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## World No Tobacco Day — May 31, 2005

Tobacco use causes approximately 5 million deaths worldwide each year (*1*). Since 1987, the World Health Organization (WHO) has sponsored World No Tobacco Day to encourage countries to implement comprehensive programs to reduce tobacco use. The focus this year is on the role of health professionals in tobacco control. Studies indicate that smokers are more likely to quit smoking permanently if they receive physician assistance, behavioral counseling, and pharmacologic treatment (*2*).

In accordance with a code of practice proposed in 2004 (*3*), WHO is encouraging health-care professionals to provide patients with information about the health consequences of smoking, help their smoking patients quit, and act as role models who promote tobacco-free lifestyles. CDC, WHO, and the Canadian Public Health Association have developed and pilot-tested the Global Health Professionals Survey, which assesses health-care–professional tobacco use, attitudes about tobacco, and training to counsel patients in tobacco-cessation techniques (*4*). Additional information on WHO tobacco-control programs is available at http://www.who.int/tobacco.

### References

1. World Health Organization. An international treaty for tobacco control. Geneva, Switzerland: World Health Organization; 2003. Available at http://www.who.int/features/2003/08.
2. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2000. AHQR publication no. 00-0032.
3. World Health Organization. Code of practice on tobacco control for health professional organizations. Geneva, Switzerland: World Health Organization; 2004. Available at http://www.who.int/tobacco/codeofpractice.
4. CDC. Tobacco use and cessation counseling—Global Health Professionals Survey Pilot Study, 2005. MMWR 2005;54:505–9.

## Tobacco Use and Cessation Counseling — Global Health Professionals Survey Pilot Study, 10 Countries, 2005

Tobacco use is projected to cause nearly 450 million deaths worldwide during the next 50 years (*1*). Health professionals can have a critical role in reducing tobacco use; even brief and simple advice from health professionals can substantially increase smoking cessation rates (*2–4*). Therefore, one of the strategies to reduce the number of smoking-related deaths is to encourage the involvement of health professionals in tobacco-use prevention and cessation counseling. Studies have collected information from health-profession students in various countries about their tobacco use and training as cessation counselors (*5–8*); however, no study has collected this information cross-nationally by using a consistent survey methodology. The World Health Organization (WHO), CDC, and the Canadian Public Health Association (CPHA) developed the Global Health Professionals Survey (GHPS) to collect data on tobacco use and cessation counseling among health-profession students in all WHO member states. This report summarizes findings from the GHPS Pilot Study, which consisted of 16 surveys conducted in 10 countries among third-year students in four health-profession disciplines (dentistry, medicine, nursing, and pharmacy) during the first quarter of 2005. The findings indicated that current cigarette smoking among these students was higher than 20% in seven of the 10 countries surveyed. Nevertheless, 87%–99% of the students surveyed believed they should have a role in counseling patients to quit smoking; only 5%–37% of these third-year

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students had actually received formal training in how to conduct such counseling. Schools for health professionals, public health organizations, and education officials should work together to design and implement training in smoking-cessation counseling for all health-profession students.

GHPS is part of the Global Tobacco Surveillance System (GTSS), which collects data through three surveys: the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey (GSPS), and GHPS. GHPS is a school-based survey of third-year students pursuing advanced degrees in dentistry, medicine, nursing, or pharmacy. GHPS uses a core questionnaire on demographics, prevalence of cigarette smoking and other tobacco use, knowledge and attitudes about tobacco use, exposure to secondhand smoke, desire for smoking cessation, and training received regarding patient counseling on smoking-cessation techniques. GHPS has a standardized methodology for selecting participating schools and classes and uniform data processing procedures. The GHPS Pilot Study surveyed third-year students from Albania (dental [57], medical [138], nursing [356], and pharmacy [56]), Argentina (Buenos Aires) (medical [348]), Bangladesh (dental [205]), Croatia (medical [404]), Egypt (medical [1,770]), Federation of Bosnia and Herzegovina (nursing [874]), India (dental [1,499]), the Philippines (pharmacy [1,045]), the Republic of Serbia (Belgrade) (dental [160], medical [218], and pharmacy [118]), and Uganda (medical [162] and nursing [444]).

Depending on the number of schools and third-year students in participating countries and disciplines and the resources available, the 16 GHPS studies included a census of students and schools or a sample of schools and a sample of students. Albania, Argentina (Buenos Aires), Bangladesh, Croatia, Egypt, the Republic of Serbia (Belgrade), and Uganda conducted a census of schools and third-year students. The Federation of Bosnia and Herzegovina, India, and the Philippines drew a two-stage sample of schools and classes of third-year students in selected schools. For each of the 16 surveys, the school response rate was 100%, and the third-year student response rate ranged from 65.6% (Republic of Serbia [Belgrade] [pharmacy students]) to 100% (Albania [pharmacy students]). GHPS was conducted in schools during regular class sessions. GHPS follows an anonymous, self-administered format for data collection, and the questionnaires were translated into local languages as needed. Current cigarette smokers were defined as those who reported that they currently smoke daily or occasionally. Differences in rates for these indicators were considered statistically significant at the $p<0.05$ level.

Current cigarette smoking among third-year health-profession students was most prevalent in Albania, Argentina

(Buenos Aires), Bangladesh, Croatia, Federation of Bosnia and Herzegovina, the Philippines, and the Republic of Serbia (Belgrade), with rates ranging from 18.1% (Republic of Serbia [Belgrade] medical students) to 47.1% (Albania pharmacy students) (Table 1); the lowest current smoking prevalences were reported among Ugandan nursing (0.5%) and medical (2.8%) students, Egyptian medical students (7.9%), and Indian dental students (9.6%). Male students were significantly more likely than female students to currently smoke cigarettes in Albania, Bangladesh, Egypt, India, Philippines, Republic of Serbia (Belgrade) (medical students only), and Uganda. Only among Serbian dental students were females significantly more likely than males to currently smoke cigarettes.

The majority of third-year students (range: 86.6%–99.8%) in all four health disciplines and in all 10 countries believed health professionals should advise patients about smoking cessation (Table 2). However, the percentage of third-year students who had received formal training in tobacco cessation counseling ranged from 5.2% among medical students in Argentina (Buenos Aires) to 36.6% among pharmacy students in the Philippines. Formal training can include classroom lectures, special seminars, clinical practicum, and other problem-based learning opportunities, but training of health professionals varies among countries and across disciplines within countries.

Data on receipt of formal cessation-counseling training among third-year students of different disciplines within the same country were available for Albania, the Republic of Serbia (Belgrade), and Uganda. In Albania, nursing students (22.6%) were significantly more likely than medical students (10.3%) or pharmacy students (7.7%) to have received such training but not significantly more likely than dental students (14.2%). In the Republic of Serbia (Belgrade), medical (32.6%) and dental (20.7%) students were significantly more likely than pharmacy students (9.5%) to have received cessation training. In Uganda, nursing students (35.1%) were more than twice as likely as medical students (15.9%) to have received training. More than 90% of third-year students (range: 90.3%–99.0%) in every survey except medical students in Croatia

**TABLE 1. Prevalence of current cigarette smoking* among third-year health-profession students, by sex, country, and discipline — Global Health Professionals Survey Pilot Study, 10 countries, 2005**

| | Total | | | Male | | | Female | | |
|---|---|---|---|---|---|---|---|---|---|
| Country/Discipline | No.† | % | (95% CI§) | No. | % | (95% CI) | No. | % | (95% CI) |
| **Albania** | | | | | | | | | |
| Dental | **41** | **30.1** | **(23.2–38.1)** | 12 | 38.0 | (24.9–53.1) | 29 | 27.1 | (19.4–36.6) |
| Medical | **114** | **43.3** | **(40.7–45.9)** | 28 | 65.1 | (59.8–69.9) | 85 | 35.7 | (32.8–38.7) |
| Nursing | **271** | **41.5** | **(37.9–45.1)** | 63 | 57.5 | (49.8–64.8) | 208 | 36.4 | (32.5–40.5) |
| Pharmacy | **40** | **47.1** | **(42.8–51.4)** | 12 | 65.8 | (58.0–72.9) | 28 | 38.9 | (34.1–44.0) |
| **Argentina (Buenos Aires)** | | | | | | | | | |
| Medical | **296** | **35.5** | **(33.6–37.4)** | 118 | 33.4 | (30.4–36.4) | 177 | 36.5 | (34.1–39.1) |
| **Bangladesh** | | | | | | | | | |
| Dental | **192** | **22.2** | **(18.2–26.8)** | 84 | 46.7 | (39.0–54.7) | 108 | 3.3 | (1.6–6.7) |
| **Federation of Bosnia and Herzegovina** | | | | | | | | | |
| Nursing | **791** | **33.0** | **(28.8–37.6)** | 212 | 27.3 | (21.1–34.5) | 576 | 34.8 | (29.8–40.2) |
| **Croatia** | | | | | | | | | |
| Medical | **377** | **36.6** | **(34.1–39.2)** | 120 | 35.9 | (31.5–40.4) | 256 | 37.1 | (34.1–40.3) |
| **Egypt** | | | | | | | | | |
| Medical | **1,749** | **7.9** | **(5.7–10.7)** | 993 | 12.9 | (9.9–16.5) | 756 | 1.2 | (0.5–3.0) |
| **India** | | | | | | | | | |
| Dental | **1,266** | **9.6** | **(6.7–13.6)** | 719 | 14.9 | (10.7–20.4) | 541 | 2.4 | (0.8–6.9) |
| **Philippines** | | | | | | | | | |
| Pharmacy | **595** | **22.1** | **(16.8–28.5)** | 119 | 37.8 | (26.5–50.5) | 469 | 18.1 | (12.8–24.9) |
| **Republic of Serbia (Belgrade)** | | | | | | | | | |
| Dental | **152** | **42.5** | **(39.1–45.9)** | 42 | 30.2 | (24.6–36.4) | 110 | 47.2 | (43.2–51.2) |
| Medical | **187** | **18.1** | **(15.9–20.7)** | 54 | 23.8 | (19.3–29.1) | 133 | 15.9 | (13.3–18.8) |
| Pharmacy | **113** | **20.4** | **(16.2–25.2)** | 24 | 16.7 | (9.5–27.7) | 89 | 21.3 | (16.6–26.9) |
| **Uganda** | | | | | | | | | |
| Medical | **151** | **2.8** | **(1.8–4.2)** | 101 | 4.1 | (2.7–6.3) | 49 | 0 | |
| Nursing | **378** | **0.5** | **(0.3–0.9)** | 60 | 3.3 | (1.9–5.6) | 316 | 0 | |

* Current smokers were defined as those who reported that they currently smoke daily or occasionally.
† The reported number is the unweighted number of cases in the denominator. The male and female numbers might not add to the total number because of nonresponse on the question that determines sex.
§ Confidence interval.

