27	54.0	22	44.0	1	2.0
Knoxville, Tenn	30	27	90.0	3	10.0	0	0.0
Las Vegas, Nev	74	31	41.9	42	56.8	1	1.4
Little Rock, Ark	24	21	87.5	2	8.3	1	4.2
Los Angeles, Calif	1,113	257	23.1	852	76.5	4	0.4
Louisville, Ky	38	30	78.9	8	21.1	0	0.0
McAllen, Tex	74	32	43.2	42	56.8	0	0.0
Memphis, Tenn	94	88	93.6	6	6.4	0	0.0
Miami, Fla	291	114	39.2	175	60.1	2	0.7
Middlesex, NJ	75	12	16.0	63	84.0	0	0.0
Milwaukee, Wis	32	20	62.5	12	37.5	0	0.0
Minneapolis-St. Paul, Minn	201	33	16.4	167	83.1	1	0.5

<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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

**Table 43. (Cont'd) Tuberculosis Cases, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2001**

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown	
		No.	%	No.	%	No.	%
Mobile, Ala	34	31	91.2	3	8.8	0	0.0
Monmouth-Ocean City, NJ	33	14	42.4	19	57.6	0	0.0
Nashville, Tenn	89	65	73.0	24	27.0	0	0.0
Nassau-Suffolk, NY	162	50	30.9	112	69.1	0	0.0
New Haven, Conn	73	29	39.7	40	54.8	4	5.5
New Orleans, La	107	97	90.7	9	8.4	1	0.9
New York, NY	1,356	378	27.9	777	57.3	201	14.8
Newark, NJ	178	82	46.1	96	53.9	0	0.0
Norfolk, Va	38	31	81.6	6	15.8	1	2.6
Oakland, Calif	313	95	30.4	217	69.3	1	0.3
Oklahoma City, Okla	60	42	70.0	18	30.0	0	0.0
Omaha, Neb	23	8	34.8	14	60.9	1	4.3
Orange County, Calif	278	44	15.8	234	84.2	0	0.0
Orlando, Fla	138	101	73.2	37	26.8	0	0.0
Philadelphia, Pa	223	112	50.2	110	49.3	1	0.4
Phoenix, Ariz	174	81	46.6	90	51.7	3	1.7
Pittsburgh, Pa	59	40	67.8	19	32.2	0	0.0
Portland, Ore	71	18	25.4	53	74.6	0	0.0
Providence, RI	58	20	34.5	38	65.5	0	0.0
Raleigh-Durham, NC	74	35	47.3	39	52.7	0	0.0
Richmond, Va	36	21	58.3	14	38.9	1	2.8
Riverside-San Bernardino, Calif	149	60	40.3	87	58.4	2	1.3
Rochester, NY	37	22	59.5	15	40.5	0	0.0
Sacramento, Calif	138	30	21.7	95	68.8	13	9.4
St. Louis, Mo	75	52	69.3	23	30.7	0	0.0
Salt Lake City, Utah	30	12	40.0	18	60.0	0	0.0
San Antonio, Tex	82	61	74.4	21	25.6	0	0.0
San Diego, Calif	332	105	31.6	227	68.4	0	0.0
San Francisco, Calif	275	67	24.4	208	75.6	0	0.0
San Jose, Calif	215	11	5.1	201	93.5	3	1.4
Sarasota, Fla	27	20	74.1	7	25.9	0	0.0
Scranton, Pa	15	10	66.7	5	33.3	0	0.0
Seattle, Wash	167	38	22.8	129	77.2	0	0.0
Springfield, Mass	15	4	26.7	11	73.3	0	0.0
Stockton, Calif	51	16	31.4	35	68.6	0	0.0
Syracuse, NY	20	15	75.0	5	25.0	0	0.0
Tacoma, Wash	22	6	27.3	16	72.7	0	0.0
Tampa-St. Petersburg, Fla	121	83	68.6	38	31.4	0	0.0
Toledo, Ohio	10	8	80.0	2	20.0	0	0.0
Tucson, Ariz	45	22	48.9	23	51.1	0	0.0
Tulsa, Okla	34	30	88.2	3	8.8	1	2.9
Vallejo, Calif	37	11	29.7	26	70.3	0	0.0
Ventura, Calif	52	11	21.2	40	76.9	1	1.9
Washington, DC	380	103	27.1	274	72.1	3	0.8
West Palm Beach, Fla	79	33	41.8	46	58.2	0	0.0
Wichita, Kan	22	9	40.9	13	59.1	0	0.0
Wilmington, Del	16	6	37.5	10	62.5	0	0.0
Youngstown, Ohio	11	11	100.0	0	0.0	0	0.0
<b>Total - 103 Areas</b>	<b>12,239</b>	<b>5,160</b>	<b>42.2</b>	<b>6,827</b>	<b>55.8</b>	<b>252</b>	<b>2.1</b>

