



# MMWR<sup>TM</sup>

## Morbidity and Mortality Weekly Report

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### Asthma Prevalence and Control Characteristics by Race/Ethnicity — United States, 2002

During 1980–1999, asthma prevalence, morbidity, and mortality increased among U.S. adults. These annual rates were higher among certain racial/ethnic minority populations than among whites (1). In addition, racial/ethnic minority populations reported higher use of emergency departments (EDs) and doctors' offices for asthma treatment than whites (1). To assess asthma prevalence and asthma-control characteristics among racial/ethnic populations, CDC analyzed 2002 data from the Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which indicated that among the estimated 16 million (7.5%) U.S. adults with asthma, self-reported current asthma prevalence among racial/ethnic minority populations ranged from 3.1% to 14.5%, compared with 7.6% among whites. Comprehensive state-specific asthma surveillance data are necessary to identify disparities in asthma prevalence and asthma-control characteristics among racial/ethnic populations and to develop targeted public health interventions.

BRFSS is a state-based, random-digit-dialed telephone survey of the noninstitutionalized, civilian U.S. population aged  $\geq 18$  years. The survey collects information about modifiable risk factors for chronic diseases and other leading causes of death and is administered in English and Spanish. In 2002, two questions about asthma were used in the core survey by the 54 reporting areas (i.e., the 50 states, the District of Columbia [DC], Guam, Puerto Rico, and the U.S. Virgin Islands [USVI]). Lifetime asthma was defined as a "yes" response to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" Current asthma was defined as a "yes" response to the same question and the question, "Do you still have asthma?" Weighted prevalence estimates and 95% confidence intervals (CIs) were calculated by using SUDAAN to account for the complex survey design.

In 2002, the median response rate for all 54 reporting areas was 58.3% (range: 42.2% [New Jersey]–82.6% [Minnesota]) (2). The overall prevalence of lifetime asthma for the 54 reporting areas was 11.9% (N = 247,646) (range: 8.6% [South Dakota]–19.6% [Puerto Rico]). Within the 50 states and DC, lifetime asthma prevalence was 11.8% (range: 8.6% [South Dakota]–14.5% [Montana]). The prevalence of current asthma in the 54 reporting areas was 7.6% (range: 4.7% [USVI]–11.5% [Puerto Rico]). Within the 50 states and DC, current asthma prevalence was 7.5% (range: 5.8% [South Carolina]–10.0% [Maine]) (Table 1).

Eight questions in the Adult Asthma History Module were used in 19 areas\* to examine the asthma-control characteristics among respondents with current asthma in eight racial/ethnic populations: 1) non-Hispanic whites, 2) non-Hispanic blacks, 3) non-Hispanic Asians, 4) non-Hispanic American Indians/Alaska Natives (AI/ANs), 5) non-Hispanic Native Hawaiians/Pacific Islanders (NH/PIs), 6) non-Hispanic persons reporting "other" race/ethnicity, 7) non-Hispanic persons reporting multiple races/ethnicities, and 8) Hispanics. Respondents with current asthma were asked to report the

\*California, Delaware, District of Columbia, Idaho, Iowa, Louisiana, Massachusetts, Michigan, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Rhode Island, Texas, Utah, Wisconsin, and the U.S. Virgin Islands.

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##### Notifiable Disease Morbidity and 122 Cities Mortality Data

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1) number of ED visits during the preceding 12 months, 2) number of doctors' office visits for urgent care during the preceding 12 months, 3) number of routine check-ups for asthma during the preceding 12 months, 4) presence of asthma attacks or episodes during the preceding 12 months, 5) presence of asthma symptoms during the preceding 30 days, 6) number of days with sleep disturbances during the preceding 30 days, 7) use of medication during the preceding 30 days, and 8) number of days with activity limitation during the preceding 12 months. Respondents who answered "yes" or provided a numeric response (other than zero) to any question were coded as "yes" to the question, and all other responses were coded as "no." Respondents who answered "don't know" or who refused to answer the question were excluded.

The overall current asthma prevalence in the 19 areas using the adult asthma module without race/ethnicity stratification was 7.3% (95% CI = 6.9%–7.6), compared with 7.6% for all 54 reporting areas. Current asthma prevalence in the 19 areas ranged from 4.7% (USVI) to 9.1% (DC). Current asthma was highest among non-Hispanic respondents of multiple races (15.6%), followed by non-Hispanic AI/ANs (11.6%), non-Hispanic blacks (9.3%), non-Hispanic whites (7.6%), non-Hispanic persons of "other" race/ethnicity (7.2%), Hispanics (5.0%), non-Hispanic Asians (2.9%), and non-Hispanic NH/PIs (1.3%) (Table 2). Hispanic respondents in Puerto Rico reported higher current asthma (11.6%) than Hispanic respondents in the 19 areas using the adult asthma module (5.0%) and Hispanic respondents in the 50 states and DC (5.5%).

Among respondents with current asthma, ED visits were reported with greater frequency by non-Hispanic black (37.2%) and Hispanic (26.0%) respondents and least frequently by non-Hispanic multiracial respondents (13.5%). Non-Hispanic white and non-Hispanic Asian respondents were the least likely to report doctors' office visits for urgent care (25.8% and 17.1%, respectively). These two racial/ethnic populations exhibited the most positive asthma-control profile, with moderate-to-low percentages of respondents reporting each of the negative indicators (i.e., ED visits, urgent care visits, symptoms, attacks, sleep disturbance, and activity limitation). Both racial/ethnic populations also reported a moderate-to-low frequency of routine doctors' visits for asthma care and medication use. Non-Hispanic black, AI/AN, multiracial, and Hispanic respondents all had less positive asthma profiles, with high percentages reporting three to five of the six negative indicators.

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**TABLE 1. Prevalence of lifetime\* and current† asthma among adults, by area — Behavioral Risk Factor Surveillance System, United States, 2002**

Area	Lifetime asthma			Current asthma		
	No. <sup>§</sup>	(%)	(95% CI <sup>¶</sup> )	No.	(%)	(95% CI)
Alabama	3,087	(11.0)	(9.8–12.3)	3,083	(7.2)	(6.2–8.2)
Alaska	2,690	(11.6)	(9.7–13.6)	2,681	(7.4)	(5.7–9.1)
Arizona	3,223	(13.9)	(12.0–15.8)	3,217	(9.0)	(7.5–10.5)
Arkansas	3,894	(12.1)	(10.8–13.3)	3,883	(7.6)	(6.5–8.6)
California	4,210	(12.7)	(11.4–13.9)	4,207	(6.4)	(5.6–7.3)
Colorado	4,050	(12.1)	(11.0–13.3)	4,039	(7.7)	(6.8–8.6)
Connecticut	5,554	(13.2)	(12.1–14.3)	5,538	(8.5)	(7.6–9.4)
Delaware	4,029	(11.8)	(10.4–13.3)	4,022	(7.6)	(6.5–8.8)
District of Columbia	2,405	(14.2)	(12.3–16.2)	2,389	(9.1)	(7.5–10.6)
Florida	6,134	(10.5)	(9.6–11.4)	6,119	(6.5)	(5.8–7.2)
Georgia	5,060	(11.7)	(10.5–12.8)	5,049	(7.4)	(6.5–8.3)
Hawaii	5,994	(13.4)	(12.3–14.6)	5,977	(6.9)	(6.0–7.7)
Idaho	5,028	(11.8)	(10.7–12.9)	5,015	(7.7)	(6.8–8.6)
Illinois	5,238	(10.7)	(9.8–11.7)	5,233	(7.2)	(6.4–8.0)
Indiana	5,778	(11.3)	(10.4–12.3)	5,760	(7.5)	(6.8–8.3)
Iowa	3,657	(9.0)	(7.9–10.1)	3,651	(6.4)	(5.4–7.5)
Kansas	4,591	(11.2)	(10.2–12.2)	4,577	(7.6)	(6.8–8.5)
Kentucky	7,052	(12.8)	(11.5–14.1)	7,038	(9.5)	(8.4–10.6)
Louisiana	5,030	(10.4)	(9.4–11.5)	5,015	(6.0)	(5.3–6.8)
Maine	2,436	(13.6)	(12.1–15.1)	2,430	(10.0)	(8.7–11.4)
Maryland	4,394	(12.7)	(11.4–13.9)	4,380	(8.2)	(7.2–9.3)
Massachusetts	7,417	(12.9)	(11.9–13.9)	7,398	(8.9)	(8.1–9.8)
Michigan	5,927	(12.8)	(11.7–13.9)	5,909	(8.8)	(7.8–9.7)
Minnesota	4,477	(11.3)	(10.2–12.4)	4,455	(7.5)	(6.6–8.4)
Mississippi	4,084	(10.6)	(9.4–11.9)	4,072	(6.1)	(5.3–7.0)
Missouri	4,721	(12.5)	(11.2–13.8)	4,703	(8.5)	(7.4–9.6)
Montana	4,027	(14.5)	(12.7–16.2)	4,018	(8.9)	(7.6–10.1)
Nebraska	4,379	(10.6)	(9.4–11.7)	4,370	(7.2)	(6.3–8.2)
Nevada	3,155	(12.4)	(10.8–14.1)	3,135	(7.6)	(6.3–8.9)
New Hampshire	5,034	(13.9)	(12.8–15.0)	5,024	(8.7)	(7.8–9.6)
New Jersey	6,169	(11.8)	(10.1–13.6)	6,153	(7.8)	(6.3–9.3)
New Mexico	4,669	(11.7)	(10.5–12.8)	4,662	(7.8)	(6.9–8.8)
New York	4,456	(11.5)	(10.4–12.6)	4,450	(7.9)	(7.0–8.8)
North Carolina	6,739	(10.9)	(9.7–12.1)	6,725	(6.5)	(5.5–7.4)
North Dakota	2,994	(10.3)	(9.0–11.5)	2,987	(7.3)	(6.3–8.4)
Ohio	4,088	(10.3)	(9.2–11.4)	4,076	(7.3)	(6.4–8.3)
Oklahoma	6,759	(11.2)	(10.3–12.2)	6,740	(7.1)	(6.4–7.8)
Oregon	3,073	(14.0)	(12.6–15.4)	3,058	(8.7)	(7.6–9.8)
Pennsylvania	13,477	(11.5)	(10.8–12.3)	13,444	(7.9)	(7.3–8.6)
Rhode Island	3,838	(12.8)	(11.6–14.1)	3,824	(8.9)	(7.9–9.9)
South Carolina	4,496	(10.0)	(8.8–11.2)	4,488	(5.8)	(4.9–6.8)
South Dakota	4,786	(8.6)	(7.6–9.6)	4,779	(5.9)	(5.1–6.7)
Tennessee	3,204	(12.2)	(10.9–13.5)	3,198	(8.2)	(7.1–9.3)
Texas	6,105	(11.6)	(10.7–12.6)	6,092	(7.1)	(6.4–7.9)
Utah	4,076	(12.3)	(10.9–13.7)	4,068	(8.0)	(6.8–9.2)
Vermont	4,233	(12.7)	(11.6–13.9)	4,224	(8.6)	(7.7–9.6)
Virginia	4,387	(12.1)	(10.8–13.3)	4,367	(7.2)	(6.2–8.2)
Washington	4,880	(14.3)	(13.1–15.5)	4,850	(8.9)	(7.8–9.9)
West Virginia	3,345	(12.8)	(11.5–14.1)	3,335	(9.1)	(8.0–10.2)
Wisconsin	4,352	(11.7)	(10.5–12.9)	4,344	(8.5)	(7.5–9.6)
Wyoming	3,541	(11.1)	(9.9–12.3)	3,528	(7.3)	(6.3–8.3)
<b>Total**</b>	<b>240,422</b>	<b>(11.8)</b>	<b>(11.6–12.0)</b>	<b>239,779</b>	<b>(7.5)</b>	<b>(7.3–7.7)</b>
Guam	829	(12.0)	(9.5–14.6)	829	(5.7)	(4.0–7.5)
Puerto Rico	4,118	(19.6)	(18.1–21.1)	4,118	(11.5)	(10.3–12.7)
U.S. Virgin Islands	2,277	(9.4)	(7.9–11.0)	2,269	(4.7)	(3.5–5.9)

\* Persons who answered "yes" to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?"