**TABLE 2. Third-year health-profession students' attitudes toward and training in smoking-cessation counseling, by country and discipline — Global Health Professionals Survey Pilot Study, 10 countries, 2005**

| Discipline/Country | Believe health professionals should give advice or information about smoking cessation to patients | | | Received formal training in cessation counseling | | | Believe health professionals should be trained in cessation techniques | | |
|---|---|---|---|---|---|---|---|---|---|
| | No.* | % | (95% CI†) | No. | % | (95% CI) | No. | % | (95% CI) |
| **Albania** | | | | | | | | | |
| Dental | 51 | 95.6 | (91.2–97.9) | 53 | 14.2 | (9.7–20.2) | 53 | 97.9 | (94.2–99.3) |
| Medical | 135 | 95.0 | (93.8–95.9) | 133 | 10.3 | (9.0–11.9) | 135 | 97.1 | (96.2–97.8) |
| Nursing | 331 | 89.4 | (87.2–91.4) | 338 | 22.6 | (16.8–24.3) | 336 | 96.7 | (95.3–97.7) |
| Pharmacy | 52 | 86.6 | (83.9–89.0) | 52 | 7.7 | (5.9–10.0) | 52 | 98.1 | (96.8–98.9) |
| **Argentina (Buenos Aires)** | | | | | | | | | |
| Medical | 304 | 98.8 | (98.3–99.1) | 305 | 5.2 | (4.4–6.1) | 305 | 91.3 | (90.1–92.3) |
| **Bangladesh** | | | | | | | | | |
| Dental | 204 | 98.1 | (96.1–99.1) | 204 | 24.9 | (20.7–29.5) | 202 | 97.5 | (95.4–98.7) |
| **Croatia** | | | | | | | | | |
| Medical | 393 | 97.7 | (96.8–98.4) | 392 | 14.5 | (12.8–16.4) | 395 | 71.7 | (69.3–73.9) |
| **Egypt** | | | | | | | | | |
| Medical | 1,767 | 91.1 | (89.6–92.4) | 1,770 | 20.9 | (18.4–23.6) | 1,766 | 92.5 | (90.4–94.2) |
| **Federation of Bosnia and Herzegovina** | | | | | | | | | |
| Nursing | | | NA§ | 851 | 28.6 | (23.7–34.0) | 851 | 90.3 | (87.8–92.3) |
| **India** | | | | | | | | | |
| Dental | 1,335 | 99.8 | (99.8–99.9) | 1,332 | 10.5 | (5.8–18.1) | 1,339 | 99.0 | (97.9–99.6) |
| **Philippines** | | | | | | | | | |
| Pharmacy | 632 | 99.3 | (98.3–99.7) | 629 | 36.6 | (30.6–43.1) | 631 | 93.9 | (91.7–95.5) |
| **Republic of Serbia (Belgrade)** | | | | | | | | | |
| Dental | | | NA | 156 | 20.7 | (18.1–23.6) | 157 | 91.5 | (89.5–93.2) |
| Medical | | | NA | 190 | 32.6 | (29.8–35.6) | 189 | 95.9 | (94.5–97.0) |
| Pharmacy | | | NA | 116 | 9.5 | (6.7–13.2) | 116 | 93.1 | (89.7–95.9) |
| **Uganda** | | | | | | | | | |
| Medical | 153 | 98.8 | (97.7–99.3) | 154 | 15.9 | (13.5–18.6) | 154 | 97.3 | (95.9–98.2) |
| Nursing | 394 | 98.4 | (97.8–98.9) | 391 | 35.1 | (33.2–37.0) | 388 | 97.1 | (96.3–97.7) |

* The reported number is the unweighted number of cases in the denominator.
† Confidence interval.
§ Question not asked.

(71.7%) thought health-profession students should receive cessation counseling training as part of their normal curriculum.

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**Editorial Note:** Health professionals who continue to smoke cigarettes send an inconsistent message to patients whom they counsel to quit smoking. Findings from the 2005 GHPS Pilot Study indicate that the current cigarette-smoking rate among third-year health-profession students is higher than 20% in seven of the 10 countries surveyed. The public health community should target cigarette smoking among health-profession students because this behavior endangers their own health and reduces their ability to deliver effective antitobacco counseling to their patients. The findings in this report also indicate that most third-year health-profession students in the countries surveyed did not receive formal training in smoking-cessation counseling, even though more than 90% of the same students want such training to be included in their formal curricula. All health-profession schools, public health organizations, and education officials should discourage tobacco use among health professionals and work together to design and implement programs that train all health professionals in effective cessation-counseling techniques.

The WHO Framework Convention for Tobacco Control (WHO-FCTC), adopted by the 56th World Health Assembly in May 2003, is the first international public health treaty on tobacco control (*9*). In addition to providing a blueprint for a global response to the pandemic of tobacco-induced death and disease, WHO-FCTC calls for countries to use standard methods and procedures for surveillance. GHPS provides

countries with a way to measure tobacco use among their third-year health-profession students, the desire for cessation among students who smoke, the extent to which students are being trained to provide tobacco-cessation counseling, and the willingness of students to use such training to reduce tobacco use among their patients. The GHPS Pilot Study proved successful in terms of school and student participation, fieldwork procedures, data collection, cost, and reliability of data. In light of these successes, GHPS will be expanded during academic year 2005–06 to include approximately 40 additional countries. The goal of WHO, CDC, and CPHA is to gather data from all four disciplines in as many of the 192 WHO member states by the end of academic year 2008.

The findings in this report are subject to at least four limitations. First, because GHPS respondents are third-year health-profession students who have not had substantial interaction with patients, survey results should not be extrapolated to account for practicing health professionals in any of the countries. Second, the GHPS did not survey students in all health professions whose members could provide patients with cessation counseling (e.g., chiropractors, traditional healers, psychologists, and counselors). Third, because adult smoking rates across countries are not collected by using a standardized and consistent methodology, comparison of the prevalence in this report with the prevalence in the general adult populations is not possible. Finally, a reliability study of the GHPS core questionnaire items has not been undertaken but is required before full expansion of the survey.

The theme of WHO's World No Tobacco Day (WNTD) 2005 is the role of health professionals in tobacco control. Organizations of health professionals are aware of members' potential role and responsibility in tobacco control, and several have already initiated specific activities. For example, the Doctors' Manifesto for Tobacco Control was launched in 2002 with the support of medical associations worldwide (*10*). In addition, several individual associations have adopted their own codes regarding tobacco control, such as the provision in the Pharmacists against Tobacco code of practice that bans smoking in pharmacies.* Countries in each of the six WHO regions will sponsor events for WNTD 2005, including the dissemination of GHPS findings. A list of the events is available at http://www.who.int/tobacco/communications/events/wntd/2005.

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### References

1. Peto R, Lopez AD. Future worldwide health effects of current smoking patterns. In: Koop CD, Pearson C, Schwarz MR, eds. Critical issues in global health. New York, NY: Jossey-Bass; 2001.
2. US Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2000.
3. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville, MD: US Department of Health and Human Services; 2000.
4. Lancaster T, Stead L, Silagy C, et al. Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library. BMJ 2000;321:355–8.
5. Gupta PC, Ray CS. Smokeless tobacco and health in India and South Asia. Respirology 2003;8:419–31.
6. Naskar NN, Bhattacharya SK. A study on drug abuse among the undergraduate medical students in Calcutta. J Indian Med Assoc 1999;97:20–1.
7. Mammas IN, Bertsias GK, Linardakis M, Tzanakis NE, Labadarios DN, Kafatos AG. Cigarette smoking, alcohol consumption, and serum lipid profile among medical students in Greece. Eur J Public Health 2003;13:278–82.
8. Vakeflliu Y, Argjiri D, Poposhi I, Agron S, Melani AS. Tobacco smoking habits, beliefs, and attitudes among medical students in Tirana, Albania. Prev Med 2002;34:370–3.
9. World Health Organization. WHO framework convention on tobacco control. Geneva, Switzerland: World Health Organization; 2003. Available at http://www.who.int/tobacco/framework.
10. Tobacco under the microscope: the doctors' manifesto for global tobacco control. Edinburgh, United Kingdom: British Medical Association Tobacco Control Resource Centre; 2002. Available at http://www.doctorsmanifesto.org.

* Additional information is available at http://www.fip.org/pharmacistsagainsttobacco.

## Cigarette Smoking Among Adults — United States, 2003

One of the national health objectives for 2010 is to reduce the prevalence of cigarette smoking among adults to 12% (objective 27-1a) (*1*). To assess progress toward this objective, CDC analyzed self-reported data from the 2003 National Health Interview Survey (NHIS). The results of that analysis indicated that, in 2003, approximately 21.6% of U.S. adults were current smokers. Although this prevalence is lower than

the 22.5% prevalence among U.S. adults in 2002 and significantly lower than the 22.8% prevalence in 2001, the rate of decline is not sufficient to meet the national health objective for 2010 (*2*). Comprehensive, sustained interventions that reduce the rate of smoking initiation and increase the rate of cessation are needed to further the decline in cigarette smoking among adults (*3*).

Questions on smoking in the 2003 NHIS were included in the adult core questionnaire, which was administered by in-person interview to a nationally representative sample of 30,852 persons aged ≥18 years in the civilian, noninstitutionalized U.S. population; survey response rate for adults was 74.2%. Respondents were asked, "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Ever smokers were defined as those who reported smoking ≥100 cigarettes during their lifetimes. Current smokers were defined as those who reported smoking ≥100 cigarettes during their lifetimes and currently smoking every day or some days. Former smokers were defined as ever smokers who no longer smoked. Poverty-level status was calculated on the basis of U.S. Census Bureau 2002 poverty thresholds. Data were adjusted for nonrespondents and weighted to provide national estimates of cigarette smoking prevalence; 95% confidence intervals (CIs) were calculated to account for the multistage probability sample design.

In 2003, an estimated 21.6% (45.4 million) of U.S. adults were current smokers; of these, 81.0% (36.8 million) smoked every day, and 19.0% (8.6 million) smoked some days. Among those who currently smoked every day, 41.1% (15.1 million) reported they had stopped smoking for at least 1 day during the preceding 12 months because they were trying to quit. Among the estimated 43.4% (91.5 million) of persons who had ever smoked, 50.3% (45.9 million) were former smokers.