<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, U.S. Minor Outlying Islands, U.S. Miscellaneous Pacific Islands, and the U.S. Virgin Islands.

# Appendix A

## 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 a Verified Case of Tuberculosis (RVCT).<sup>1</sup> Reported TB cases are verified according to the TB case definition for public health surveillance (*MMWR* 1997;46[No. RR-10]:40-1). Cases may be verified using the laboratory or clinical case definition. A case may be verified by the laboratory case definition either by (1) isolation of *M. tuberculosis* from a clinical specimen, OR (2) 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: (a) a positive tuberculin skin test result, (b) other signs and symptoms compatible with TB, such as an abnormal, unstable (worsening or improving) chest radiograph, or clinical evidence of current disease, (c) treatment with two or more antituberculosis medications, and (d) a completed diagnostic evaluation. When patients are diagnosed with TB but do not meet the case definition (e.g., anergic patients with a clinical picture consistent with TB but without laboratory evidence of *M. tuberculosis*), reporting areas also have the option of verifying TB cases based on provider diagnosis.

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, 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, 1998-2001). 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 2001 (and for 1999, Tables 35-37) and the trend data for 1993-2001 (Tables 8-11) were received at CDC via TIMS by April 10, 2002.

---

<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 the U.S. Virgin Islands. RVCT data for 2000 were available from the Commonwealth of the Northern Mariana Islands and Guam.



## Completion of Tuberculosis Therapy

Tables 10 and 37 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 current American Thoracic Society/CDC treatment guidelines<sup>2</sup> 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 37, the first column shows the total number of cases reported during 1999. The remaining columns are grouped under three headings: therapy of 1 year or less indicated, therapy greater than 1 year indicated, and overall. For patients with an initial isolate resistant to rifampin and for pediatric patients (age under 15 years old) with meningeal, bone or joint, or miliary disease, data were included under the category of greater than 1 year of therapy indicated. For all other patients, including those 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 10 presents data only for the category of therapy of 1 year or less indicated.

In Table 37, each group under an indicated length of therapy has an initial column showing the number of cases in persons who were alive at diagnosis and prescribed an initial regimen of one or more drugs, and who did not die during therapy. This number was used as the denominator in COT rate calculations. COT rates, shown as percentages, were only calculated for areas reporting reason therapy stopped for at least 90% of cases shown in the overall column. For the group with an indicated length of therapy of 1 year or less, rates are shown for both COT in 1 year or less (COT  $\leq$  1 year) and for COT, regardless of duration (i.e., duration of therapy  $\leq$  1 year,  $>$  1 year, or unknown). For COT  $\leq$  1 year, the numerator included only those patients completing therapy in  $\leq$  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 patients listed in the first column of each group. 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 10 provides rates for COT  $\leq$  1 year and for COT, regardless of duration, only for the group with an indicated therapy of 1 year or less.

*Acknowledgment: Tables 10 and 37 were developed in collaboration with the Field Services Branch, Division of Tuberculosis Elimination, CDC.*

---

<sup>2</sup>ATS/CDC. Treatment of tuberculosis and tuberculosis infection in adults and children. *Am J Respir Crit Care Med* 1994;149:1359-74.

## **Site of TB Disease**

Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 6, 7, 23, 24, and 40). 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 Infection**

Table 33 shows information on HIV status for TB cases among persons aged 25-44 years, the age group in which 74% of AIDS cases occur (CDC. *HIV/AIDS Surveillance Report* 2001;13[No. 1]:14). The information on HIV status for TB cases reported in 2001 is incomplete. Reasons for incomplete reporting of HIV test results to the national 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 counseling and HIV testing 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 in 2001 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 do not provide a minimum estimate of 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 2001. 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 1999. In addition, trend data are presented in Tables 1 through 11. 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. 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 C: "Recommendations for Counting Reported Tuberculosis Cases").