† Persons who answered "yes" to the questions, "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" and "Do you still have asthma?"

§ Unweighted sample size.

¶ Confidence interval.

\*\* 50 states and the District of Columbia.

**Editorial Note:** Asthma is a chronic respiratory illness often associated with familial, allergenic, socioeconomic, psychological, and environmental factors (3). Although recent reports suggest asthma-related mortality has been declining since 1996, a disparity remains between rates for non-Hispanic whites and those for non-Hispanic blacks and other racial/ethnic populations (4). Non-Hispanic blacks experience higher rates than non-Hispanic whites for ED visits, hospitalizations, and deaths; these trends are not explained entirely by higher asthma prevalence among non-Hispanic blacks (4). Other racial/ethnic populations experience higher asthma mortality and hospitalization rates than non-Hispanic whites while also reporting lower asthma prevalence and fewer outpatient and ED visits. The asthma-control characteristics described in this report can contribute to increased mortality and higher hospitalization rates.

In 2002, the BRFSS adult lifetime asthma prevalence estimate and the adult current asthma prevalence estimate for the 50 states and DC were higher than in 2001 and 2000. Consistent with previous BRFSS findings, the data in this report indicate variability across states and territories in the lifetime and current asthma estimates. In addition, racial/ethnic populations with the highest current asthma prevalence in 2001 (non-Hispanics of multiple races, non-Hispanic AI/ANs, and non-Hispanic blacks) reported higher adult current asthma prevalence in 2002. Non-Hispanic whites also reported higher adult current asthma prevalence in 2002 than in 2001. Although non-Hispanic Asians reported the lowest current asthma prevalence in 2001, current asthma prevalence decreased in 2002 in contrast to the increases reported by other racial/ethnic populations. Non-Hispanic NH/PIs also reported a decrease in current asthma prevalence in

**TABLE 2. Number and percentage of persons reporting current\* asthma, by race/ethnicity and selected characteristics — Behavioral Risk Factor Surveillance System (BRFSS), 19 selected areas†, 2002**

Race/Ethnicity	Current prevalence <sup>§</sup>		ED <sup>¶</sup> visit	Urgent visit	Routine visit	Asthma symptoms	Asthma attack	Sleep difficulty	Activity limited	Used medication(s)
	No.	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
White, non-Hispanic	5,458	(7.6)	(14.5)	(25.8)	(52.6)	(76.3)	(52.3)	(47.4)	(23.6)	(70.0)
Black, non-Hispanic	709	(9.3)	(37.2)	(35.9)	(62.9)	(68.7)	(47.8)	(63.3)	(39.5)	(68.0)
Asian, non-Hispanic	54	(2.9)	(18.8)	(17.1)	(50.9)	(67.8)	(35.0)	—**	—	(63.2)
Native Hawaiian/Pacific Islander, non-Hispanic	9	(1.3)	—	—	—	—	—	—	—	—
American Indian/Alaska Native, non-Hispanic	143	(11.6)	(20.4)	(35.2)	(66.6)	(78.0)	(64.2)	(48.3)	(26.3)	(76.0)
Other race, non-Hispanic	50	(7.2)	—	—	—	—	—	—	—	—
Multiracial, non-Hispanic	115	(15.6)	(13.5)	(36.9)	(53.8)	(92.7)	(66.0)	(60.3)	(43.6)	(76.6)
Hispanic	546	(5.0)	(26.0)	(36.9)	(51.4)	(72.3)	(52.4)	(64.7)	(40.4)	(67.0)
<b>Total††</b>	<b>7,084</b>	<b>(7.2)</b>	<b>(18.4)</b>	<b>(28.5)</b>	<b>(53.9)</b>	<b>(75.1)</b>	<b>(52.0)</b>	<b>(51.1)</b>	<b>(28.0)</b>	<b>(69.3)</b>
Lower 95% CI <sup>§§</sup>		(6.9)	(16.4)	(26.3)	(51.6)	(73.1)	(49.6)	(48.4)	(25.6)	(67.1)
Upper 95% CI		(7.5)	(20.4)	(30.8)	(56.3)	(77.2)	(54.3)	(53.9)	(30.3)	(71.5)

\* Persons who answered "yes" to the questions, "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" and "Do you still have asthma?"

† California, Delaware, District of Columbia, Idaho, Iowa, Louisiana, Massachusetts, Michigan, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Rhode Island, Texas, Utah, Wisconsin, and the U.S. Virgin Islands.

§ Unweighted number of BRFSS respondents with current asthma.

¶ Emergency department.

\*\* Fewer than 50 respondents; estimates suppressed.

†† Excludes "Don't know/refused" responses to asthma status or race/ethnicity questions, missing responses, outliers, reporting of "no asthma symptoms," and/or response miscodes.

§§ Confidence interval.

2002, compared with 2001. Higher current asthma prevalence cannot be explained by the distribution of BRFSS respondents by race/ethnicity because the change in any racial/ethnic population in the BRFSS data was <1% from 2001 to 2002. Possible reasons for variability include demographic, socioeconomic (e.g., income and education level), and environmental factors (e.g., outdoor air pollution and climate), physician diagnostic procedures, or data-collection practices (3).

The findings in this report are subject to at least four limitations. First, the median response rate for the survey was 58.3%. However, BRFSS asthma prevalence is similar to estimates from other surveys with higher response rates, such as the National Health Interview Survey (5). Second, BRFSS does not measure asthma prevalence among institutionalized adults, military personnel, persons aged <18 years, and residents without telephones. Third, the validity of self-reported asthma or asthma-control characteristics in BRFSS is unknown (6). Actual adherence to prescribed medication or asthma treatment plans in respondents with current asthma is unknown. Finally, the asthma-control questions were asked in 19 of the 54 BRFSS reporting areas and might not accurately reflect the asthma-control characteristics of other reporting areas or accurately represent their racial/ethnic distribution.

States and territories using the BRFSS Adult Asthma History module can direct asthma management within their jurisdictions and address disparities in asthma risk and control characteristics among racial/ethnic populations. Use of comprehensive state-specific asthma surveillance data to identify populations with poorly controlled asthma is instrumental in developing, implementing, and evaluating asthma-control programs and interventions.

#### Acknowledgment

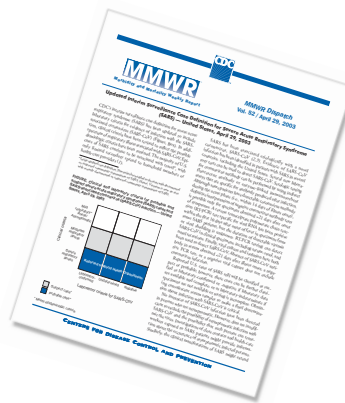
This report is based on data contributed by state BRFSS coordinators.

#### References

1. CDC. Surveillance for asthma—United States, 1980–1999. In: CDC Surveillance Summaries (March 29). MMWR 2002;51(No. SS-1).
2. CDC. 2002 BRFSS summary data quality report. Available at <http://www.cdc.gov/brfss/ti-quality-req2002.htm>.
3. Weiss KB, Gergen PJ, Wagener DK. Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annu Rev Public Health* 1993;14:491–513.
4. CDC. Deaths: Final Data for 2000. National Vital Statistics Reports (Vol. 50, no. 15). Hyattsville, Maryland: U.S. Department of Health and Human Services, CDC, National Center for Health Statistics, 2002.
5. Nelson DE, Holtzman D, Bolen J, Stanwyck CA, Mack KA. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). *Int J Public Health* 2001;46(suppl):1–42.
6. CDC. Self-reported asthma prevalence and control among adults—United States, 2001. MMWR 2003;52:381–4.

up-to-the-minute: *adj*

1 : extending up to the immediate present, including the very latest information; see also *MMWR*.



know what matters.



## Impact of a Smoking Ban on Restaurant and Bar Revenues — El Paso, Texas, 2002

Smoke-free indoor air ordinances protect employees and customers from secondhand smoke exposure, which is associated with increased risks for heart disease and lung cancer in adults and respiratory disease in children (1,2). As of January 2004, five states (California, Connecticut, Delaware, Maine, and New York) and 72 municipalities in the United States had passed laws that prohibit smoking in almost all workplaces, restaurants, and bars (3). On January 2, 2002, El Paso, Texas (2000 population: 563,662), implemented an ordinance banning smoking in all public places and workplaces, including restaurants and bars. The El Paso smoking ban is the strongest smoke-free indoor air ordinance in Texas and includes stipulations for enforcement of the ban by firefighting and law enforcement agencies, with fines of up to \$500 for ordinance violations (4). To assess whether the El Paso smoking ban affected restaurant and bar revenues, the Texas Department of Health (TDH) and CDC analyzed sales tax and mixed-beverage tax data during the 12 years preceding and 1 year after the smoking ban was implemented. This report summarizes the results of that analysis, which determined that no statistically significant changes in restaurant and bar revenues occurred after the smoking ban took effect. These findings are consistent with those from studies of smoking bans in other U.S. cities (5–8). Local public health officials can use these data to support implementation of smokefree environments as recommended by the Task Force on Community Preventive Services (9).

To study the impact of the El Paso smoking ban on all sectors of the local restaurant and bar industry, TDH and CDC obtained quarterly sales tax reports and monthly mixed-beverage tax receipts from the Texas Comptroller of Public Accounts. The sales tax reports provided revenue data for restaurants, bars, and retail businesses, grouped by Standardized Industrial Classification (SIC) codes. Categories were created for restaurants (SIC codes 5812, 5816, and 5817) and bars (SIC codes 5813 and 5814) (10). The sales tax reports included revenue generated by sales of meals and sales of beer and wine for establishments with beer and wine retailer permits; sales tax revenue data were used for 1990–2002. Other restaurant and bar revenue data came from reports filed by holders of mixed-beverage permits. The state's mixed-beverage gross receipts tax, enacted in 1994, is levied on revenue generated by sales of alcoholic beverages (e.g., liquor, beer, and wine) and nonalcoholic beverages and ice used in mixed drinks. Mixed-beverage revenue data were used for 1995–2002.