Prevalence of current cigarette smoking varied substantially across populations and subpopulations (Table). More men (24.1%) than women (19.2%) reported current smoking. Among racial/ethnic populations, Asians (11.7%) and Hispanics (16.4%) had the lowest prevalence, and American Indians/Alaska Natives had the highest prevalence (39.7%). By education level, smoking prevalence was highest among adults who had earned a General Educational Development diploma (44.4%) and lowest among those with graduate degrees (7.5%). Among age groups, persons aged ≥65 years had the lowest prevalence of cigarette smoking (9.1%), and persons aged 25–44 years had the highest prevalence (25.6%). Current smoking prevalence was higher among adults living below the poverty level (30.5%) than among those at or above the poverty level (21.7%).

Persons in certain subpopulations had cigarette smoking prevalence rates below the 2010 health objective target of 12%. These subpopulations included women with undergraduate (11.0%) or graduate degrees (6.7%), men with graduate degrees (8.1%), Hispanic women (10.3%), Asian women (6.5%), and men and women aged ≥65 years (10.1% and 8.3%, respectively) (Table).

During 1983–2003, a sustained decline in cigarette smoking occurred in all age groups except persons aged 18–24 years (Figure). In this group, prevalence increased during 1993–2002, before declining significantly from 28.5% in 2002 to 23.9% in 2003, the lowest reported prevalence for persons aged 18–24 years since 1991 (*4*).

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**Editorial Note:** The findings in this report indicate that cigarette smoking continues to decline among adults in the United States. In 2003, for the first time since NHIS began collecting smoking data in 1965, the prevalence of cigarette smoking among women declined below 20%, to 19.2%. For the second consecutive year, more than half of U.S. adults who ever smoked reported they were no longer smokers. In addition, cigarette smoking among persons aged 18–24 years declined to the lowest level since 1991. The increase in smoking prevalence among young adults during 1991–2002 was similar to an increase in smoking among youths in 8th, 10th, and 12th grades during the early 1990s (*5*). Factors associated with the increase in smoking among adolescents (e.g., increased tobacco industry marketing to youths) might have had a similar influence on smoking prevalence among young adults (*6*). A cohort effect might also have contributed to the increase in smoking prevalence among young adults, as youths with high rates of smoking during the early 1990s entered the young adult age group during 1992–2002 (*5–7*).

Although tobacco use usually begins during adolescence, initiation also can occur during young adulthood (*6,7*). Preventing smoking initiation and tobacco use among youths and young adults is critical to reducing tobacco use in the United States. Young adults, who constitute the youngest legal market for the tobacco industry in the United States, and adolescents continue to be the target of intensive tobacco industry marketing efforts, including sponsorship of age-specific promotions and other marketing strategies that appeal to persons in these age groups (*7,8*).

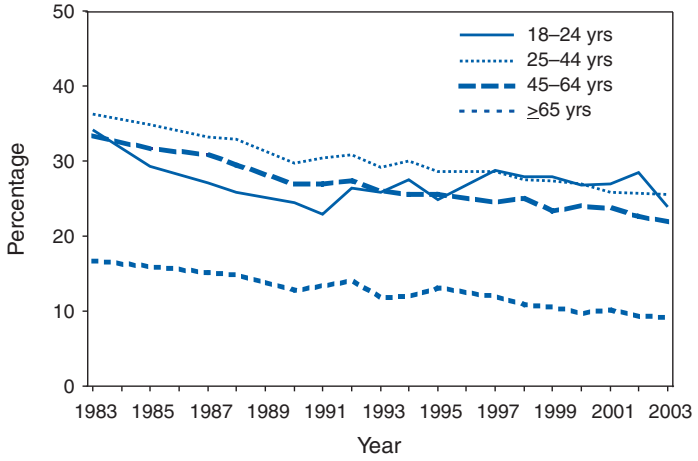
Efforts to reduce cigarette smoking prevalence among all adults include increasing the retail price of tobacco products and implementing complete smoking bans in all worksites, campuses, sports arenas, concert venues, bars, restaurants, and

**TABLE. Percentage of persons aged ≥18 years who were current smokers,* by sex and selected characteristics — National Health Interview Survey, United States, 2003**

| Characteristic | Men (n = 13,427) % | Men (n = 13,427) (95% CI†) | Women (n = 17,425) % | Women (n = 17,425) (95% CI) | Total (N = 30,852) % | Total (N = 30,852) (95% CI) |
|---|---|---|---|---|---|---|
| **Race/Ethnicity§** | | | | | | |
| White, non-Hispanic | 24.3 | (±1.0) | 21.2 | (±0.9) | **22.7** | **(±0.7)** |
| Black, non-Hispanic | 25.5 | (±2.5) | 18.3 | (±1.8) | **21.5** | **(±1.6)** |
| Hispanic | 22.1 | (±2.0) | 10.3 | (±1.1) | **16.4** | **(±1.2)** |
| American Indian/Alaska Native¶ | 42.0 | (±15.9) | 37.3 | (±14.7) | **39.7** | **(±11.9)** |
| Asian** | 17.5 | (±4.5) | 6.5 | (±2.2) | **11.7** | **(±2.5)** |
| **Education††** | | | | | | |
| 0–12 (no diploma) | 32.4 | (±2.1) | 21.2 | (±1.9) | **26.6** | **(±1.4)** |
| <8 yrs | 23.4 | (±2.9) | 11.8 | (±2.0) | **17.6** | **(±1.8)** |
| 9–11 yrs | 40.6 | (±3.4) | 28.5 | (±3.0) | **34.0** | **(±2.3)** |
| 12 yrs (no diploma) | 35.2 | (±7.7) | 23.7 | (±5.8) | **29.3** | **(±4.6)** |
| GED (diploma)§§ | 43.4 | (±5.9) | 45.6 | (±5.8) | **44.4** | **(±4.1)** |
| 12 yrs (diploma) | 29.2 | (±2.0) | 22.1 | (±1.5) | **25.4** | **(±1.2)** |
| Associate degree | 21.9 | (±2.9) | 18.2 | (±2.1) | **19.8** | **(±1.7)** |
| Some college (no degree) | 23.7 | (±1.8) | 20.4 | (±1.3) | **21.9** | **(±1.1)** |
| Undergraduate degree | 13.6 | (±1.8) | 11.0 | (±1.5) | **12.3** | **(±1.1)** |
| Graduate degree | 8.1 | (±1.6) | 6.7 | (±1.5) | **7.5** | **(±1.1)** |
| **Age group (yrs)** | | | | | | |
| 18–24 | 26.3 | (±2.6) | 21.5 | (±2.3) | **23.9** | **(±1.8)** |
| 25–44 | 28.4 | (±1.4) | 22.8 | (±1.2) | **25.6** | **(±1.0)** |
| 45–64 | 23.9 | (±1.5) | 20.2 | (±1.4) | **22.0** | **(±1.0)** |
| ≥65 | 10.1 | (±1.4) | 8.3 | (±1.1) | **9.1** | **(±0.9)** |
| **Poverty level¶¶** | | | | | | |
| At or above | 24.2 | (±1.0) | 19.1 | (±0.9) | **21.7** | **(±0.7)** |
| Below | 33.0 | (±3.1) | 28.8 | (±2.5) | **30.5** | **(±2.1)** |
| Unknown | 21.2 | (±1.6) | 16.0 | (±1.3) | **18.4** | **(±1.0)** |
| **Total** | **24.1** | **(±0.8)** | **19.2** | **(±0.7)** | **21.6** | **(±0.6)** |

* Persons who reported smoking at least 100 cigarettes during their lifetimes and who reported at the time of interview smoking every day or some days. Excludes 402 respondents whose smoking status was unknown.
† Confidence interval.
§ Excludes 310 respondents of unknown or multiple racial/ethnic categories or whose race/ethnicity was unknown.
¶ Wide variances among estimates reflect small sample sizes.
** Does not include Native Hawaiians or other Pacific Islanders.
†† Among persons aged ≥25 years; excludes 409 persons with unknown years of education.
§§ General Educational Development.
¶¶ Calculated on the basis of U.S. Census Bureau 2002 poverty thresholds.

**FIGURE. Percentage of current cigarette smoking among persons aged ≥18 years, by age group and year — National Health Interview Survey, United States, 1983–2003**




nightclubs. Strategies for reducing cigarette smoking prevalence among young adults include 1) providing effective smoking-cessation interventions and quitlines tailored to youths and young adults in school, work, and community settings; 2) conducting countermarketing campaigns designed to help young persons reject messages promoting cigarette use, reduce access by minors to tobacco products, and increase access to school programs for preventing tobacco use; and 3) monitoring smoking trends among youths and young adults (*6–10*). Ongoing surveillance of smoking patterns among young adults and evaluation of tobacco-control programs can identify those interventions that are most effective for this age group.

The findings in this report are subject to at least four limitations. First, the wording of questions about cigarette smoking and NHIS data collection procedures have changed since 1993. Before 1993, current smokers were defined as those

who had smoked at least 100 cigarettes and currently smoked. Starting in 1993, current smokers were defined as those who had smoked at least 100 cigarettes and currently smoked either every day or some days. Therefore, any comparison of data collected before 1993 with data collected since 1993 should be interpreted with caution. Second, many young adults view themselves as "social smokers" and might not identify themselves as smokers even on "some days" when completing the NHIS questionnaire, leading to underestimates of current smoking. Third, the NHIS questionnaire is administered only in English and Spanish, which might lead to imprecise estimates of smoking prevalence among other racial/ethnic populations who are unable to respond to the survey. Finally, because NHIS sample sizes for some subpopulations are minimal (e.g., Asians and American Indians/Alaska Natives), estimates derived from 1 year of data are less precise for these groups.

Effective interventions for tobacco-use prevention and cessation should be implemented in the United States among persons of all ages to accelerate the decline in smoking prevalence among adults and decrease the public health burden of tobacco-related diseases (*3,6–10*). In addition, tailored interventions for populations and subpopulations at high risk are needed to reduce disparities in cigarette smoking by age, race/ethnicity, and education level.

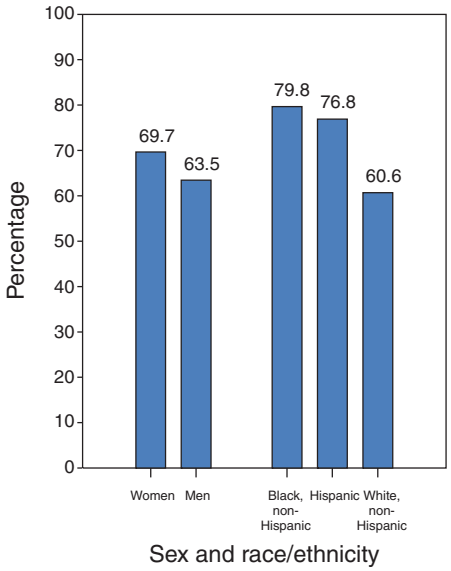
## References


1. US Department of Health and Human Services. Healthy people 2010: understanding and improving health. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at http://www.healthypeople.gov.
2. CDC. Cigarette smoking among adults—United States, 2002. MMWR 2004;53:427–31.
3. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. Am J Prev Med 2001;20(2 Suppl 1):1–87.
4. CDC. Cigarette smoking among adults—United States, 1991. MMWR 1993;42:230–3.
5. Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the future: national survey results on drug use, 1975–2003. Volume I: secondary school students. Bethesda, MD: National Institutes of Health, National Institute on Drug Abuse; 2004. DHHS publication no. (NIH) 04-5507.