Tables 39 through 43 present data by metropolitan statistical areas (MSAs) with an estimated 2001 population of 500,000 or more. Metropolitan areas are defined by the federal Office of Management and Budget, and the definitions effective as of June 30, 1999, were used for this publication ([www.census.gov/population/www/estimates/metrodef.html](http://www.census.gov/population/www/estimates/metrodef.html)). The metropolitan area definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. Metropolitan areas 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 17 include only persons residing within the geographic boundaries of the District. However, the TB cases and case rates for Washington, D.C. (Table 39), 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 midyear (July 1) postcensus estimates from the U.S. Census Bureau. Specifically, in Tables 1 and 17, the U.S. total and state populations for 2001 were obtained from the U.S. Census Bureau Table St-20001EST-01-Time Series of State Population Estimates: April 1, 2000, to July 1, 2001, located at <http://eire.census.gov/popest/data/states/tables/St-EST2001-01.php>. To calculate rates in Tables 2, 3, and 13, the age, sex, and race/ethnicity proportions from the U.S. Census Bureau July 1, 2000, population estimates were applied to the July 1, 2001, total national population to estimate the age, sex, and race/ethnicity subpopulations. In Table 4, the populations for U.S.-born and foreign-born persons for 1990-1999 were obtained from *Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990, to July 1, 1999* ([www.census.gov/population/estimates/nation/nativity/fstab001.txt](http://www.census.gov/population/estimates/nation/nativity/fstab001.txt)). To calculate the rates for 2000 and 2001, population estimates reported in the U.S. Census Bureau Current Population Reports, P20-534, *The Foreign-born Population in the United States: March 2000*, were extrapolated to the April 2000 Census population and the July 1, 2001, population.

### **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 1999 and 2000 was obtained from the NCHS *National Vital Statistics Reports*, Vol. 49, No. 12, October 9, 2001. The number of deaths for 2001 was not available at the time of this publication.

## Appendix B

### 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 the following criteria:

- ! A positive tuberculin skin test
- ! Other signs and symptoms compatible with tuberculosis (e.g., an abnormal, unstable [i.e., worsening or improving] chest radiographs, or clinical evidence of current disease)
- ! Treatment with two or more antituberculosis medications
- ! 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<sup>†</sup>, 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

A case should not be counted twice within any consecutive 12-month period. However, cases in which the patients had previously had verified disease should be reported again if the patients were discharged from treatment. Cases also should be reported again if patients were 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>1</sup>CDC. *Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(No. RR-10):40-41.*

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

<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 C

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

Since publication of the “Recommendations for Counting Reported Tuberculosis Cases”<sup>1</sup> 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.”<sup>2</sup> 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
- ! 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.\*

---

\****Mycobacterium tuberculosis* complex** (*M. tuberculosis* complex) consists of three mycobacterial species: *M. tuberculosis*, *M. bovis*, and *M. africanum*. These species are identical in DNA homology studies. In terms of their ability to cause clinical disease and be transmissible from person to person, *M. bovis* and *M. africanum* behave like *M. tuberculosis*; therefore, disease caused by any of the three 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 this *M. bovis* strain 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). Current FDA-approved NAA tests are only approved for use on smear-positive respiratory specimens.

**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

**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 the U.S. Virgin Islands) report cases to the CDC but are not included in the annual incidence for the United States. Laboratory and clinical case definitions are the two primary 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.