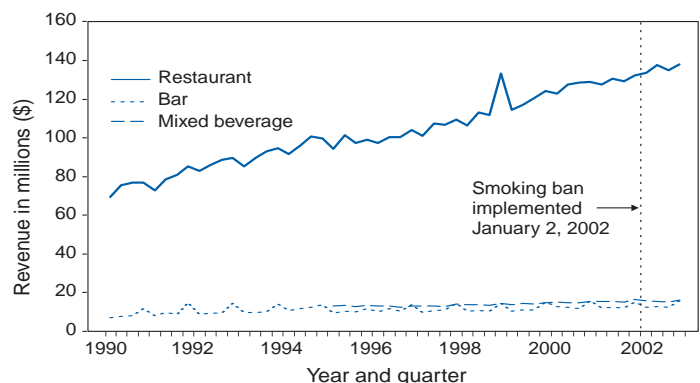
Multiple linear regression analysis was used to examine the effect of the El Paso smoking ban on changes in revenue over time. The following independent variables were considered: a variable indicating whether the smoking ban was in force, an ordinal variable to represent secular time, and three variables to indicate during which one of four calendar quarters the revenue data were collected. Two regression models were created for each of the following primary dependent variables: 1) revenue subject to sales tax from all restaurants and bars, restaurants only, and bars only; and 2) revenue subject to the mixed-beverage tax. For each category, the first model examined the association between the smoking ban and revenue, and the second examined the association between the smoking ban and the fraction of revenue as a percentage of El Paso's total retail revenues (SIC codes 5211–5999). This fraction accounts for economic variation that might impact revenue in all sectors of the retail economy (6).

Two sets of statistics were used to evaluate the quality of the models. The Durbin-Watson statistic was calculated for each model to determine if first-order autocorrelation was present. Variance inflation factors were examined to determine if multicollinearity was present in any of the models.

Restaurant, bar, and mixed-beverage revenues varied by quarter; in all categories, revenues usually were higher during the fourth quarter (October–December) of each year (Figure 1). During all four quarters, bar and mixed-beverage revenues accounted for approximately 1% of total retail revenues (Figure 2).

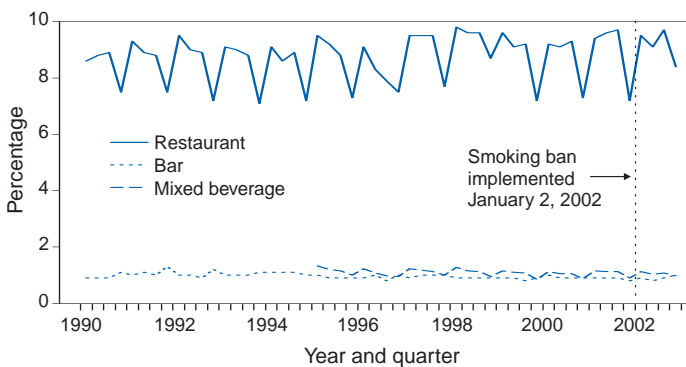
None of the regression models for restaurant, bar, or mixed-beverage revenues or for such revenues as percentages of total retail revenue over time showed any statistically significant changes after the smoking ban was implemented (Table). In

**FIGURE 1. Restaurant, bar, and mixed-beverage\* revenues, before and after implementation of smoking ban, by quarter — El Paso, Texas, 1990–2002**



\* Mixed-beverage revenue data were available only for 1995–2002.

**FIGURE 2. Restaurant, bar, and mixed-beverage\* revenues as percentage of total retail revenues, before and after implementation of smoking ban, by quarter — El Paso, Texas, 1990–2002**



\*Mixed-beverage revenue data were available only for 1995–2002.

addition, the results did not change when revenues were adjusted for inflation, and adjusting for changes in price did not change the results (8). In all models, the variance inflation factors had values of <2 for each of the independent variables, indicating that multicollinearity was not present, and the Durbin-Watson statistics indicated that none of the autocorrelations was statistically significant (Table).

**Reported by:** P Huang, MD, Texas Dept of Health. AK De, PhD, Div of Applied Public Health Training, Epidemiology Program Office; ME McCusker, MD, EIS Officer, CDC.

**Editorial Note:** No decline in total restaurant or bar revenues occurred in El Paso, Texas, after the city's smoking ban was implemented on January 2, 2002. These findings are consistent with the results of studies in other municipalities that determined smoke-free indoor air ordinances had no effect

on restaurant revenues (2,5–8). Despite claims that these laws especially might reduce alcoholic beverage revenues (2), the mixed-beverage revenue analyses indicate that sales of alcoholic beverages were not affected by the El Paso smoking ban.

The findings in this report are subject to at least three limitations. First, because sales tax reports lag revenue collection by 6 months, sales tax data were available for only 1 year after the El Paso smoking ban was implemented. However, analyses from other cities that included data for several years after a smoking ban was enacted indicated no declines in restaurant or bar revenues (6–8). Revenue data from El Paso will be monitored for any changes in restaurant and bar revenues. Second, because limited revenue data for El Paso were available, methods that might provide better estimates of the impact of the ban could not be used. Regression models measuring changes in slope for revenues before and after implementation of smoke-free indoor air ordinances might provide better estimates of how these ordinances affect revenues (8); time-series models also might produce better estimates. When more information becomes available, these models should be applied to the El Paso data. Finally, because the SIC code-based restaurant and bar categories are not mutually exclusive, certain bars were included in the restaurant category created for this analysis. However, mixed-beverage tax data, which provide a more precise measure of alcohol-related revenue, support the finding that bar revenues were not affected by the smoking ban.

Opponents of smoke-free indoor air ordinances have claimed that enacting smoke-free indoor air ordinances will harm restaurant and bar revenues (2). However, the findings in this report indicate that, in El Paso, Texas, restaurant and bar revenues were not affected by the smoking ban. Such analyses of

**TABLE. Impact of a smoking ban on restaurant, bar, and mixed-beverage revenues\* — El Paso, Texas, 2002**

Revenue type	Mean revenue per quarter (\$)	Effect of ban		Model fit <sup>†</sup>	
		Change in revenue <sup>§</sup> (\$)	(95% CI) <sup>¶</sup>	R <sup>2</sup>	Durbin-Watson <sup>**</sup>
Restaurant	104,749,601	1,336,331	(-3,189,740–5,862,402)	0.96	1.76
% of total retail	8.8	0.2	(-0.7–1.1)	0.21	2.05
Bar	11,454,957	9,211	(-1,959,153–1,977,576)	0.43	2.03
% of total retail	1.0	0.03	(-0.1–0.1)	0.29	1.70
<b>Total</b>	<b>116,204,559</b>	<b>1,269,532</b>	<b>(-4,632,656–7,171,720)</b>	<b>0.95</b>	<b>2.08</b>
% of total retail	<b>9.7</b>	<b>0.3</b>	<b>(-0.6–1.2)</b>	<b>0.15</b>	<b>2.02</b>
Mixed beverage	14,187,573	-276,505	(-909,710–356,700)	0.83	1.89
% of total retail	1.1	0.03	(-0.1–0.2)	0.46	1.70

\* Restaurant and bar revenues are from sales tax data for 1990–2002; mixed-beverage revenues are from mixed-beverage gross receipts tax data for 1995–2002.

<sup>†</sup> P values were all nonsignificant (p<0.01).

<sup>§</sup> Change in revenue indicates the value of the coefficient for the indicator variable representing the El Paso smoking ban in each model. All p values for this coefficient were nonsignificant (p>0.1).

<sup>¶</sup> Confidence interval.

<sup>\*\*</sup> None of the Durbin-Watson results indicates a significant autocorrelation. In a model with three independent variables and 52 observations (i.e., restaurant and bar models), <1.67 indicates significant positive autocorrelation and >2.58 indicates significant negative autocorrelation. In a model with three independent variables and 32 observations (i.e., mixed-beverage models), the critical values are <1.65 and >2.76, respectively.

economic data can provide local policymakers with statistical evidence to evaluate the merit of implementing smoke-free indoor air ordinances in their communities.

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#### References

1. California Environmental Protection Agency. Health effects of exposure to environmental tobacco smoke. Sacramento, California: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, 1997. Available at [http://www.oehha.org/air/environmental\\_tobacco/finalets.html](http://www.oehha.org/air/environmental_tobacco/finalets.html).
2. Glantz SA. Smoke-free restaurant ordinances do not affect restaurant business. Period [Editorial]. *J Public Health Manag Pract* 1999;5:vi-ix.
3. American Nonsmokers' Rights Foundation. Clean indoor air ordinance counts summary. Berkeley, California: American Nonsmokers' Rights Foundation, 2004. Available at <http://www.no-smoke.org/mediaordlist.pdf>.
4. Gingiss PM, Roberts-Gray C, Boerm MC, et al. Texas smoke-free municipal ordinance database. Houston, Texas: University of Houston, 2002.
5. CDC. Assessment of the impact of a 100% smoke-free ordinance on restaurant sales—West Lake Hills, Texas, 1992–1994. *MMWR* 1995;44:370–2.
6. Glantz SA, Smith LR. The effect of ordinances requiring smoke-free restaurants and bars on revenues: a follow-up. *Am J Public Health* 1997;87:1687–93.
7. Glantz SA. Effect of smokefree bar law on bar revenues in California. *Tob Control* 2000;9:111–2.
8. Glantz SA, Charlesworth MA. Tourism and hotel revenues before and after passage of smoke-free restaurant ordinances. *JAMA* 1999;281:1911–8.
9. Task Force on Community Preventive Services. Recommendations regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J Prev Med* 2001;20:10–5.
10. Occupational Safety and Health Administration. Standard Industrial Classification (SIC) System Search. Washington, DC: U.S. Department of Labor, Occupational Safety and Health Administration, 2003. Available at <http://www.osha.gov/oshstats/sicser.html>.

## Effect of New Susceptibility Breakpoints on Reporting of Resistance in *Streptococcus pneumoniae* — United States, 2003

In January 2003, the National Committee for Clinical Laboratory Standards (NCCLS) finalized new breakpoints for defining the susceptibility of *Streptococcus pneumoniae* isolates to cefotaxime and ceftriaxone (1). The former breakpoints were based on attainable concentrations of these antibiotics in cerebrospinal fluid (CSF) and the level at which it was thought that meningitis treatment failed because of elevated minimum inhibitory concentrations (MICs). The new breakpoints differ for *S. pneumoniae* isolates causing menin-

gitis and those causing nonmeningeal clinical syndromes. To assess the effect of these new criteria on reporting of nonsusceptible *S. pneumoniae* isolates, CDC analyzed cefotaxime MIC data from the Active Bacterial Core Surveillance (ABCs) of the Emerging Infections Program (EIP) Network during 1998–2001. This report summarizes the results of that analysis, which indicated that after the new criteria were applied, the number of isolates defined as nonsusceptible to cefotaxime decreased 52.1%–61.2% for each year. Laboratory reports for clinicians should include interpretations using the new breakpoints for meningitis and nonmeningeal syndromes for all non-CSF isolates.

During 1998–2001, ABCs/EIP surveillance areas from eight states (California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee) conducted surveillance for invasive pneumococcal disease. Surveillance populations ranged from approximately 17.4 million in 1998 to 18.6 million in 2001 (2). A case of invasive pneumococcal disease was defined as isolation of *S. pneumoniae* from a normally sterile site in a resident of a surveillance area. Isolates were tested for susceptibility at reference laboratories by using NCCLS methods (1). Isolates were considered to be nonsusceptible to an antibiotic if they met intermediate or resistant criteria by MIC testing. Under the former criteria, susceptible, intermediate, and resistant MIC breakpoints for cefotaxime and ceftriaxone were  $\leq 0.5$ , 1, and  $\geq 2$   $\mu\text{g/mL}$ , respectively, for all pneumococci. Under the new criteria, isolates from CSF or other body sites where meningitis is suspected maintain the old breakpoints, but isolates causing nonmeningeal syndromes have breakpoints of  $\leq 1$ , 2, and  $\geq 4$   $\mu\text{g/mL}$ , respectively.