# QuickStats

**FROM THE NATIONAL CENTER FOR HEALTH STATISTICS**

## Percentage of Adults Aged 18–24 Years Who Have Never Smoked Cigarettes*, by Sex and Race/Ethnicity — United States, 2002–2003




* Have not smoked 100 or more cigarettes during their lifetimes.

During 2002–2003, young women were more likely than young men to report having never smoked cigarettes. Among those aged 18–24 years, Hispanic and non-Hispanic black adults were more likely than non-Hispanic white adults to have never smoked.

**Source:** National Health Interview Surveys, 2002 and 2003. Available at http://www.cdc.gov/nchs/nhis.htm.

6. Lantz PM. Smoking on the rise among young adults: implications for research and policy. Tob Control 2003;12(Suppl 1):i60–i70.
7. Backinger CL, Fagan P, Matthews E, Grana R. Adolescent and young adult tobacco prevention and cessation: current status and future directions. Tob Control 2003;12(Suppl 4):iv46–iv53.
8. Ling PM, Glantz SA. Why and how the tobacco industry sells cigarettes to young adults: evidence from industry documents. Am J Public Health 2002;92:908–16.
9. Orleans CT, Arkin EB, Backinger CL, et al. Youth tobacco cessation collaborative and national blueprint for action. Am J Health Behavior 2003;27(Suppl 2):S103–S119.
10. Chaloupka FJ, Cummings KM, Morley CP, Horan JK. Tax, price, and cigarette smoking: evidence from the tobacco documents and implications for tobacco company marketing strategies. Tob Control 2002;11(Suppl 1):i62–i72.

## Blood Lead Levels — United States, 1999–2002

Adverse health effects caused by lead exposure include intellectual and behavioral deficits in children and hypertension and kidney disease in adults (*1*). Exposure to lead is an important public health problem, particularly for young children (*2*). Eliminating blood lead levels (BLLs) ≥10 µg/dL in children is one of the national health objectives for 2010 (objective no. 8-11) (*3,4*). Findings of National Health and Nutrition Examination Surveys (NHANES) from the period 1976–1980 to 1991–1994 reveal a steep decline (from 77.8% to 4.4%) in the percentage of children aged 1–5 years with BLLs ≥10 µg/dL (*5,6*). However, BLLs remain higher for certain populations, especially children in minority populations, children from low-income families, and children who live in older homes (*5*). This report updates estimates of BLLs in the U.S. population with the latest NHANES data, collected during 1999–2002. The findings indicated that BLLs continued to decrease in all age groups and racial/ethnic populations. During 1999–2002, the overall prevalence of elevated BLLs for the U.S. population aged ≥1 year was 0.7%. BLLs in non-Hispanic black children remained higher than in non-Hispanic white or Mexican-American children, although the proportion of BLLs ≥10 µg/dL in this population decreased (72%) since 1991–1994. Approximately 310,000 children aged 1–5 years remained at risk for exposure to harmful lead levels. Public health agencies should continue efforts to eliminate or control sources of lead, screen persons at highest risk for exposure, and provide timely medical and environmental interventions for those identified with elevated BLLs.

NHANES is an ongoing series of cross-sectional surveys on health and nutrition designed to be nationally representative of the noninstitutionalized, U.S. civilian population by using a complex, multistage probability design. All NHANES surveys included a household interview followed by a detailed physical examination in a mobile examination center (MEC), at which time venous blood samples were obtained from persons aged ≥1 year. BLLs were measured by graphite furnace atomic absorption spectrophotometry in the inorganic toxicology laboratory at CDC.

Detailed analyses compared BLLs of 16,825 persons from the NHANES survey conducted during 1999–2002 with BLLs of 13,472 persons from the NHANES survey conducted during 1991–1994. Results were analyzed by age group, race/ethnicity (i.e., non-Hispanic white, non-Hispanic black, and Mexican American), and low-income status (with the threshold determined by multiplying the U.S. Census Bureau poverty level threshold for the year of the interview by 1.3). Elevated BLLs were defined as BLLs ≥10 µg/dL for all ages. Geometric mean (GM) BLLs and 95% confidence intervals were calculated. All analyses used MEC sample weights to account for the unequal probability of selection, oversampling, and survey nonresponse.

For 1999–2002, the overall prevalence of elevated BLLs for the U.S. population was 0.7% (Table 1), a decrease of 68% from 2.2% in the 1991–1994 survey. The largest decrease (72%) in elevated BLLs, from 11.2% to 3.1%, was among non-Hispanic black children aged 1–5 years, consistent with a previous decline from 1988–1991 to 1991–1994 (Figure).

During the 1999–2002 survey period, children aged 1–5 years had the highest prevalence of elevated BLLs (1.6%), indicating that approximately 310,000 children in that age group remained at risk for exposure to harmful lead levels. Youths aged 6–19 years had the lowest prevalence of elevated BLLs (0.2%), although this estimate was not statistically reliable. Overall, by race/ethnicity, non-Hispanic blacks and Mexican Americans had higher percentages of elevated BLLs (1.4% and 1.5%, respectively) than non-Hispanic whites (0.5%) (Table 1). Among subpopulations, non-Hispanic blacks aged 1–5 years and aged ≥60 years had the highest prevalence of elevated BLLs (3.1% and 3.4%, respectively). Although the prevalence of elevated BLLs among non-Hispanic black children was higher compared with children in the other two racial/ethnic populations, statistical power was not sufficient to examine these differences because of the small proportions and variability around the estimates.

GM BLLs declined significantly ($p<0.05$) from the 1991–1994 survey period in all populations and subpopulations (Table 2). Overall, the GM BLL declined from 2.3 µg/dL in 1991–1994 to 1.6 µg/dL in 1999–2002. The highest GM BLLs in 1999–2002 were among children aged 1–5 years (1.9 µg/dL) and adults aged ≥60 years (2.2 µg/dL), and the lowest were among youths aged 6–19 years (1.1 µg/dL). Males had significantly higher GM BLLs than females, except among children aged 1–5 years, which is consistent with the 1991–

**TABLE 1. Percentage of persons with elevated blood lead levels*, by selected characteristics — National Health and Nutrition Examination Surveys (NHANES), United States, 1991–1994 and 1999–2002**

| Sex/Age (yrs) | No. in sample | NHANES 1991–1994 % (95% confidence interval) All racial/ethnic groups | White, non-Hispanic | Black, non-Hispanic | Mexican American |
|---|---|---|---|---|---|
| **Both sexes** | | | | | |
| ≥1 | 13,472 | 2.2 (1.6–2.8) | 1.5 (0.9–2.2)†§ | 5.3 (3.8–6.9)§¶ | 2.9 (2.0–4.0)†¶ |
| *1–5* | *2,392* | *4.4 (2.7–6.5)* | *2.3 (0.8–4.5)††* | *11.2 (5.9–18.0)* | *4.0 (1.8–6.9)* |
| *6–19* | *2,960* | *1.3 (0.7–2.1)* | *0.6 (0.1–1.8)††* | *3.2 (2.3–4.3)* | *2.3 (0.7–4.7)††* |
| *20–59* | *5,596* | *1.7 (1.1–2.5)* | *1.1 (0.5–2.1)††* | *4.1 (2.7–5.7)* | *2.9 (1.9–4.0)* |
| *≥60* | *2,524* | *3.6 (2.8–4.5)* | *3.0 (2.2–3.9)†* | *10.5 (7.2–14.3)§¶* | *3.8 (1.8–6.6)†* |
| **Male** | | | | | |
| ≥1 | 6,204 | 3.5 (2.5–4.6) | 2.3 (1.3–3.7)† | 8.4 (6.2–10.8)§¶ | 4.0 (2.6–5.7)† |
| *1–5* | *1,211* | *5.5 (3.1–8.4)* | *2.4 (0.7–5.3)††* | *13.8 (8.5–20.0)* | *4.7 (2.0–8.4)††* |
| *6–19* | *1,443* | *1.5 (0.8–2.5)* | *0.4 (0.0–1.7)††* | *4.5 (3.3–5.9)* | *2.4 (0.6–5.3)††* |
| *20–59* | *2,365* | *3.1 (1.9–4.6)* | *2.1 (0.8–4.0)††* | *7.0 (4.4–10.3)* | *4.3 (2.5–6.5)* |
| *≥60* | *1,185* | *6.5 (4.6–8.8)* | *5.2 (3.2–7.6)†* | *20.5 (13.2–28.9)§¶* | *7.5 (3.4–13.0)†* |
| **Female** | | | | | |
| ≥1 | 7,268 | 0.9 (0.6–1.3) | 0.7 (0.3–1.1)†† | 2.6 (1.4–4.1) | 1.7 (0.9–2.9) |
| *1–5* | *1,181* | *3.3 (2.0– 4.9)* | *2.1 (0.6–4.3)††* | *8.7 (3.0–16.8)††* | *3.3 (1.2–6.4)††* |
| *6–19* | *1,517* | *1.1 (0.2–2.6)††* | *0.9 (0.0–3.3)††* | *1.9 (0.7–3.7)††* | *2.2 (0.6–4.8)††* |
| *20–59* | *3,231* | *0.4 (0.2–0.6)* | *0.2 (0.0–0.5)††* | *1.6 (0.7–2.8)††* | *1.3 (0.5–2.3)††* |
| *≥60* | *1,339* | *1.5 (0.7–2.6)* | *1.4 (0.5–2.7)††* | *3.5 (1.3–6.7)††* | *0.9 (0.1–2.3)††* |