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 that 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.<sup>4</sup>**

### **COUNT**

Immigrants and refugees who have been screened overseas for TB and

- ! have been classified as Class B (B1, B2, or B3)<sup>3</sup> or resident aliens
- ! are not already on anti-TB medications for treatment of tuberculous disease, and
- ! are examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications

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 Immigration and Naturalization Service (INS)<sup>4</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>3</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 during the calendar year by the 52 reporting areas with count authority (50 states, District of Columbia, and New York City) 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 the U.S. Virgin Islands) are also counted but are not included in the annual incidence for the United States. Cases for which bacteriologic results are pending or for which confirmation of disease is questionable for any other reason should not be counted until their status is clearly determined; they should be counted at the time they meet the criteria for counting. This means that a case reported in one calendar year could be included in the morbidity count for the following year. The reporting area with count authority should ensure that there is agreement between final local and state TB figures reported to CDC. Currently, some reporting areas may not use this suggested protocol. Some of these areas may wait until the beginning of the following year when they have received and processed all of the TB cases for inclusion in the annual case count for the previous year. If reporting areas decide to revise their protocols, they should be aware that 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”<sup>2</sup> (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/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) - consists of three mycobacterial species: *M. tuberculosis*, *M. bovis*, and *M. africanum*. These species are identical in DNA homology studies. In terms of their ability to cause clinical disease and to be transmissible from person to person, *M. bovis* and *M. africanum* behave like *M. tuberculosis*; therefore, disease caused by any of the three 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 to protect against TB or as cancer immunotherapy; disease caused by this *M. bovis* strain 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 59 reporting areas; 50 states, District of Columbia, New York City, American Samoa, Federated States of Micronesia, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, and the U.S. Virgin Islands. Annual incidence of tuberculosis for the United States is based on 52 reporting areas (50 states, District of Columbia, and New York City).

**Alien** - defined by the Immigration and Naturalization Service (INS)<sup>4</sup> as “any person not a citizen or national of the United States.”

**Border crosser** - defined, in part, by the Immigration and Naturalization Service (INS)<sup>4</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.

**Class A (TB, Infectious)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with an abnormal chest radiograph or series of chest radiographs suggestive of current pulmonary TB and one or more positive sputum smear examinations for acid-fast bacilli.” This person is not authorized to enter the United States unless a waiver has been granted (see definition for Class A - TB, Infectious, “Noncommunicable for travel purposes.”)

**Class A (TB, Infectious, “Noncommunicable for travel purposes”)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with an abnormal chest radiograph or series of chest radiographs suggestive of active TB, a history of one or more positive sputum smear examinations for acid-fast bacilli, currently on recommended treatment, and sputum smears that are negative for acid-fast bacilli on 3 consecutive days.” This person is authorized to enter the United States if a waiver has been granted.

**Class B1 (TB, clinically active, not infectious)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with an abnormal chest radiograph or series of chest radiographs suggestive of active TB, and sputum smears that are negative for acid-fast bacilli on 3 consecutive days.” This person may be on anti-TB medications when entering the United States.

**Class B1 (Extrapulmonary TB, clinically active, not infectious)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with radiographic or other evidence of extrapulmonary TB, clinically active.” This person may be on anti-TB medications when entering the United States.

**Class B2 (TB, not clinically active)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with an abnormal chest radiograph or series of chest radiographs suggestive of active TB, not clinically active (e.g., fibrosis, scarring, pleural thickening, diaphragmatic tenting, blunting of costophrenic angles.) Sputum smears are not required.” Such a person who “completed the recommended course of anti-TB therapy and whose chest radiographs are stable should be reported as Class B2 - TB, treatment completed.” This person may be on anti-TB medications when entering the United States.

**Class B3 (Consistent with TB, old or healed)** - defined by the Division of Quarantine<sup>3</sup> as an alien “with an abnormal chest radiograph or series of chest radiographs (the only abnormality is a calcified lymph node, calcified primary complex, or calcified granuloma). Sputum smears are not required.”

**Immigrant** - defined by the Immigration and Naturalization Service (INS)<sup>4</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 Immigration and Naturalization Service of the United States.”

**Permanent Resident Alien** - see Immigrant.

### **References**

1. *Recommendations for Counting Reported TB Cases*. Atlanta: CDC, January 1977.
2. CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(No. RR-10):40-41.
3. *Technical Instructions for Medical Examination of Aliens*. Atlanta: CDC, Division of Quarantine, revised July 13, 1992.
4. *Statistical Yearbook of the Immigration and Naturalization Service, 1994*. Washington, DC: US Department of Justice, Immigration and Naturalization Service, 1995.

**Note:** Reference to details of FDA approved labeling for NAA (IIa) was deleted from this document in August 2002.