During 1998–2001, the number of *S. pneumoniae* isolates collected annually ranged from 3,128 to 3,961 (Table). Approximately 95.6% of isolates collected caused nonmeningeal clinical syndromes such as pneumonia with bacteremia. The percentage of isolates causing meningitis ranged from 4.4% in 1998 to 5.5% in 2000.

The percentage of isolates causing nonmeningeal syndromes that were nonsusceptible to penicillin ranged from 24.3% in 1998 to 26.5% in 2000. Penicillin nonsusceptibility was consistently higher among isolates causing meningitis (Table). The susceptibility breakpoints for penicillin remain unchanged and are the same for isolates causing both meningitis and nonmeningeal syndromes.

Under the former breakpoints, the percentage of isolates causing nonmeningeal syndromes that were nonsusceptible to cefotaxime ranged from 13.8% in 1998 to 16.7% in 2000 (Table). Cefotaxime nonsusceptibility was consistently higher among isolates causing meningitis. When the new breakpoints were applied, the percentage of isolates causing invasive



**TABLE. *Streptococcus pneumoniae* nonsusceptibility (NS) to penicillin and cefotaxime, by former and new\* National Committee for Clinical Laboratory Standards (NCCLS) breakpoints and year — Active Bacterial Core Surveillance, United States, 1998–2001**

NCCLS breakpoints	1998	1999	2000	2001
<b>Surveillance population</b>	<b>17,383,935</b>	<b>17,569,857</b>	<b>18,299,953</b>	<b>18,612,289</b>
<b>Total isolates collected (No.)</b>	<b>3,629</b>	<b>3,961</b>	<b>3,666</b>	<b>3,128</b>
Meningitis isolates	158	209	203	168
Nonmeningeal isolates	3,471	3,752	3,463	2,960
<b>Penicillin NS (%)</b>				
NS among all isolates	24.6	26.4	26.8	24.9
NS among meningitis isolates	29.8	30.6	31.5	30.4
NS among nonmeningeal isolates	24.3	26.2	26.5	24.6
<b>Cefotaxime NS, by former breakpoints (%)</b>				
NS among all isolates	14.2	16.5	16.9	16.0
NS among meningitis isolates	22.2	19.6	20.2	19.6
NS among nonmeningeal isolates	13.8	16.4	16.7	15.8
<b>Cefotaxime NS, by new breakpoints (%)</b>				
NS among all isolates	6.7	6.4	8.1	6.4
NS among meningitis isolates	22.2	19.6	20.2	19.6
NS among nonmeningeal isolates	6.0	5.7	7.4	5.6
<b>% decrease in total no. NS isolates with new criteria</b>	<b>52.8</b>	<b>61.2</b>	<b>52.1</b>	<b>60.0</b>

\* New NCCLS breakpoints were finalized in January 2003.

nonmeningeal syndromes defined as cefotaxime nonsusceptible decreased to 5.6%–7.4%; the percentage of isolates causing meningitis defined as nonsusceptible remained unchanged. Cefotaxime nonsusceptibility among all isolates was 6.4%–8.1%, representing a decrease of 52.1%–61.2% in cefotaxime nonsusceptibility annually (Table).

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**Editorial Note:** When the new breakpoints were applied to previously collected ABCs MIC data for 1998–2001, the number of *S. pneumoniae* isolates defined as nonsusceptible to cefotaxime decreased 52.1%–61.2% each year. Although breakpoints remain unchanged for pneumococci from CSF or other body sites where meningitis is suspected, these isolates constitute only a small fraction (4%–5%) of all collected.

Under the former criteria, *S. pneumoniae* infections treated with beta-lactam antibiotics to which isolates had intermediate resistance were associated with worse clinical outcomes for meningitis (3,4) but not for pneumonia (5). This difference might be related to the attainable concentration level of beta-lactam antibiotics in CSF, compared with plasma and interstitial fluid. Beta-lactam antibiotic concentrations in the lung interstitia are similar to those measured simultaneously in serum, and concentrations in CSF are lower than serum levels (6).

MIC breakpoints for penicillin were not changed because susceptibility to penicillin (MIC <0.06 µg/mL) is used to predict susceptibility to other penicillins, cephalosporins, and carbapenems. Defining new penicillin susceptibility breakpoints for nonmeningeal syndromes also would require recommending specific doses for each route of penicillin administration.

State and local health departments conduct surveillance for drug-resistant *S. pneumoniae* and rely on data generated by clinical laboratories. The change in susceptibility breakpoints will cause an artificial decline in the percentage of nonsusceptible *S. pneumoniae* isolates on surveillance reports. Health departments should examine laboratory data collected as part of surveillance programs to ensure that data are interpreted and aggregated correctly.

Antimicrobial susceptibility testing influences clinicians' antibiotic choices (7). Current recommendations for treating penicillin-resistant pneumococcal pneumonia suggest choosing one of the following agents on the basis of susceptibility testing results: cefotaxime, ceftriaxone, selected fluoroquinolones, or, if the isolate is resistant to fluoroquinolone and cephalosporin, vancomycin (8). New clinical-syndrome-based susceptibility breakpoints for cefotaxime and ceftriaxone might lead to an increase in use of these antibiotics to treat nonmeningeal pneumococcal disease over broader-spectrum antibiotics (e.g., fluoroquinolones). *S. pneumoniae* strains resistant to fluoroquinolones are uncommon, but development of resistance is a concern (9). If the new NCCLS susceptibility breakpoints promote using narrower-spectrum

antibiotics to treat pneumococcal disease, development of resistance to broader-spectrum antibiotics might be slowed.

## References

1. National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial susceptibility testing. Wayne, Pennsylvania: National Committee for Clinical Laboratory Standards, 2002; document no. NCCLS M100-S12.
2. CDC. Active Bacterial Core Surveillance (ABCs) report: *Streptococcus pneumoniae*, 1998–2001. Available at <http://www.cdc.gov/ncidod/dbmd/abcs>.
3. Catalan MJ, Fernandez JM, Vazquez A, et al. Failure of cefotaxime in the treatment of meningitis due to relatively resistant *Streptococcus pneumoniae*. Clin Infect Dis 1994;18:766–9.
4. Klugman KP, Friedland JR, Bradley JS. Bactericidal activity against cephalosporin-resistant *Streptococcus pneumoniae* in cerebrospinal fluid of children with acute bacterial meningitis. Antimicrob Agents Chemother 1995;39:1988–92.
5. Feikin DR, Schuchat A, Kolczak M, et al. Mortality from invasive pneumococcal pneumonia in the era of antibiotic resistance, 1995–1997. Am J Public Health 2000;90:223–9.
6. Craig WA. Pharmacokinetic/pharmacodynamic parameters: rationale for antibacterial dosing of mice and men. Clin Infect Dis 1998;26:1–10.
7. Heffelfinger JD, Dowell SF, Jorgensen JH, et al. Management of community-acquired pneumonia in the era of pneumococcal resistance. Arch Intern Med 2000;160:1399–408.
8. Mandell LA, Bartlett JG, Dowell SF, et al. Update of practice guidelines for the management of community-acquired pneumonia in immunocompetent adults. Clin Infect Dis 2003;37:1405–33.
9. Brueggemann AB, Coffmann SL, Rhomberg P, et al. Fluoroquinolone resistance in *Streptococcus pneumoniae* in United States since 1994–1995. Antimicrob Agents Chemother 2002;46:680–8.

## Interim Guidelines for the Evaluation of Infants Born to Mothers Infected with West Nile Virus During Pregnancy

West Nile virus (WNV) is a single-stranded RNA flavivirus with antigenic similarities to Japanese encephalitis and St. Louis encephalitis viruses. It is transmitted to humans primarily through the bites of infected mosquitoes. Flavivirus infection during pregnancy has been associated rarely with both spontaneous abortion and neonatal illness but has not been known to cause birth defects in humans (1–4). During 2002, a total of 4,156 cases of WNV illness in humans, including 2,946 cases of neuroinvasive disease, were reported to CDC by state health departments. In 2002, a woman who had WNV encephalitis during the 27th week of her pregnancy delivered a full-term infant with chorioretinitis, cystic destruction of cerebral tissue, and laboratory evidence of congenitally acquired WNV infection (5,6). Although this case demonstrated intrauterine WNV infection in an infant with congenital abnormalities, it did not prove a causal relation between WNV infection and these abnormalities. During 2002, CDC

investigated three other instances of maternal WNV infection. In all three cases, the infants were born at full term with normal appearance and negative laboratory tests for WNV infection; cranial imaging studies and ophthalmologic examinations were not performed. During 2003, CDC received reports of approximately 9,100 cases of WNV illness, including approximately 2,600 cases of neuroinvasive disease\*. CDC is gathering data on pregnancy outcomes for approximately 70 women with WNV illness during pregnancy (CDC, unpublished data, 2003).

To develop guidelines for evaluating infants born to mothers who acquire WNV infection during pregnancy, on December 2, 2003, CDC convened a meeting of specialists in the evaluation of congenital infections. This report summarizes the interim guidelines established during that meeting.

### Screening for WNV During Pregnancy

No specific treatment for WNV infection exists, and the consequences of WNV infection during pregnancy have not been well defined. For these reasons, screening of asymptomatic pregnant women for WNV infection is not recommended.

### Diagnosis of WNV Infection During Pregnancy

Pregnant women who have meningitis, encephalitis, acute flaccid paralysis, or unexplained fever in an area of ongoing WNV transmission should have serum (and cerebrospinal fluid [CSF], if clinically indicated) tested for antibody to WNV. If serologic or other laboratory tests indicate recent infection with WNV, these infections should be reported to the local or state health department, and the women should be followed to determine the outcomes of their pregnancies.

### Evaluation of the Fetus in Pregnant Women with WNV Infection

If WNV illness is diagnosed during pregnancy, a detailed ultrasound examination of the fetus to evaluate for structural abnormalities should be considered no sooner than 2–4 weeks after onset of WNV illness in the mother, unless earlier examination is otherwise indicated. Amniotic fluid, chorionic villi, or fetal serum can be tested for evidence of WNV infection. However, the sensitivity, specificity, and predictive value of tests that might be used to evaluate fetal WNV infection are not known, and the clinical consequences of fetal infection have not been determined. In case of miscarriage or induced abortion, testing of all products of conception (e.g., the placenta and umbilical cord) for evidence of WNV infec-

tion is advised to document the effects of WNV infection on pregnancy outcome.

### Evaluation of Infants Born to Mothers Infected with WNV During Pregnancy

When an infant is born to a mother who was known or suspected to have WNV infection during pregnancy, clinical evaluation is recommended (Box 1). Further evaluation should be considered if any clinical abnormality is identified or if laboratory testing indicates that an infant might have congenital WNV infection (Box 2).