**TABLE 1. (*Continued*) Percentage of persons with elevated blood lead levels*, by selected characteristics — National Health and Nutrition Examination Surveys (NHANES), United States, 1991–1994 and 1999–2002**

| Sex/Age (yrs) | No. in sample | NHANES 1999–2002 % (95% confidence interval) All racial/ethnic groups | White, non-Hispanic | Black, non-Hispanic | Mexican American |
|---|---|---|---|---|---|
| **Both sexes** | | | | | |
| ≥1 | 16,825 | 0.7 (0.5–0.9)** | 0.5 (0.4–0.7)†§** | 1.4 (0.9–1.9)¶** | 1.5 (1.0–2.1)¶** |
| *1–5* | *1,160* | *1.6 (1.1–2.2)*** | *1.3 (0.6–2.5)††* | *3.1 (1.7–4.9)*** | *2.0 (0.5–4.4)††* |
| *6–19* | *6,283* | *0.2 (0.0–0.4)††* | *0.2 (0.0–0.6)††* | *0.3 (0.1–0.6)††* | *0.3 (0.1–0.6)††* |
| *20–59* | *5,876* | *0.7 (0.5–1.0)*** | *0.6 (0.4–0.9)§* | *1.3 (0.6–2.1)*** | *2.0 (1.2–2.9)¶* |
| *≥60* | *3,056* | *0.8 (0.4–1.2)*** | *0.4 (0.1–0.7)††* | *3.4 (1.9–5.3)*** | *1.8 (0.9–3.1)* |
| **Male** | | | | | |
| ≥1 | 8,202 | 1.1 (0.8–1.4)** | 0.8 (0.6–1.1)†§** | 2.2 (1.3–3.3)¶** | 2.1 (1.3–3.1)¶** |
| *1–5* | *846* | *1.7 (0.8–2.9)*** | *1.4 (0.3–3.3)††* | *2.5 (1.0–4.6)††* | *3.2 (0.7–7.2)††* |
| *6–19* | *3,158* | *0.2 (0.0–0.4)††* | *0.2 (0.0–0.6)††* | *0.3 (0.1–0.5)*** | *0.1 (0.0–0.3)††* |
| *20–59* | *2,689* | *1.2 (0.8–1.7)*** | *1.0 (0.5–1.5)§* | *2.3 (1.0–4.0)††* | *3.0 (1.8–4.5)¶* |
| *≥60* | *1,509* | *1.5 (0.8–2.4)*** | *0.7 (0.2–1.5)††* | *7.5 (4.4–11.3)§** | *2.2 (1.0–3.7)†** |
| **Female** | | | | | |
| ≥1 | 8,623 | 0.3 (0.2–0.5)** | 0.3 (0.1–0.5)†† | 0.7 (0.4–1.0)** | 0.8 (0.4–1.3) |
| *1–5* | *764* | *1.4 (0.7–2.4)*** | *1.3 (0.2–3.5)††* | *3.7 (1.6–6.6)††* | *0.7 (0.0–2.3)††* |
| *6–19* | *3,125* | *0.2 (0.0–0.5)††* | *0.2 (0.0–0.8)††* | *0.3 (0.0–1.0)††* | *0.5 (0.1–1.1)††* |
| *20–59* | *3,187* | *0.3 (0.1–0.6)††* | *0.3 (0.0–0.7)††* | *0.5 (0.1–1.2)††* | *0.8 (0.3–1.7)††* |
| *≥60* | *1,547* | *0.2 (0.0–0.4)††* | *0.1 (0.0–0.3)††* | *0.8 (0.1–2.3)††* | *1.6 (0.6–3.1)††* |

* ≥10 μg/dL.
† Significantly different from non-Hispanic blacks at p<0.05, with Bonferroni adjustment.
§ Significantly different from Mexican Americans at p<0.05, with Bonferroni adjustment.
¶ Significantly different from non-Hispanic whites at p<0.05, with Bonferroni adjustment.
** Significantly different between NHANES 1999–2002 and NHANES 1991–1994 at p<0.05.
†† Does not meet standard of statistical reliability and precision (i.e., relative standard error is >30%), and significant testing was not performed.

1994 survey. By racial/ethnic group, among children aged 1–5 years, the GM BLL was significantly higher for non-Hispanic blacks (2.8 μg/dL), compared with Mexican Americans (1.9 μg/dL) and non-Hispanic whites (1.8 μg/dL). Among children aged 1–5 years from families with low income, the GM BLL also declined significantly, from 3.7 μg/dL in the 1991–1994 survey to 2.5 μg/dL in 1999–2002.

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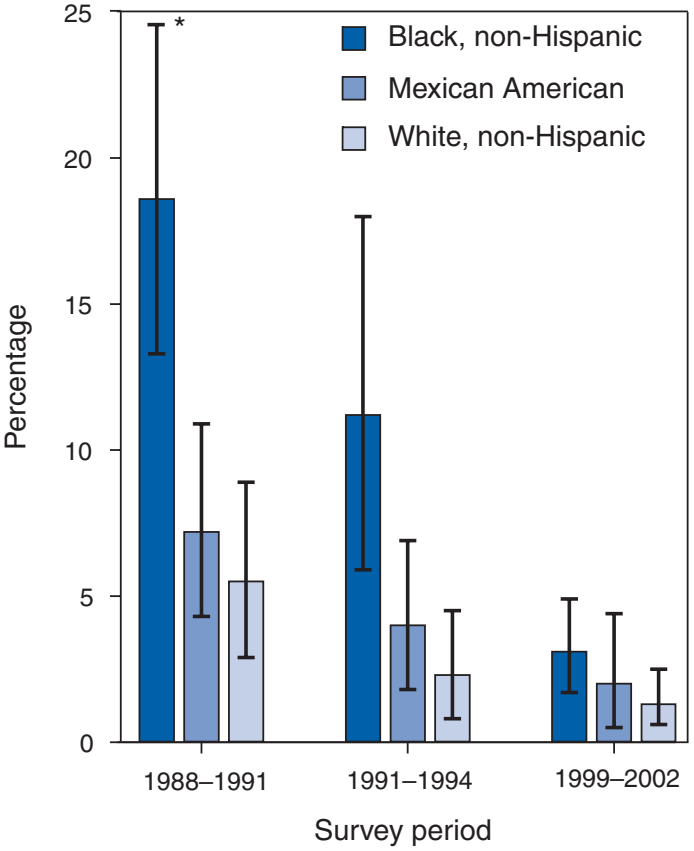
**Editorial Note:** The findings in this report indicate that BLLs continue to decline in the United States, as measured by NHANES, the only survey providing national data on lead

**FIGURE. Percentage of children aged 1–5 years with blood lead levels ≥10 μg/dL, by race/ethnicity and survey period — National Health and Nutrition Examination Surveys, United States, 1988–1991, 1991–1994, and 1999–2002**




* 95% confidence interval.

exposure. The GM BLL for the U.S. population aged ≥1 year decreased by 30% from 1991–1994 to 1999–2002, and the prevalence of elevated BLLs decreased by 68% overall and by 64% for children aged 1–5 years. Differences in proportions of elevated BLLs among children by race/ethnicity also were reduced, likely because of the substantial decline among non-Hispanic black children. However, the GM BLL for non-Hispanic black children remains higher than that for Mexican-American and non-Hispanic white children, indicating that differences in risk for exposure still persist. Exposure risk remains of particular concern in light of reported adverse health effects at BLLs <10μg/dL (*7*).

The decline in BLLs in the United States has resulted from coordinated, intensive efforts at the national, state, and local levels beginning with efforts to remove lead from gasoline, food cans, and residential paint products (*4*). Beginning in 2003, CDC and the U.S. Department of Housing and Urban Development (HUD) required funded programs to develop formal plans to eliminate lead poisoning in their jurisdictions. Key components of these plans include coordination of activities by state, local, and nongovernmental organizations, linking BLL surveillance and Medicaid claims data to identify gaps in screening of populations at high risk, and eliminating lead paint hazards in housing, particularly in homes with more than one child with an elevated BLL.

The findings in this report are subject to at least three limitations. First, although NHANES is a nationally representative survey, the current design does not allow for estimates in smaller geographic areas or for identifying risk in certain subpopulations such as recent immigrants. Second, NHANES does not identify specific sources of lead exposure. Finally, the low prevalence of elevated BLLs does not allow stratification by more than one factor that might be related to exposure, such as race/ethnicity or age of residence.

A critical factor in reducing BLLs in children has been the decline in the number of U.S. homes with lead-based paint, from an estimated 64 million in 1990 to 38 million in 2000 (*8*). This decline might be associated, in part, with federal appropriations to HUD of $700 million during fiscal years 1992–2002 for residential lead control in low-income, privately owned housing (*9*), and to investments in housing rehabilitation made by other government agencies and the private sector. Lead-control enforcement action by HUD, the U.S. Environmental Protection Agency, and the Department of Justice has resulted in approximately 200 on-site inspections and 30 settlements involving approximately 160,000 housing units nationwide (*10*). State and local governments have provided substantial additional funding for lead-poisoning–prevention activities and enforcement of local ordinances. However, an estimated 24 million housing units still contain substantial lead paint hazards, with 1.2 million of these units occupied by low-income families with young children (*8*). Findings in this report demonstrate progress toward achieving the national health objective for 2010 to eliminate elevated BLLs in children. Continued vigilance to identify remaining lead hazards and children at risk for lead exposure is necessary to meet this goal.

## References

1. Agency for Toxic Substances and Disease Registry. Toxicological profile for lead. Atlanta, GA: US Department Health and Human Services, Agency for Toxic Substances and Disease Registry; 1999.
2. National Academy of Sciences, Board on Environmental Studies and Toxicology, Commission on Life Sciences. Measuring lead exposure in infants, children, and other sensitive populations. Washington, DC: National Academy Press; 1993.
3. US Department of Health and Human Services. Healthy people 2010 (conference ed, in 2 vols). Washington, DC: US Department of Health and Human Services; 2000. Available at http://www.health.gov/healthypeople.
4. President's Task Force on Environmental Health Risks and Safety Risks to Children, US Department of Housing and Urban Development. Eliminating childhood lead poisoning: a federal strategy targeting lead paint hazards, 2000. Washington, DC: US Department of Housing and Urban Development; 2000. Available at http://www.hud.gov/offices/lead/reports/fedstrategy2000.pdf.