#### BOX 1. Recommended clinical evaluation of infants born to mothers infected with West Nile virus (WNV) during pregnancy

- Thorough physical examination, including careful measurement of the head circumference, length, weight, and assessment of gestational age.
- Evaluation for neurologic abnormalities, dysmorphic features, splenomegaly, hepatomegaly, and rash or other skin lesions. Any rash, skin lesions, or dysmorphic features should be photographed. If an abnormality is noted, consultation with an appropriate specialist is recommended.
- Testing of infant serum for IgM and IgG antibody to WNV. The initial sample should be collected either from the umbilical cord or directly from the infant within 2 days of birth. If maternal WNV illness occurred  $\leq 8$  days before delivery and the initial infant serum sample is negative for WNV IgM antibody, a second infant serum sample should be obtained  $\geq 2$  weeks after the first sample. Free testing of samples by CDC can be arranged by contacting state public health laboratories.
- Evaluation of hearing by evoked otoacoustic emissions testing or auditory brainstem response testing, either before discharge from the hospital or within 1 month after birth. Infants with abnormal initial hearing screens should be referred to an audiologist for further evaluation.
- Initial examination of the placenta by a pathologist is encouraged. Regardless of whether this is completed, the entire placenta, a sample of umbilical cord tissue, and a sample of serum from the umbilical cord should be retained for further evaluation if congenital WNV infection is identified or strongly suspected. A section of the placenta and umbilical cord should be frozen, and the remainder of the placenta should be preserved in formalin; a sample of umbilical cord blood should be centrifuged, and the serum should be refrigerated or frozen.

\*Data as of February 18, 2004.

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**BOX 2. Recommended clinical evaluation of infants with clinical or laboratory evidence of possible congenital West Nile virus (WNV) infection\***

- Computerized tomography (CT) scan of the head and brain. If CT is abnormal, a pediatric neurologist should be consulted.
- Pediatric ophthalmologic evaluation, including examination of the retina.
- Complete blood count, platelet count, and liver function tests, including alanine aminotransferase and aspartate aminotransferase. Examination of cerebrospinal fluid (CSF) should be considered and, if performed, should include testing of CSF for IgM antibody to WNV.
- Evaluation by a dysmorphologist or clinical geneticist.
- Further evaluation of any congenital abnormalities to determine alternative causes, including genetic, infectious, or other teratogenic causes.
- Additional hearing screen at age 6 months.
- Careful evaluation of head circumference, physical characteristics, and developmental milestones throughout the first year of life.
- Additional examination of infant serum for IgG and IgM antibody to WNV at age 6 months.
- Histopathologic examination of the placenta and umbilical cord, testing of frozen placental tissue and cord tissue for WNV nucleic acid, and testing of cord serum for IgM and IgG antibody to WNV.

\*The following laboratory results indicate possible congenital WNV infection: 1) positive IgM to WNV in infant serum or cerebrospinal fluid; 2) stable or increasing IgG to WNV in infant serum samples obtained at delivery and at age 6 months; or 3) detectable WNV, WNV nucleic acid, or WNV antigen in any infant clinical sample.

**Prevention of WNV Infection During Pregnancy**

Pregnant women who live in areas with WNV-infected mosquitoes should apply insect repellent to skin and clothes when exposed to mosquitoes and wear clothing that will help protect against mosquito bites. In addition, whenever possible, pregnant women should avoid being outdoors during peak mosquito-feeding times (i.e., usually dawn and dusk).

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**Editorial Note:** Neither the proportion of WNV infections during pregnancy that result in congenital infection nor the spectrum of clinical abnormalities associated with congenital WNV infection is known. However, one case reported in 2002 suggests that intrauterine transmission of WNV in certain instances might affect the newborn adversely. To evaluate the possible effects of WNV infection during pregnancy, CDC is gathering clinical and laboratory data on outcomes of pregnancies of women who were known or suspected to be infected with WNV during pregnancy. Guidance on diagnosis of WNV can be obtained from local or state health departments and from CDC, telephone 970-221-6400. Guidance also is available at [http://www.cdc.gov/ncidod/dvbid/westnile/resources/fact\\_sheet\\_clinician.htm](http://www.cdc.gov/ncidod/dvbid/westnile/resources/fact_sheet_clinician.htm). Clinicians are encouraged to report cases of WNV infections in pregnant women to their state or local health departments or CDC.

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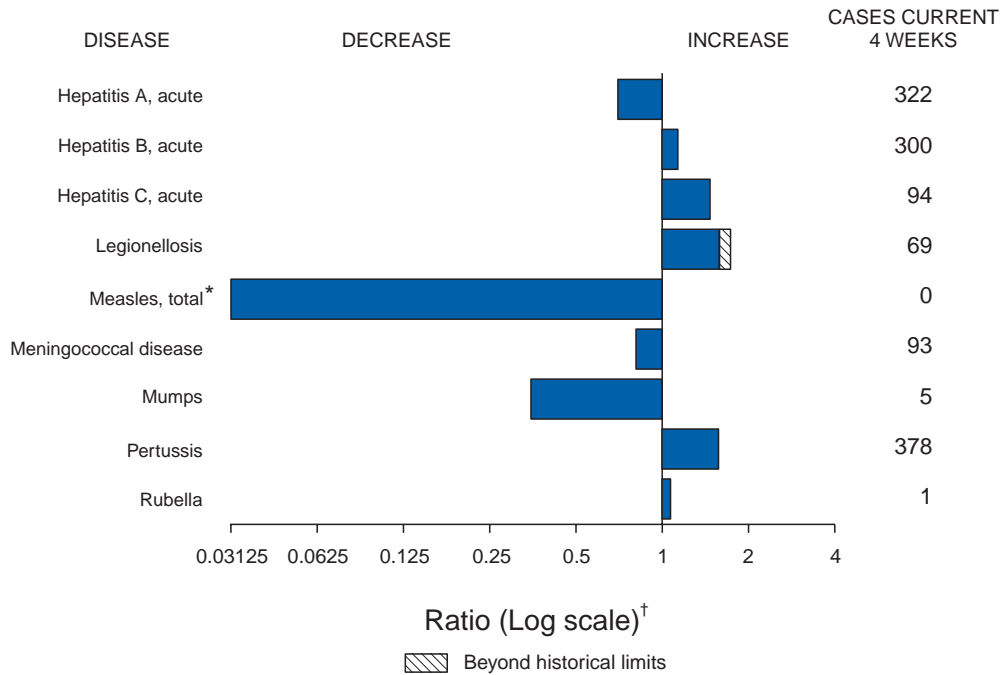
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#### References

1. Chaturvedi UC, Mathur A, Chandra A, Das SK, Tandon HO, Singh UK. Transplacental infection with Japanese encephalitis virus. *J Infect Dis* 1980;141:712-5.
2. Kerdpanich A, Watanaveeradej V, Samakoses R, et al. Perinatal dengue infection. *Southeast Asian J Trop Med Public Health* 2001;32:488-93.
3. Robert E, Vial T, Schaefer C, Arnon J, Reuvers M. Exposure to yellow fever vaccine in early pregnancy. *Vaccine* 1999;17:283-5.
4. Thaithumyanon P, Thisyakorn U, Deerojnawong J, Innis BL. Dengue infection complicated by severe hemorrhage and vertical transmission in a parturient woman. *Clin Infect Dis* 1994;18:248-9.
5. Alpert SG, Ferguson J, Noel LP. Intrauterine West Nile virus: ocular and systemic findings. *Am J Ophthalmol* 2003;136:733-5.
6. CDC. Intrauterine West Nile virus infection—New York, 2002. *MMWR* 2002;51:1135-6.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals February 21, 2004, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week 7 of zero (0).  
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

**TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending February 21, 2004 (7th Week)\***

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	5	19
Botulism:	-	-	HIV infection, pediatric‡§	-	27
foodborne	3	1	Measles, total	2¶	2**
infant	5	12	Mumps	15	30
other (wound & unspecified)	3	1	Plague	-	-
Brucellosis†	4	20	Poliomyelitis, paralytic	-	-
Chancroid	3	7	Psittacosis†	2	5
Cholera	1	-	Q fever†	4	13
Cyclosporiasis†	3	19	Rabies, human	-	-
Diphtheria	-	-	Rubella	3	-
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE)†	3	11	SARS-associated coronavirus disease† ††	-	-
human monocytic (HME)†	3	17	Smallpox† §§	-	NA
human, other and unspecified	-	1	<i>Staphylococcus aureus</i> :	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† §§	2	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† §§	-	NA
eastern equine†	-	2	Streptococcal toxic-shock syndrome†	15	29
Powassan†	-	-	Tetanus	-	4
St. Louis†	1	2	Toxic-shock syndrome	17	9
western equine†	-	-	Trichinosis	1	-
Hansen disease (leprosy)†	6	16	Tularemia†	2	3
Hantavirus pulmonary syndrome†	2	5	Yellow fever	-	-

-: No reported cases.  
 \* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).  
 † Not notifiable in all states.  
 § Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 28, 2003.  
 ¶ Of two cases reported, one was indigenous, and one was imported from another country.  
 \*\* Of two cases reported, one was indigenous, and one was imported from another country.  
 †† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).  
 §§ Not previously notifiable.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\***

Reporting area	AIDS		Chlamydia†		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	-	5,273	87,304	111,683	409	488	286	337	3	57
NEW ENGLAND	-	192	3,442	3,739	-	-	19	19	-	-
Maine	-	-	181	254	N	N	3	1	-	-
N.H.	-	3	241	212	-	-	5	2	-	-
Vt.	-	5	96	161	-	-	2	2	-	-
Mass.	-	111	1,934	1,414	-	-	7	11	-	-
R.I.	-	16	574	349	-	-	-	1	-	-
Conn.	-	57	416	1,349	N	N	2	2	-	-
MID. ATLANTIC	-	1,540	13,334	16,579	-	-	45	26	1	-
Upstate N.Y.	-	77	2,112	1,474	N	N	9	4	-	-
N.Y. City	-	941	3,206	4,655	-	-	6	12	-	-
N.J.	-	170	1,452	2,211	-	-	1	2	-	-
Pa.	-	352	6,564	8,239	N	N	29	8	1	-
E.N. CENTRAL	-	632	12,909	20,497	-	1	53	46	-	-
Ohio	-	95	822	5,587	-	-	24	7	-	-
Ind.	-	84	1,816	2,464	N	N	3	2	-	-
Ill.	-	290	3,772	6,657	-	-	1	10	-	-
Mich.	-	143	5,217	3,520	-	1	17	9	-	-
Wis.	-	20	1,282	2,269	-	-	8	18	-	-
W.N. CENTRAL	-	60	4,117	5,957	-	-	27	13	-	-
Minn.	-	9	528	1,439	N	N	6	5	-	-
Iowa	-	17	-	330	N	N	2	3	-	-
Mo.	-	26	1,620	2,311	-	-	9	2	-	-
N. Dak.	-	-	109	125	N	N	-	-	-	-
S. Dak.	-	1	249	321	-	-	4	3	-	-
Nebr.†	-	-	582	478	-	-	-	-	-	-
Kans.	-	7	1,029	953	N	N	6	-	-	-
S. ATLANTIC	-	1,118	13,138	18,998	-	-	54	151	1	57
Del.	-	30	383	422	N	N	-	1	-	-
Md.	-	103	2,364	2,153	-	-	5	5	-	-
D.C.	-	179	367	446	-	-	-	-	-	-
Va.	-	176	992	1,792	-	-	3	-	-	-
W. Va.	-	6	331	327	N	N	-	-	-	-
N.C.	-	123	1,953	3,507	N	N	14	3	-	-
S.C.†	-	45	2,028	1,740	-	-	-	1	-	-
Ga.	-	309	387	3,437	-	-	16	12	-	-
Fla.	-	147	4,333	5,174	N	N	16	129	1	57
E.S. CENTRAL	-	80	6,051	7,285	N	N	19	14	-	-
Ky.	-	28	720	1,185	N	N	5	1	-	-
Tenn.	-	21	2,445	2,224	N	N	10	7	-	-
Ala.	-	12	1,631	2,048	-	-	2	5	-	-
Miss.	-	19	1,255	1,828	N	N	2	1	-	-
W.S. CENTRAL	-	698	13,238	13,692	-	-	13	5	1	-
Ark.	-	14	954	758	-	-	7	1	-	-
La.	-	15	3,801	2,464	N	N	-	-	1	-
Okla.	-	16	837	888	N	N	5	1	-	-
Tex.	-	653	7,646	9,582	-	-	1	3	-	-
MOUNTAIN	-	204	5,888	6,766	224	402	16	9	-	-
Mont.	-	7	27	270	N	N	1	1	-	-
Idaho	-	1	477	350	N	N	-	4	-	-
Wyo.	-	1	132	155	-	-	2	-	-	-
Colo.	-	23	534	1,791	N	N	9	2	-	-
N. Mex.	-	14	861	1,078	2	-	-	-	-	-
Ariz.	-	112	2,841	1,997	210	395	3	1	-	-
Utah	-	6	365	293	4	1	-	1	-	-
Nev.	-	40	651	832	8	6	1	-	-	-
PACIFIC	-	749	15,187	18,170	185	85	40	54	-	-
Wash.	-	72	2,227	2,020	N	N	-	-	-	-
Oreg.	-	47	1,001	794	-	-	5	3	-	-
Calif.	-	618	11,557	14,147	185	85	34	51	-	-
Alaska	-	6	391	480	-	-	-	-	-	-
Hawaii	-	6	11	729	-	-	1	-	-	-
Guam	-	1	-	-	-	-	-	-	-	-
P.R.	-	145	135	30	N	N	N	N	-	-
V.I.	-	2	-	45	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 28, 2003.