**TABLE 2. Geometric means (GMs) of blood lead levels (measured as μg/dL), by race/ethnicity, sex, and age group — National Health and Nutrition Examination Surveys (NHANES), United States, 1991–1994 and 1999–2002**

| Sex/Age (yrs) | No. in sample | NHANES 1991–1994* GM (95% confidence interval) All racial/ethnic groups | White, non-Hispanic | Black, non-Hispanic | Mexican American |
|---|---|---|---|---|---|
| **Both sexes** | | | | | |
| ≥1 | 13,472 | 2.3 (2.1–2.4) | 2.2 (2.0–2.3)†§ | 2.8 (2.5–3.0)¶ | 2.4 (2.3–2.6)¶ |
| *1–5* | *2,392* | *2.7 (2.5–3.0)* | *2.3 (2.1–2.6)†§* | *4.3 (3.6–5.0)§¶* | *3.1 (2.7–3.5)†¶* |
| *6–19* | *2,960* | *1.7 (1.5–1.8)* | *1.5 (1.4–1.7)†§* | *2.3 (2.1–2.6)¶* | *2.0 (1.8–2.1)¶* |
| *20–59* | *5,596* | *2.2 (2.1–2.3)* | *2.1 (2.0–2.2)†§* | *2.6 (2.4–2.8)¶* | *2.5 (2.4–2.6)¶* |
| *≥60* | *2,524* | *3.4 (3.2–3.5)* | *3.3 (3.2–3.4)†* | *4.3 (3.7–4.9)§¶* | *3.1 (2.7–3.6)†* |
| **Male** | | | | | |
| ≥1 | 6,204 | 2.8 (2.6–2.9) | 2.6 (2.5–2.8)†§ | 3.6 (3.3–4.0)§¶ | 3.1 (2.9–3.3)†¶ |
| *1–5* | *1,211* | *2.8 (2.5–3.1)* | *2.3 (2.1–2.6)†§* | *4.7 (3.9–5.5)§¶* | *3.3 (2.9–3.6)†¶* |
| *6–19* | *1,443* | *1.9 (1.7–2.1)* | *1.7 (1.5–1.9)†§* | *2.7 (2.4–3.1)¶* | *2.3 (2.0–2.5)¶* |
| *20–59* | *2,365* | *2.9 (2.7–3.1)* | *2.7 (2.5–3.0)†§* | *3.6 (3.2–3.9)¶* | *3.4 (3.2–3.6)¶* |
| *≥60* | *1,185* | *4.2 (4.0–4.4)* | *4.0 (3.8–4.2)†* | *6.3 (5.4–7.1)§¶* | *4.1 (3.5–4.8)†* |
| **Female** | | | | | |
| ≥1 | 7,268 | 1.9 (1.8–2.0) | 1.8 (1.7–1.9)† | 2.2 (2.0–2.4)§¶ | 1.9 (1.8–2.1)† |
| *1–5* | *1,181* | *2.7 (2.4–2.9)* | *2.3 (2.0–2.6)†* | *4.0 (3.2–4.8)¶* | *2.9 (2.4–3.4)* |
| *6–19* | *1,517* | *1.5 (1.3–1.7)* | *1.4 (1.2–1.6)†* | *2.0 (1.7–2.2)¶* | *1.7 (1.5–1.9)* |
| *20–59* | *3,231* | *1.7 (1.6–1.8)* | *1.6 (1.5–1.7)†§* | *1.9 (1.8–2.1)¶* | *1.8 (1.7–1.9)¶* |
| *≥60* | *1,339* | *2.9 (2.7–3.0)* | *2.8 (2.7–3.0)* | *3.3 (2.8–3.8)* | *2.5 (2.1–2.9)* |

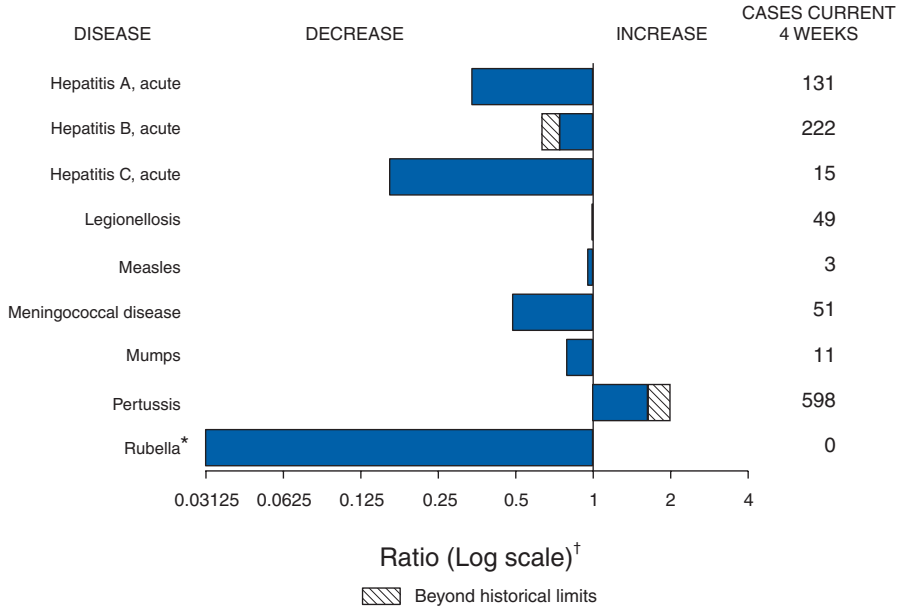
**TABLE 2. (*Continued*) Geometric (GMs) means of blood lead levels (measured as μg/dL), by race/ethnicity, sex, and age group — National Health and Nutrition Examination Surveys (NHANES), United States, 1991–1994 and 1999–2002**

| Sex/Age (yrs) | No. in sample | NHANES 1999–2002* GM (95% confidence interval) All racial/ethnic groups | White, non-Hispanic | Black, non-Hispanic | Mexican American |
|---|---|---|---|---|---|
| **Both sexes** | | | | | |
| ≥1 | 16,825 | 1.6 (1.5–1.6) | 1.5 (1.5–1.6)† | 1.8 (1.7–1.9)¶ | 1.6 (1.6–1.7) |
| *1–5* | *1,610* | *1.9 (1.8–2.1)* | *1.8 (1.6–2.0)†* | *2.8 (2.5–3.1)§¶* | *1.9 (1.8–2.0)†* |
| *6–19* | *6,283* | *1.1 (1.1–1.2)* | *1.1 (1.0–1.1)†§* | *1.5 (1.4–1.6)§¶* | *1.3 (1.2–1.4)†¶* |
| *20–59* | *5,876* | *1.5 (1.5–1.6)* | *1.5 (1.4–1.5)†§* | *1.7 (1.6–1.8)¶* | *1.8 (1.6–1.9)¶* |
| *≥60* | *3,056* | *2.2 (2.1–2.3)* | *2.2 (2.1–2.3)†* | *2.7 (2.5–2.8)§¶* | *2.1 (1.9–2.3)†* |
| **Male** | | | | | |
| ≥1 | 8,202 | 1.9 (1.8–2.0) | 1.9 (1.8–1.9)†§ | 2.1 (2.0–2.3)¶ | 2.0 (1.9–2.2)¶ |
| *1–5* | *846* | *1.9 (1.8–2.1)* | *1.8 (1.6–2.0)†* | *2.8 (2.5–3.1)§¶* | *2.0 (1.8–2.1)†* |
| *6–19* | *3,158* | *1.3 (1.3–1.4)* | *1.2 (1.1–1.3)†§* | *1.7 (1.5–1.8)¶* | *1.5 (1.4–1.6)¶* |
| *20–59* | *2,689* | *2.0 (1.9–2.0)* | *1.9 (1.8–2.0)§* | *2.1 (2.0–2.3)* | *2.3 (2.2–2.5)¶* |
| *≥60* | *1,509* | *2.7 (2.6–2.8)* | *2.6 (2.5–2.7)†* | *3.4 (3.1–3.6)§¶* | *2.6 (2.3–2.8)†* |
| **Female** | | | | | |
| ≥1 | 8,623 | 1.3 (1.3–1.3) | 1.3 (1.2–1.3)† | 1.5 (1.4–1.6)§¶ | 1.3 (1.2–1.4)† |
| *1–5* | *764* | *1.9 (1.8–2.1)* | *1.8 (1.5–2.1)†* | *2.8 (2.5–3.2)§¶* | *1.8 (1.7–2.0)†* |
| *6–19* | *3,125* | *1.0 (0.9–1.0)* | *0.9 (0.8–1.0)†§* | *1.3 (1.2–1.5)§¶* | *1.1 (1.0–1.2)†¶* |
| *20–59* | *3,187* | *1.2 (1.2–1.2)* | *1.2 (1.1–1.2)†* | *1.4 (1.3–1.5)¶* | *1.3 (1.2–1.4)* |
| *≥60* | *1,547* | *1.9 (1.8–2.0)* | *1.9 (1.8–2.0)†* | *2.3 (2.1–2.4)§¶* | *1.8 (1.6–2.0)†* |

* Differences in GMs between NHANES 1999–2002 and NHANES 1991–1994 are all significant at p<0.05.
† Significantly different from non-Hispanic blacks at p<0.05, with Bonferroni adjustment.
§ Significantly different from Mexican Americans at p<0.05, with Bonferroni adjustment.
¶ Significantly different from non-Hispanic whites at p<0.05, with Bonferroni adjustment.


5. CDC. Update: blood lead levels—United States, 1991–1994. MMWR 1997;46:141–6.
6. Meyer P, Pivert T, Dignam T, Homa D, Schoonover J, Brody D. Surveillance for elevated blood lead levels among children—United States, 1997–2001. In: Surveillance Summaries, September 12, 2003. MMWR 2003;52(No. SS-10).
7. Canfield RL, Henderson CR, Cory-Slechta DA, Cos C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below 10 microg per deciliter. N Engl J Med 2003;348:1517–26.
8. Jacobs DE, Clickner RP, Zhou JY, et al. The prevalence of lead-based paint hazards in US housing. Environ Health Perspect 2002;110:599–06.
9. US Department of Housing and Urban Development. Lead-Based Paint Hazard Control Grant Program. Washington, DC: US Department of Housing and Urban Development; updated 2005. Available at http://www.hud.gov/offices/lead/lhc/index.cfm.
10. US Department of Housing and Urban Development. Compliance assistance and enforcement: Federal Residential Lead-Based Paint Hazard Reduction Act (Lead-Based Paint Disclosure Rule). Washington, DC: US Department of Housing and Urban Development; updated 2004. Available at http://www.hud.gov/offices/lead/compliance/index.cfm.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 21, 2005, with historical data**