† Contains data reported through National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	<i>Escherichia coli</i> , Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	111	164	18	41	13	19	1,525	3,016	32,181	44,789
NEW ENGLAND	4	9	1	1	2	2	107	109	785	1,045
Maine	-	-	-	-	-	-	13	12	36	18
N.H.	1	2	-	1	-	-	3	8	15	16
Vt.	-	-	-	-	-	-	7	10	5	14
Mass.	-	3	-	-	2	2	64	75	447	410
R.I.	-	-	-	-	-	-	3	4	140	127
Conn.	3	4	1	-	-	-	17	-	142	460
MID. ATLANTIC	9	15	1	-	2	2	309	410	4,504	6,876
Upstate N.Y.	2	3	-	-	1	-	90	64	808	701
N.Y. City	3	1	-	-	-	-	89	163	1,055	1,912
N.J.	-	3	-	-	1	-	22	63	614	1,341
Pa.	4	8	1	-	-	2	108	120	2,027	2,922
E.N. CENTRAL	26	33	4	3	1	2	215	374	5,087	9,730
Ohio	12	7	-	-	1	2	111	120	410	3,002
Ind.	2	2	-	-	-	-	-	-	707	945
Ill.	2	6	-	-	-	-	29	111	1,526	3,093
Mich.	6	6	-	-	-	-	58	91	2,074	1,865
Wis.	4	12	4	3	-	-	17	52	370	825
W.N. CENTRAL	14	16	4	3	6	2	130	207	1,476	2,179
Minn.	6	7	-	3	-	-	43	44	277	391
Iowa	-	1	-	-	-	-	25	32	-	46
Mo.	5	3	4	-	1	-	39	74	639	1,201
N. Dak.	-	1	-	-	3	1	2	4	7	4
S. Dak.	-	1	-	-	-	-	4	7	23	17
Nebr.	1	3	-	-	-	-	7	26	151	155
Kans.	2	-	-	-	2	1	10	20	379	365
S. ATLANTIC	6	51	5	28	1	10	263	1,322	7,234	10,133
Del.	-	-	N	N	N	N	6	7	132	201
Md.	2	-	-	-	-	-	13	16	1,077	1,115
D.C.	-	-	-	-	-	-	5	-	263	337
Va.	-	1	1	-	-	-	35	16	374	1,071
W. Va.	-	-	-	-	-	-	1	-	105	104
N.C.	-	-	3	3	-	-	N	N	2,104	2,045
S.C.	-	-	-	-	-	-	1	8	1,021	1,035
Ga.	1	3	-	-	-	-	66	140	282	1,797
Fla.	3	47	1	25	1	10	136	1,135	1,876	2,428
E. S. CENTRAL	5	7	1	-	-	-	26	41	2,963	3,798
Ky.	1	1	1	-	-	-	N	N	324	531
Tenn.	2	4	-	-	-	-	13	17	968	1,059
Ala.	1	2	-	-	-	-	13	24	987	1,308
Miss.	1	-	-	-	-	-	-	-	684	900
W.S. CENTRAL	2	4	-	2	-	1	32	27	5,149	5,743
Ark.	-	1	-	-	-	-	18	19	440	485
La.	-	-	-	-	-	-	3	-	1,843	1,409
Okla.	2	-	-	-	-	-	11	8	390	372
Tex.	-	3	-	2	-	1	-	-	2,476	3,477
MOUNTAIN	22	13	1	3	1	-	166	176	1,575	1,478
Mont.	1	-	-	-	-	-	5	2	8	20
Idaho	2	4	-	2	-	-	27	25	10	12
Wyo.	-	-	-	-	-	-	1	3	6	8
Colo.	7	3	1	-	1	-	30	48	310	457
N. Mex.	-	-	-	1	-	-	3	9	112	169
Ariz.	8	4	N	N	N	N	55	43	787	535
Utah	2	2	-	-	-	-	33	30	39	33
Nev.	2	-	-	-	-	-	12	16	303	244
PACIFIC	23	16	1	1	-	-	277	350	3,408	3,807
Wash.	4	4	-	-	-	-	25	18	379	361
Oreg.	4	1	1	1	-	-	46	45	124	121
Calif.	11	11	-	-	-	-	195	263	2,834	3,105
Alaska	-	-	-	-	-	-	5	9	70	77
Hawaii	4	-	-	-	-	-	6	15	1	143
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	6	10	7
V.I.	-	-	-	-	-	-	-	-	-	8
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003		
UNITED STATES	244	314	2	6	20	15	21	32	649	1,120
NEW ENGLAND	22	19	-	1	2	1	-	-	108	23
Maine	3	-	-	-	-	-	-	-	4	1
N.H.	7	3	-	-	1	-	-	-	2	-
Vt.	2	4	-	-	-	-	-	-	4	1
Mass.	3	9	-	1	-	1	-	-	87	15
R.I.	1	-	-	-	-	-	-	-	-	-
Conn.	6	3	-	-	1	-	-	-	11	6
MID. ATLANTIC	49	33	-	-	-	-	6	3	82	134
Upstate N.Y.	18	4	-	-	-	-	1	1	8	7
N.Y. City	5	9	-	-	-	-	1	2	28	60
N.J.	8	7	-	-	-	-	2	-	11	19
Pa.	18	13	-	-	-	-	2	-	35	48
E.N. CENTRAL	40	33	-	1	9	2	4	9	55	92
Ohio	22	6	-	-	2	-	3	2	9	15
Ind.	8	2	-	-	3	1	1	-	4	4
Ill.	-	17	-	-	-	-	-	7	14	35
Mich.	7	5	-	1	4	1	-	-	26	27
Wis.	3	3	-	-	-	-	-	-	2	11
W.N. CENTRAL	5	17	-	-	1	-	-	3	17	20
Minn.	3	4	-	-	1	-	-	-	-	1
Iowa	-	-	-	-	-	-	-	-	4	6
Mo.	1	10	-	-	-	-	-	3	6	6
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	-	-	-	-	-	1	-
Nebr.	1	-	-	-	-	-	-	-	2	2
Kans.	-	2	-	-	-	-	-	-	4	5
S. ATLANTIC	75	145	-	1	1	8	6	10	152	546
Del.	-	-	-	-	-	-	-	-	-	2
Md.	16	10	-	-	-	1	1	-	24	25
D.C.	-	-	-	-	-	-	-	-	1	-
Va.	7	2	-	-	-	-	-	-	14	4
W. Va.	4	-	-	-	-	-	2	-	1	2
N.C.	5	3	-	-	-	-	-	-	8	5
S.C.	-	1	-	-	-	-	-	-	-	9
Ga.	29	6	-	-	-	-	3	1	64	88
Fla.	14	123	-	1	1	7	-	9	40	411
E.S. CENTRAL	10	17	-	-	-	-	1	3	15	24
Ky.	-	1	-	-	-	-	-	-	-	2
Tenn.	5	7	-	-	-	-	-	2	10	15
Ala.	5	8	-	-	-	-	1	1	-	6
Miss.	-	1	-	-	-	-	-	-	5	1
W.S. CENTRAL	5	11	-	-	1	1	-	-	14	67
Ark.	-	1	-	-	-	-	-	-	5	1
La.	1	4	-	-	-	-	-	-	-	8
Okla.	4	6	-	-	1	1	-	-	4	1
Tex.	-	-	-	-	-	-	-	-	5	57
MOUNTAIN	31	24	-	1	6	2	3	3	71	37
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	2	1
Wyo.	-	-	-	-	-	-	-	-	1	-
Colo.	4	5	-	-	-	-	1	1	2	1
N. Mex.	4	2	-	-	1	-	-	-	-	-
Ariz.	19	11	-	1	4	-	1	1	57	21
Utah	1	4	-	-	-	1	1	1	7	5
Nev.	3	2	-	-	1	1	-	-	2	9
PACIFIC	7	15	2	2	-	1	1	1	135	177
Wash.	3	-	2	-	-	-	1	-	6	2
Oreg.	3	8	-	-	-	-	-	1	12	14
Calif.	-	5	-	2	-	1	-	-	114	158
Alaska	-	-	-	-	-	-	-	-	1	1
Hawaii	1	2	-	-	-	-	-	-	2	2
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	1	3
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	554	1,481	177	373	141	283	46	92	608	987
NEW ENGLAND	24	38	-	-	1	5	1	3	8	45
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	6	-	-	-	-	-	-	1	-	-
Vt.	1	1	-	-	-	1	-	-	-	3
Mass.	17	27	-	-	-	3	-	2	1	41
R.I.	-	-	-	-	-	-	-	-	-	1
Conn.	-	10	U	U	1	1	1	-	7	-
MID. ATLANTIC	52	150	18	16	27	29	9	14	507	730
Upstate N.Y.	4	6	1	2	4	5	2	2	154	188
N.Y. City	1	65	-	-	-	5	1	4	-	-
N.J.	23	35	-	-	6	3	3	2	57	151
Pa.	24	44	17	14	17	16	3	6	296	391
E.N. CENTRAL	38	70	11	18	40	41	5	7	12	26
Ohio	22	23	2	1	27	16	3	1	12	4
Ind.	-	-	-	-	1	1	-	1	-	2
Ill.	-	-	-	3	-	9	-	3	-	-
Mich.	16	32	9	14	11	12	1	2	-	-
Wis.	-	15	-	-	1	3	1	-	U	20
W.N. CENTRAL	43	41	83	33	4	2	-	2	9	3
Minn.	3	2	-	-	-	-	-	1	3	-
Iowa	-	1	-	-	-	1	-	-	2	2
Mo.	36	33	83	33	3	-	-	-	3	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	1	-	-	-	-	-
Nebr.	4	3	-	-	-	-	-	1	-	-
Kans.	-	2	-	-	-	1	-	-	1	-
S. ATLANTIC	211	828	25	87	36	172	14	44	58	145
Del.	1	2	-	-	2	-	N	N	-	19
Md.	17	12	1	3	5	11	2	2	39	39
D.C.	2	-	-	-	-	-	-	-	-	-
Va.	9	4	1	-	3	2	-	-	-	-
W. Va.	-	-	1	-	-	-	1	-	-	-
N.C.	23	16	1	1	6	4	4	1	12	6
S.C.	-	1	-	-	-	-	-	1	1	-
Ga.	75	157	6	4	5	4	4	2	-	1
Fla.	84	636	15	79	15	151	3	38	6	80
E. S. CENTRAL	31	47	26	14	5	1	1	4	-	6
Ky.	4	8	2	2	1	-	1	-	-	-
Tenn.	14	7	23	2	3	1	-	-	-	1
Ala.	2	15	-	2	1	-	-	3	-	-
Miss.	11	17	1	8	-	-	-	1	-	5
W.S. CENTRAL	6	111	7	191	4	16	1	5	-	17
Ark.	2	13	-	1	-	-	-	-	-	-
La.	4	21	6	25	-	-	-	-	-	2
Okla.	-	6	-	-	1	2	-	-	-	-
Tex.	-	71	1	165	3	14	1	5	-	15
MOUNTAIN	65	83	2	5	9	7	4	8	2	2
Mont.	-	2	-	-	-	-	-	1	-	-
Idaho	1	1	-	-	1	1	-	-	-	1
Wyo.	1	2	-	-	2	1	-	-	1	-
Colo.	7	9	-	2	1	1	-	5	-	-
N. Mex.	2	5	-	-	-	-	-	-	-	-
Ariz.	43	48	1	2	2	2	3	2	-	-
Utah	4	4	-	-	2	1	-	-	1	-
Nev.	7	12	1	1	1	1	1	-	-	1
PACIFIC	84	113	5	9	15	10	11	5	12	13
Wash.	7	3	1	1	3	-	2	-	1	-
Oreg.	15	21	1	2	N	N	3	-	1	3
Calif.	60	85	2	5	12	10	6	5	10	10
Alaska	2	1	-	-	-	-	-	-	-	-
Hawaii	-	3	1	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	1	10	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	115	218	247	311	845	821	300	624	62	50
NEW ENGLAND	8	7	7	10	259	99	27	54	4	-
Maine	-	1	-	1	-	-	1	4	-	-