* No rubella cases were reported for the current 4-week period yielding a ratio for week 20 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 May 21, 2005 (20th Week)***

| Disease | Cum. 2005 | Cum. 2004 | Disease | Cum. 2005 | Cum. 2004 |
|---|---|---|---|---|---|
| Anthrax | — | — | Hemolytic uremic syndrome, postdiarrheal† | 43 | 27 |
| Botulism: | | | HIV infection, pediatric†¶ | 116 | 117 |
| foodborne | 5 | 4 | Influenza-associated pediatric mortality†** | 34 | — |
| infant | 21 | 25 | Measles | 15†† | 14§§ |
| other (wound & unspecified) | 9 | 3 | Mumps | 96 | 82 |
| Brucellosis | 30 | 38 | Plague | — | — |
| Chancroid | 10 | 16 | Poliomyelitis, paralytic | — | — |
| Cholera | 1 | 4 | Psittacosis† | 7 | 4 |
| Cyclosporiasis† | 307 | 86 | Q fever† | 22 | 20 |
| Diphtheria | — | — | Rabies, human | 1 | — |
| Domestic arboviral diseases | | | Rubella | 4 | 7 |
| (neuroinvasive & non-neuroinvasive): | — | — | Rubella, congenital syndrome | 1 | — |
| California serogroup†§ | — | 4 | SARS†** | — | — |
| eastern equine†§ | — | — | Smallpox† | — | — |
| Powassan†§ | — | — | *Staphylococcus aureus*: | | |
| St. Louis†§ | — | — | Vancomycin-intermediate (VISA)† | — | — |
| western equine†§ | — | — | Vancomycin-resistant (VRSA)† | — | — |
| Ehrlichiosis: | — | — | Streptococcal toxic-shock syndrome† | 64 | 77 |
| human granulocytic (HGE)† | 30 | 36 | Tetanus | 5 | 4 |
| human monocytic (HME)† | 31 | 23 | Toxic-shock syndrome | 42 | 37 |
| human, other and unspecified † | 10 | 5 | Trichinellosis¶¶ | 7 | — |
| Hansen disease† | 14 | 43 | Tularemia† | 13 | 15 |
| Hantavirus pulmonary syndrome† | 5 | 4 | Yellow fever | — | — |

—: No reported cases.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
¶ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update April 24, 2005.
** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases.
†† Of 15 cases reported, nine were indigenous and six were imported from another country.
§§ Of 14 cases reported, five were indigenous and nine were imported from another country.
¶¶ Formerly Trichinosis.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | AIDS | | Chlamydia† | | Coccidioidomycosis | | Cryptosporidiosis | |
|---|---|---|---|---|---|---|---|---|
| | Cum. 2005§ | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 13,232 | 12,150 | 327,461 | 352,369 | 1,610 | 1,809 | 671 | 921 |
| NEW ENGLAND | 532 | 370 | 10,722 | 11,658 | — | — | 35 | 55 |
| Maine | 4 | 5 | 824 | 754 | N | N | 3 | 9 |
| N.H. | 7 | 19 | 705 | 661 | — | — | 5 | 14 |
| Vt.¶ | 3 | 10 | 384 | 444 | — | — | 9 | 6 |
| Mass. | 275 | 119 | 5,507 | 5,221 | — | — | 12 | 19 |
| R.I. | 47 | 44 | 1,299 | 1,340 | — | — | 1 | 1 |
| Conn. | 196 | 173 | 2,003 | 3,238 | N | N | 5 | 6 |
| MID. ATLANTIC | 2,558 | 2,414 | 38,792 | 43,745 | — | — | 100 | 153 |
| Upstate N.Y. | 253 | 186 | 8,167 | 8,453 | N | N | 26 | 28 |
| N.Y. City | 1,476 | 1,134 | 11,959 | 13,511 | — | — | 23 | 48 |
| N.J. | 413 | 524 | 4,341 | 7,007 | N | N | 7 | 12 |
| Pa. | 416 | 570 | 14,325 | 14,774 | N | N | 44 | 65 |
| E.N. CENTRAL | 1,204 | 1,276 | 52,221 | 63,389 | 3 | 5 | 125 | 237 |
| Ohio | 185 | 231 | 13,987 | 16,055 | N | N | 45 | 53 |
| Ind. | 165 | 164 | 7,644 | 7,013 | N | N | 11 | 30 |
| Ill. | 661 | 606 | 14,836 | 18,072 | — | — | 2 | 40 |
| Mich. | 138 | 207 | 8,802 | 15,261 | 3 | 5 | 20 | 47 |
| Wis. | 55 | 68 | 6,952 | 6,988 | N | N | 47 | 67 |
| W.N. CENTRAL | 318 | 300 | 18,972 | 21,473 | 3 | 4 | 100 | 95 |
| Minn. | 88 | 66 | 3,030 | 4,399 | 3 | N | 28 | 39 |
| Iowa | 41 | 19 | 2,627 | 2,635 | N | N | 17 | 14 |
| Mo. | 132 | 125 | 7,756 | 7,921 | — | 3 | 39 | 18 |
| N. Dak. | 5 | 12 | 412 | 761 | N | N | — | — |
| S. Dak. | 9 | 5 | 1,076 | 966 | — | — | 7 | 10 |
| Nebr.¶ | 5 | 20 | 1,498 | 2,004 | — | 1 | 1 | 3 |
| Kans. | 38 | 53 | 2,573 | 2,787 | N | N | 8 | 11 |
| S. ATLANTIC | 4,263 | 4,145 | 63,599 | 66,362 | — | — | 153 | 168 |
| Del. | 70 | 55 | 1,298 | 1,141 | N | N | — | — |
| Md. | 513 | 475 | 6,784 | 7,335 | — | — | 8 | 9 |
| D.C. | 276 | 149 | 1,459 | 1,407 | — | — | 2 | 3 |
| Va.¶ | 223 | 209 | 7,944 | 8,705 | — | — | 12 | 22 |
| W. Va. | 22 | 29 | 886 | 1,093 | N | N | 4 | 2 |
| N.C. | 350 | 237 | 13,171 | 10,639 | N | N | 21 | 31 |
| S.C.¶ | 215 | 267 | 7,900 | 6,838 | — | — | 7 | 7 |
| Ga. | 741 | 690 | 7,754 | 12,947 | — | — | 45 | 49 |
| Fla. | 1,853 | 2,034 | 16,403 | 16,257 | N | N | 54 | 45 |
| E.S. CENTRAL | 770 | 555 | 22,762 | 21,694 | — | 3 | 19 | 39 |
| Ky. | 91 | 68 | 4,269 | 2,121 | N | N | 7 | 9 |
| Tenn.¶ | 313 | 208 | 8,471 | 8,773 | N | N | 3 | 12 |
| Ala.¶ | 213 | 167 | 2,996 | 5,355 | — | — | 8 | 10 |
| Miss. | 153 | 112 | 7,026 | 5,445 | — | 3 | 1 | 8 |
| W.S. CENTRAL | 1,513 | 1,707 | 42,542 | 44,547 | — | 2 | 18 | 42 |
| Ark. | 71 | 88 | 3,413 | 3,125 | — | 1 | 1 | 7 |
| La. | 278 | 337 | 6,982 | 10,043 | — | 1 | 3 | — |
| Okla. | 112 | 68 | 4,116 | 4,155 | N | N | 7 | 8 |
| Tex.¶ | 1,052 | 1,214 | 28,031 | 27,224 | N | N | 7 | 27 |
| MOUNTAIN | 537 | 485 | 20,534 | 19,806 | 1,079 | 1,121 | 39 | 36 |
| Mont. | 3 | — | 798 | 877 | N | N | 4 | 3 |
| Idaho¶ | 5 | 3 | 731 | 1,190 | N | N | 2 | 4 |
| Wyo. | — | 5 | 427 | 425 | — | — | 2 | 2 |
| Colo. | 107 | 97 | 5,071 | 5,096 | N | N | 16 | 19 |
| N. Mex. | 56 | 51 | 1,478 | 3,244 | 2 | 9 | 2 | 1 |
| Ariz. | 227 | 197 | 8,018 | 5,550 | 1,045 | 1,085 | 4 | 5 |
| Utah | 25 | 29 | 1,645 | 1,270 | 2 | 6 | 4 | 1 |
| Nev.¶ | 114 | 103 | 2,366 | 2,154 | 30 | 21 | 5 | 1 |
| PACIFIC | 1,537 | 898 | 57,317 | 59,695 | 525 | 674 | 82 | 96 |
| Wash. | 144 | 165 | 7,454 | 6,608 | N | N | 5 | — |
| Oreg.¶ | 90 | 90 | 3,399 | 3,004 | — | — | 15 | 11 |
| Calif. | 1,250 | 592 | 43,262 | 46,298 | 525 | 674 | 62 | 84 |
| Alaska | 9 | 10 | 1,473 | 1,531 | — | — | — | — |
| Hawaii | 44 | 41 | 1,729 | 2,254 | — | — | — | 1 |
| Guam | 1 | — | — | 438 | — | — | — | — |
| P.R. | 335 | 208 | 1,631 | 1,144 | N | N | N | N |
| V.I. | 7 | 4 | 32 | 150 | — | — | — | — |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | 2 | 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 2004 and 2005 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, National Center for HIV, STD, and TB Prevention. Last update April 24, 2005.