N.H.	-	2	-	-	4	-	1	3	-	-
Vt.	-	-	1	-	10	17	3	3	-	-
Mass.	6	4	6	8	243	81	12	21	4	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	2	-	-	1	2	1	10	23	-	-
MID. ATLANTIC	16	30	30	27	234	73	67	87	4	6
Upstate N.Y.	4	4	7	3	168	31	38	34	-	-
N.Y. City	6	15	5	8	-	-	-	1	1	1
N.J.	-	3	3	3	18	14	-	21	-	4
Pa.	6	8	15	13	48	28	29	31	3	1
E.N. CENTRAL	12	13	35	34	120	63	1	4	-	1
Ohio	4	3	20	11	71	44	1	-	-	1
Ind.	-	-	2	4	1	-	-	2	-	-
Ill.	-	7	1	6	-	-	-	-	-	-
Mich.	5	2	10	9	13	6	-	2	-	-
Wis.	3	1	2	4	35	13	-	-	-	-
W.N. CENTRAL	8	4	11	12	44	21	37	62	1	1
Minn.	4	2	1	1	3	-	7	3	-	-
Iowa	1	2	2	4	6	4	8	5	-	1
Mo.	2	-	3	6	28	11	2	-	1	-
N. Dak.	-	-	-	-	1	-	7	8	-	-
S. Dak.	-	-	1	-	-	1	-	6	-	-
Nebr.	-	-	-	-	-	-	-	5	-	-
Kans.	1	-	4	1	6	5	13	35	-	-
S. ATLANTIC	46	113	49	130	47	168	128	369	48	39
Del.	-	-	-	4	2	-	1	-	-	-
Md.	14	12	4	4	13	12	13	36	3	5
D.C.	1	-	-	-	1	-	-	-	-	-
Va.	3	1	2	3	7	1	-	44	-	-
W. Va.	-	1	3	-	-	-	9	7	-	-
N.C.	1	4	5	4	11	27	68	66	43	16
S.C.	1	-	1	4	2	-	7	15	-	-
Ga.	6	3	10	4	-	14	30	36	2	-
Fla.	20	92	24	107	11	114	-	165	-	18
E.S. CENTRAL	1	4	13	12	16	19	9	14	4	1
Ky.	-	1	2	1	1	3	2	3	-	-
Tenn.	-	1	4	3	11	7	5	10	1	1
Ala.	1	2	2	3	1	7	2	1	1	-
Miss.	-	-	5	5	3	2	-	-	2	-
W.S. CENTRAL	4	14	25	32	2	-	12	10	-	2
Ark.	1	-	3	1	1	-	4	-	-	-
La.	2	1	7	11	1	-	-	-	-	-
Okla.	1	-	1	3	-	-	8	10	-	-
Tex.	-	13	14	17	-	-	-	-	-	2
MOUNTAIN	4	5	13	9	73	115	12	11	-	-
Mont.	-	-	1	-	4	-	-	1	-	-
Idaho	-	1	1	-	13	4	-	-	-	-
Wyo.	-	-	1	-	2	-	-	-	-	-
Colo.	1	3	4	1	40	49	-	-	-	-
N. Mex.	1	-	1	1	1	12	-	-	-	-
Ariz.	-	1	4	4	6	36	12	10	-	-
Utah	1	-	1	-	7	9	-	-	-	-
Nev.	1	-	-	3	-	5	-	-	-	-
PACIFIC	16	28	64	45	50	263	7	13	1	-
Wash.	2	4	3	2	32	15	-	-	-	-
Oreg.	1	5	11	10	17	35	-	-	-	-
Calif.	13	19	48	32	-	212	7	12	1	-
Alaska	-	-	-	-	1	-	-	1	-	-
Hawaii	-	-	2	1	-	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	1	-	-	10	6	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		Streptococcus pneumoniae, invasive			
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Drug resistant, all ages		Age <5 years	
							Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	2,875	7,693	1,160	5,158	610	1,021	411	855	36	65
NEW ENGLAND	123	123	31	47	28	68	-	18	-	-
Maine	5	6	-	2	1	-	-	-	-	-
N.H.	5	6	2	-	5	1	-	-	N	N
Vt.	4	4	-	1	-	2	-	3	-	-
Mass.	80	81	23	33	20	37	N	N	N	N
R.I.	4	5	-	2	2	-	-	-	-	-
Conn.	25	21	6	9	-	28	-	15	U	U
MID. ATLANTIC	314	413	124	241	83	154	24	17	8	14
Upstate N.Y.	62	40	48	26	35	38	9	7	4	12
N.Y. City	97	141	34	57	3	25	U	U	U	U
N.J.	53	86	20	62	15	38	N	N	N	N
Pa.	102	146	22	96	30	53	15	10	4	2
E.N. CENTRAL	388	501	103	204	107	208	99	64	21	38
Ohio	130	146	32	44	46	49	83	55	16	26
Ind.	22	25	4	8	5	9	16	9	5	2
Ill.	97	197	37	99	1	61	-	-	-	-
Mich.	78	68	19	31	52	61	N	N	N	N
Wis.	61	65	11	22	3	28	N	N	-	10
W.N. CENTRAL	168	173	44	105	33	46	33	44	3	7
Minn.	39	41	10	7	-	17	-	-	3	5
Iowa	31	48	2	2	N	N	N	N	N	N
Mo.	49	44	14	42	10	12	1	1	-	-
N. Dak.	4	4	1	-	3	1	-	1	-	2
S. Dak.	9	5	1	8	4	5	-	-	-	-
Nebr.	12	11	2	34	1	5	-	-	N	N
Kans.	24	20	14	12	15	6	32	42	N	N
S. ATLANTIC	789	5,248	349	3,589	191	297	221	678	1	-
Del.	2	8	1	59	-	1	1	-	N	N
Md.	52	79	17	105	32	33	-	1	-	-
D.C.	2	-	6	-	-	-	-	-	1	-
Va.	78	44	11	28	7	1	N	N	N	N
W. Va.	1	2	-	-	6	-	8	8	-	-
N.C.	112	168	47	119	17	17	N	N	U	U
S.C.	43	46	15	19	1	2	14	24	N	N
Ga.	156	232	74	410	96	12	107	34	N	N
Fla.	343	4,669	178	2,849	32	231	91	611	N	N
E.S. CENTRAL	154	218	59	114	32	18	18	10	-	-
Ky.	16	34	5	19	14	3	6	-	N	N
Tenn.	42	70	27	27	18	15	12	10	N	N
Ala.	60	75	15	48	-	-	-	-	N	N
Miss.	36	39	12	20	-	-	-	-	-	-
W.S. CENTRAL	162	293	139	382	22	81	9	19	3	5
Ark.	23	37	7	3	2	1	1	2	-	2
La.	11	42	12	51	-	-	8	17	1	1
Okla.	24	21	37	69	9	11	N	N	1	2
Tex.	104	193	83	259	11	69	N	N	1	-
MOUNTAIN	287	199	146	118	31	87	7	5	-	1
Mont.	9	7	2	-	-	-	-	-	-	-
Idaho	27	15	-	2	1	5	N	N	N	N
Wyo.	2	3	1	1	3	-	3	-	-	-
Colo.	33	64	12	21	11	24	-	-	-	-
N. Mex.	18	16	18	23	10	19	3	5	-	-
Ariz.	163	62	96	64	4	37	-	-	N	N
Utah	20	15	8	3	2	2	-	-	-	1
Nev.	15	17	9	4	-	-	1	-	-	-
PACIFIC	490	525	165	358	83	62	-	-	-	-
Wash.	33	30	7	6	-	-	-	-	N	N
Oreg.	38	28	9	8	N	N	N	N	N	N
Calif.	365	433	141	337	60	46	N	N	N	N
Alaska	17	14	-	2	-	-	-	-	N	N
Hawaii	37	20	8	5	23	16	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	9	50	1	1	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 21, 2004, and February 15, 2003 (7th Week)\*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	705	901	22	65	524	1,112	23	44	1,418	2,244
NEW ENGLAND	9	21	-	-	17	22	2	1	137	435
Maine	-	-	-	-	-	-	-	-	6	233
N.H.	1	1	-	-	-	1	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	131	160
Mass.	5	17	-	-	13	6	2	-	-	42
R.I.	2	1	-	-	3	5	-	-	-	-
Conn.	1	2	-	-	1	10	-	1	-	-
MID. ATLANTIC	86	105	4	9	154	195	2	7	8	3
Upstate N.Y.	5	3	2	1	-	12	-	-	-	-
N.Y. City	43	47	2	3	132	110	-	3	-	-
N.J.	19	29	-	5	-	26	1	3	-	-
Pa.	19	26	-	-	22	47	1	1	8	3
E.N. CENTRAL	69	133	10	15	117	82	2	4	716	1,121
Ohio	26	23	-	1	15	12	1	-	133	258
Ind.	8	5	-	5	13	16	-	2	-	-
Ill.	18	49	-	8	74	38	-	1	-	-
Mich.	14	54	10	1	8	13	1	1	551	707
Wis.	3	2	-	-	7	3	-	-	32	156
W.N. CENTRAL	12	30	-	-	42	45	-	-	25	2
Minn.	-	9	-	-	10	11	-	-	-	-
Iowa	-	2	-	-	-	3	-	-	N	N
Mo.	9	12	-	-	11	13	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	12	2
S. Dak.	-	-	-	-	-	4	-	-	13	-
Nebr.	3	-	-	-	-	-	-	-	-	-
Kans.	-	7	-	-	21	14	-	-	-	-
S. ATLANTIC	203	202	1	11	34	166	5	17	197	338
Del.	1	1	-	-	-	-	-	-	-	1
Md.	34	33	-	3	12	11	1	2	1	-
D.C.	12	3	-	-	-	-	-	-	4	-
Va.	1	10	-	1	-	17	1	-	-	65
W. Va.	-	-	-	-	2	1	-	-	185	262
N.C.	20	22	-	-	7	13	2	-	-	-
S.C.	18	14	-	3	13	14	-	-	7	10
Ga.	13	36	-	3	-	47	-	-	-	-
Fla.	104	83	1	1	-	63	1	15	-	-
E. S. CENTRAL	45	48	1	2	35	41	-	-	-	-
Ky.	9	10	-	1	1	-	-	-	-	-
Tenn.	22	20	1	1	20	12	-	-	-	-
Ala.	11	16	-	-	14	22	-	-	-	-
Miss.	3	2	-	-	-	7	-	-	-	-
W.S. CENTRAL	131	106	6	8	21	197	1	-	-	335
Ark.	7	8	-	-	9	9	-	-	-	-
La.	23	12	-	-	-	-	-	-	-	3
Okla.	4	5	-	-	12	10	-	-	-	-
Tex.	97	81	6	8	-	178	1	-	-	332
MOUNTAIN	55	34	-	12	26	20	2	2	335	10
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	4	-	-	-	-	-	-	-	-	-
Wyo.	1	-	-	-	-	1	-	-	11	2
Colo.	-	7	-	2	7	12	-	2	215	-
N. Mex.	13	9	-	4	-	-	-	-	7	-
Ariz.	34	16	-	6	13	7	-	-	-	-
Utah	1	1	-	-	6	-	1	-	102	8
Nev.	2	1	-	-	-	-	1	-	-	-
PACIFIC	95	222	-	8	78	344	9	13	-	-
Wash.	11	7	-	-	33	23	1	-	-	-
Oreg.	9	5	-	-	8	9	-	2	-	-
Calif.	75	206	-	8	17	289	6	11	-	-
Alaska	-	-	-	-	4	7	-	-	-	-
Hawaii	-	4	-	-	16	16	2	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	10	9	-	1	-	-	-	-	36	48
V.I.	-	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,\* week ending February 21, 2004 (7th Week)

Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total	Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	577	401	110	33	18	15	72	S. ATLANTIC	1,386	907	311	98	32	36	93		
Boston, Mass.	151	92	35	9	8	7	17	Atlanta, Ga.	193	109	49	16	5	14	9		
Bridgeport, Conn.	32	26	5	1	-	-	4	Baltimore, Md.	162	97	34	25	5	1	20		
Cambridge, Mass.	23	15	7	-	1	-	4	Charlotte, N.C.	128	83	29	6	1	9	12		
Fall River, Mass.	23	20	3	-	-	-	1	Jacksonville, Fla.	141	93	36	9	2	1	8		
Hartford, Conn.	54	37	11	2	3	1	10	Miami, Fla.	158	105	37	12	4	-	8		
Lowell, Mass.	30	26	2	2	-	-	3	Norfolk, Va.	44	37	5	1	-	1	1		
Lynn, Mass.	7	3	2	2	-	-	1	Richmond, Va.	86	49	27	6	1	3	9		
New Bedford, Mass.	26	23	3	-	-	-	3	Savannah, Ga.	73	55	13	-	3	2	3		
New Haven, Conn.	46	26	13	4	2	1	9	St. Petersburg, Fla.	64	51	9	4	-	-	6		
Providence, R.I.	67	45	12	5	4	1	6	Tampa, Fla.	235	172	47	7	5	4	13		
Somerville, Mass.	5	3	2	-	-	-	-	Washington, D.C.	102	56	25	12	6	1	4		
Springfield, Mass.	39	26	8	3	-	2	5	Wilmington, Del.	U	U	U	U	U	U	U		
Waterbury, Conn.	27	20	2	3	-	2	2	E.S. CENTRAL	824	538	193	57	17	19	69		
Worcester, Mass.	47	39	5	2	-	1	7	Birmingham, Ala.	189	115	42	20	5	7	20		
MID. ATLANTIC	2,366	1,689	476	137	37	27	163	Chattanooga, Tenn.	87	63	15	2	1	6	10		
Albany, N.Y.	53	38	11	2	1	1	3	Knoxville, Tenn.	102	70	26	5	1	-	-		
Allentown, Pa.	9	9	-	-	-	-	2	Lexington, Ky.	57	37	16	3	1	-	6		
Buffalo, N.Y.	103	70	17	9	2	5	19	Memphis, Tenn.	148	101	33	9	4	1	17		
Camden, N.J.	37	21	8	5	2	1	2	Mobile, Ala.	86	55	23	6	1	1	2		
Elizabeth, N.J.	16	12	3	1	-	-	-	Montgomery, Ala.	22	15	4	2	1	-	3		
Erie, Pa.	33	24	5	1	2	1	1	Nashville, Tenn.	133	82	34	10	3	4	11		
Jersey City, N.J.	28	19	8	1	-	-	-	W.S. CENTRAL	1,610	1,080	315	121	49	45	98		
New York City, N.Y.	1,325	936	282	75	21	11	94	Austin, Tex.	82	57	17	6	1	1	2		
Newark, N.J.	44	29	6	8	1	-	5	Baton Rouge, La.	54	36	9	8	1	-	-		
Paterson, N.J.	32	16	6	10	-	-	3	Corpus Christi, Tex.	59	36	11	4	7	1	3		
Philadelphia, Pa.	263	182	63	13	3	2	9	Dallas, Tex.	205	129	38	21	8	9	18		
Pittsburgh, Pa. <sup>‡</sup>	22	13	6	2	1	-	1	El Paso, Tex.	80	63	15	1	1	-	3		
Reading, Pa.	30	25	5	-	-	-	1	Ft. Worth, Tex.	110	75	21	6	5	3	4		
Rochester, N.Y.	126	98	19	5	4	-	7	Houston, Tex.	420	266	93	35	7	19	28		
Schenectady, N.Y.	22	19	3	-	-	-	2	Little Rock, Ark.	68	39	21	4	2	2	3		
Scranton, Pa.	31	26	5	-	-	-	1	New Orleans, La.	43	31	8	4	-	-	-		
Syracuse, N.Y.	106	85	14	2	-	5	8	San Antonio, Tex.	265	187	43	16	12	7	26		
Trenton, N.J.	38	28	9	-	-	1	1	Shreveport, La.	70	52	11	5	1	1	6		
Utica, N.Y.	20	18	1	1	-	-	2	Tulsa, Okla.	154	109	28	11	4	2	5		
Yonkers, N.Y.	28	21	5	2	-	-	2	MOUNTAIN	992	649	225	78	23	14	57		
E.N. CENTRAL	2,148	1,463	460	133	41	48	146	Albuquerque, N.M.	127	84	34	7	2	-	9		
Akron, Ohio	52	36	12	1	1	2	8	Boise, Idaho	37	30	2	1	3	1	2		
Canton, Ohio	37	27	8	2	-	-	4	Colo. Springs, Colo.	55	42	9	4	-	-	3		
Chicago, Ill.	358	213	95	24	8	15	19	Denver, Colo.	114	71	30	8	3	1	5		
Cincinnati, Ohio	107	74	20	3	4	6	11	Las Vegas, Nev.	256	162	66	19	7	2	14		
Cleveland, Ohio	262	194	56	8	1	3	11	Ogden, Utah	21	14	5	2	-	-	2		
Columbus, Ohio	194	130	39	17	5	3	13	Phoenix, Ariz.	105	57	30	9	2	5	-		
Dayton, Ohio	140	103	27	8	2	-	12	Pueblo, Colo.	26	18	2	6	-	-	1		
Detroit, Mich.	164	90	45	19	7	3	9	Salt Lake City, Utah	94	55	27	8	2	2	9		
Evansville, Ind.	38	27	7	3	-	1	4	Tucson, Ariz.	157	116	20	14	4	3	12		
Fort Wayne, Ind.	59	43	12	-	1	3	5	PACIFIC	2,673	1,951	465	150	69	38	282		
Gary, Ind.	22	13	5	4	-	-	-	Berkeley, Calif.	15	10	1	1	1	2	2		
Grand Rapids, Mich.	73	54	12	5	-	2	11	Fresno, Calif.	121	92	19	5	-	5	4		
Indianapolis, Ind.	206	144	39	10	5	8	17	Glendale, Calif.	83	71	8	2	1	1	15		
Lansing, Mich.	42	31	6	4	1	-	7	Honolulu, Hawaii	79	57	7	7	4	4	4		
Milwaukee, Wis.	102	69	26	6	1	-	5	Long Beach, Calif.	95	68	15	6	5	1	12		
Peoria, Ill.	50	37	12	1	-	-	1	Los Angeles, Calif.	1,336	966	248	68	36	18	150		
Rockford, Ill.	41	31	5	4	1	-	2	Pasadena, Calif.	36	30	5	1	-	-	3		
South Bend, Ind.	44	35	5	3	1	-	-	Portland, Oreg.	143	100	31	6	4	2	8		
Toledo, Ohio	89	61	17	6	3	2	6	Sacramento, Calif.	U	U	U	U	U	U	U		
Youngstown, Ohio	68	51	12	5	-	-	1	San Diego, Calif.	156	115	28	8	4	1	15		
W.N. CENTRAL	905	635	180	51	19	20	95	San Francisco, Calif.	161	110	31	16	2	2	26		
Des Moines, Iowa	120	78	32	6	3	1	13	San Jose, Calif.	170	127	30	7	4	2	25		
Duluth, Minn.	32	24	6	2	-	-	2	Santa Cruz, Calif.	33	30	1	1	1	-	4		
Kansas City, Kans.	38	26	7	4	-	1	7	Seattle, Wash.	89	63	18	7	1	-	2		
Kansas City, Mo.	86	55	22	6	-	3	10	Spokane, Wash.	53	37	9	6	1	-	5		
Lincoln, Nebr.	66	56	5	2	1	2	6	Tacoma, Wash.	103	75	14	9	5	-	7		
Minneapolis, Minn.	64	45	9	4	4	2	9	TOTAL	13,481 <sup>†</sup>	9,313	2,735	858	305	262	1,075		
Omaha, Nebr.	77	64	11	2	-	-	6										
St. Louis, Mo.	280	178	63	20	8	11	27										
St. Paul, Minn.	70	52	15	3	-	-	7										
Wichita, Kans.	72	57	10	2	3	-	8										

U: Unavailable. -:No reported cases.

\* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

<sup>†</sup> Pneumonia and influenza.<sup>‡</sup> Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.<sup>§</sup> Total includes unknown ages.



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