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

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | *Escherichia coli*, Enterohemorrhagic (EHEC) | | | | | | Giardiasis | | Gonorrhea | |
|---|---|---|---|---|---|---|---|---|---|---|
| | O157:H7 | | Shiga toxin positive, serogroup non-O157 | | Shiga toxin positive, not serogrouped | | | | | |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 386 | 412 | 55 | 71 | 61 | 46 | 5,513 | 5,994 | 109,189 | 121,669 |
| NEW ENGLAND | 28 | 20 | 15 | 18 | 6 | 5 | 453 | 527 | 1,949 | 2,722 |
| Maine | 2 | — | 2 | — | — | — | 44 | 52 | 52 | 102 |
| N.H. | 2 | 4 | 1 | 2 | — | — | 21 | 16 | 59 | 52 |
| Vt. | 1 | — | — | — | — | — | 59 | 39 | 15 | 35 |
| Mass. | 10 | 11 | 5 | 6 | 6 | 5 | 185 | 268 | 1,057 | 1,202 |
| R.I. | 1 | 2 | — | — | — | — | 30 | 37 | 192 | 358 |
| Conn. | 12 | 3 | 7 | 10 | — | — | 114 | 115 | 574 | 973 |
| MID. ATLANTIC | 47 | 36 | 3 | 9 | 5 | 10 | 1,028 | 1,341 | 11,027 | 13,947 |
| Upstate N.Y. | 18 | 10 | 3 | 2 | 2 | 3 | 332 | 379 | 2,384 | 2,792 |
| N.Y. City | 1 | 7 | — | — | — | — | 292 | 434 | 2,897 | 4,374 |
| N.J. | 11 | 7 | — | 3 | — | 4 | 135 | 175 | 1,607 | 2,579 |
| Pa. | 17 | 12 | — | 4 | 3 | 3 | 269 | 353 | 4,139 | 4,202 |
| E.N. CENTRAL | 79 | 85 | 7 | 13 | 3 | 4 | 777 | 913 | 20,633 | 25,726 |
| Ohio | 34 | 18 | 1 | 2 | 2 | 4 | 226 | 270 | 6,565 | 8,200 |
| Ind. | 8 | 12 | — | — | — | — | N | N | 2,972 | 2,390 |
| Ill. | 9 | 22 | 1 | — | — | — | 130 | 304 | 5,988 | 7,554 |
| Mich. | 14 | 14 | — | 2 | 1 | — | 239 | 200 | 3,199 | 5,872 |
| Wis. | 14 | 19 | 5 | 9 | — | — | 182 | 139 | 1,909 | 1,710 |
| W.N. CENTRAL | 53 | 62 | 12 | 11 | 9 | 9 | 713 | 653 | 6,006 | 6,308 |
| Minn. | 6 | 23 | 3 | 6 | 2 | 2 | 356 | 206 | 865 | 1,114 |
| Iowa | 10 | 11 | — | — | — | — | 74 | 94 | 579 | 475 |
| Mo. | 20 | 7 | 6 | 4 | 2 | 2 | 151 | 200 | 3,189 | 3,198 |
| N. Dak. | 1 | 2 | — | — | — | 3 | 1 | 11 | 19 | 57 |
| S. Dak. | 2 | 2 | — | — | — | — | 33 | 19 | 140 | 103 |
| Nebr. | 5 | 8 | 3 | 1 | 2 | — | 38 | 54 | 349 | 414 |
| Kans. | 9 | 9 | — | — | 3 | 2 | 60 | 69 | 865 | 947 |
| S. ATLANTIC | 61 | 41 | 8 | 11 | 30 | 7 | 925 | 928 | 26,930 | 29,392 |
| Del. | — | — | N | N | N | N | 8 | 20 | 313 | 364 |
| Md. | 6 | 5 | 2 | 2 | — | 2 | 57 | 34 | 2,525 | 3,059 |
| D.C. | — | 1 | — | — | — | — | 18 | 29 | 790 | 947 |
| Va. | 2 | 1 | 3 | 6 | 6 | — | 195 | 137 | 2,865 | 3,503 |
| W. Va. | — | 1 | — | — | — | — | 11 | 12 | 258 | 317 |
| N.C. | — | — | — | — | 16 | 4 | N | N | 6,263 | 5,796 |
| S.C. | 1 | 4 | — | — | — | — | 30 | 32 | 3,380 | 3,301 |
| Ga. | 7 | 11 | 1 | 1 | — | — | 316 | 286 | 3,391 | 5,472 |
| Fla. | 45 | 18 | 2 | 2 | 8 | 1 | 290 | 378 | 7,145 | 6,633 |
| E.S. CENTRAL | 22 | 23 | — | 2 | 5 | 6 | 141 | 130 | 8,370 | 9,444 |
| Ky. | 4 | 7 | — | 1 | 4 | 4 | N | N | 1,344 | 897 |
| Tenn. | 11 | 3 | — | — | 1 | 2 | 74 | 62 | 3,008 | 3,106 |
| Ala. | 7 | 6 | — | — | — | — | 67 | 68 | 1,910 | 3,041 |
| Miss. | — | 7 | — | 1 | — | — | — | — | 2,108 | 2,400 |
| W.S. CENTRAL | 8 | 40 | 1 | 2 | 2 | 5 | 83 | 102 | 16,651 | 16,578 |
| Ark. | 1 | 5 | — | — | — | — | 30 | 45 | 1,723 | 1,497 |
| La. | 1 | 1 | 1 | — | 2 | — | 10 | 15 | 3,858 | 4,557 |
| Okla. | 3 | 4 | — | — | — | — | 43 | 42 | 1,733 | 1,786 |
| Tex. | 3 | 30 | — | 2 | — | 5 | N | N | 9,337 | 8,738 |
| MOUNTAIN | 42 | 45 | 9 | 4 | 1 | — | 404 | 439 | 4,251 | 4,353 |
| Mont. | 3 | 3 | — | — | — | — | 11 | 15 | 44 | 30 |
| Idaho | 3 | 12 | 5 | 1 | — | — | 31 | 64 | 31 | 34 |
| Wyo. | — | — | 1 | — | — | — | 7 | 5 | 25 | 22 |
| Colo. | 11 | 9 | 1 | 1 | — | — | 139 | 149 | 1,076 | 1,220 |
| N. Mex. | — | 5 | 2 | 1 | — | — | 14 | 25 | 260 | 394 |
| Ariz. | 10 | 6 | N | N | N | N | 59 | 71 | 1,690 | 1,566 |
| Utah | 7 | 6 | — | — | — | — | 115 | 87 | 259 | 174 |
| Nev. | 8 | 4 | — | 1 | 1 | — | 28 | 23 | 866 | 913 |
| PACIFIC | 46 | 60 | — | 1 | — | — | 989 | 961 | 13,372 | 13,199 |
| Wash. | 9 | 17 | — | — | — | — | 61 | 91 | 1,295 | 982 |
| Oreg. | 4 | 8 | — | 1 | — | — | 84 | 148 | 618 | 369 |
| Calif. | 27 | 31 | — | — | — | — | 793 | 664 | 10,954 | 11,049 |
| Alaska | 3 | 1 | — | — | — | — | 28 | 26 | 188 | 262 |
| Hawaii | 3 | 3 | — | — | — | — | 23 | 32 | 317 | 537 |
| Guam | N | N | — | — | — | — | — | — | — | 70 |
| P.R. | — | — | — | — | — | — | 10 | 22 | 153 | 101 |
| V.I. | — | — | — | — | — | — | — | — | 2 | 53 |
| 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 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | *Haemophilus influenzae*, invasive | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | All ages | | Age <5 years | | | | | |
| | All serotypes | | Serotype b | | Non-serotype b | | Unknown serotype | |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 906 | 892 | 2 | 6 | 49 | 46 | 87 | 94 |
| NEW ENGLAND | 65 | 86 | — | 1 | 5 | 6 | 4 | 1 |
| Maine | 3 | 7 | — | — | — | — | 1 | — |
| N.H. | 3 | 12 | — | — | — | 2 | — | — |
| Vt. | 6 | 5 | — | — | — | — | 2 | 1 |
| Mass. | 24 | 43 | — | 1 | — | 2 | 1 | — |
| R.I. | 6 | 2 | — | — | 2 | — | — | — |
| Conn. | 23 | 17 | — | — | 3 | 2 | — | — |
| MID. ATLANTIC | 178 | 185 | — | 1 | — | 3 | 21 | 24 |
| Upstate N.Y. | 48 | 63 | — | 1 | — | 3 | 5 | 3 |
| N.Y. City | 27 | 38 | — | — | — | — | 6 | 8 |
| N.J. | 37 | 34 | — | — | — | — | 5 | 2 |
| Pa. | 66 | 50 | — | — | — | — | 5 | 11 |
| E.N. CENTRAL | 122 | 160 | — | — | 1 | 7 | 6 | 24 |
| Ohio | 61 | 57 | — | — | — | 2 | 5 | 10 |
| Ind. | 35 | 22 | — | — | 1 | 4 | 1 | 1 |
| Ill. | 9 | 47 | — | — | — | — | — | 10 |
| Mich. | 10 | 9 | — | — | — | 1 | — | 3 |
| Wis. | 7 | 25 | — | — | — | — | — | — |
| W.N. CENTRAL | 45 | 43 | — | 1 | 2 | 2 | 6 | 5 |
| Minn. | 18 | 14 | — | — | 2 | 2 | — | — |
| Iowa | — | 1 | — | 1 | — | — | — | — |
| Mo. | 20 | 18 | — | — | — | — | 4 | 4 |
| N. Dak. | 1 | 3 | — | — | — | — | 1 | — |
| S. Dak. | — | — | — | — | — | — | — | — |
| Nebr. | 3 | 2 | — | — | — | — | 1 | — |
| Kans. | 3 | 5 | — | — | — | — | — | 1 |
| S. ATLANTIC | 235 | 205 | — | — | 13 | 10 | 14 | 16 |
| Del. | — | — | — | — | — | — | — | — |
| Md. | 34 | 38 | — | — | 4 | 2 | — | — |
| D.C. | — | 1 | — | — | — | — | — | 1 |
| Va. | 18 | 17 | — | — | — | — | — | 1 |
| W. Va. | 14 | 10 | — | — | 1 | 3 | 2 | — |
| N.C. | 37 | 24 | — | — | 5 | 3 | — | — |
| S.C. | 10 | 5 | — | — | — | — | 1 | — |
| Ga. | 60 | 59 | — | — | — | — | 6 | 14 |
| Fla. | 62 | 51 | — | — | 3 | 2 | 5 | — |
| E.S. CENTRAL | 46 | 29 | — | — | 1 | — | 10 | 6 |
| Ky. | 4 | — | — | — | 1 | — | 1 | — |
| Tenn. | 32 | 20 | — | — | — | — | 6 | 4 |
| Ala. | 10 | 9 | — | — | — | — | 3 | 2 |
| Miss. | — | — | — | — | — | — | — | — |
| W.S. CENTRAL | 55 | 37 | 1 | 1 | 4 | 4 | 6 | 1 |
| Ark. | — | 1 | — | — | — | — | — | — |
| La. | 26 | 9 | 1 | — | 2 | — | 6 | 1 |
| Okla. | 29 | 26 | — | — | 2 | 4 | — | — |
| Tex. | — | 1 | — | 1 | — | — | — | — |
| MOUNTAIN | 121 | 105 | — | 2 | 14 | 10 | 17 | 12 |
| Mont. | — | — | — | — | — | — | — | — |
| Idaho | 3 | 4 | — | — | — | — | 1 | 2 |
| Wyo. | 1 | — | — | — | — | — | — | — |
| Colo. | 26 | 25 | — | — | — | — | 3 | 3 |
| N. Mex. | 13 | 23 | — | — | 4 | 3 | 1 | 4 |
| Ariz. | 55 | 43 | — | — | 8 | 6 | 4 | 1 |
| Utah | 10 | 8 | — | 2 | — | 1 | 6 | 1 |
| Nev. | 13 | 2 | — | — | 2 | — | 2 | 1 |
| PACIFIC | 39 | 42 | 1 | — | 9 | 4 | 3 | 5 |
| Wash. | — | 1 | — | — | — | — | — | 1 |
| Oreg. | 17 | 22 | — | — | — | — | 3 | 2 |
| Calif. | 16 | 12 | 1 | — | 9 | 4 | — | 1 |
| Alaska | 1 | 3 | — | — | — | — | — | 1 |
| Hawaii | 5 | 4 | — | — | — | — | — | — |
| Guam | — | — | — | — | — | — | — | — |
| P.R. | — | — | — | — | — | — | — | — |
| V.I. | — | — | — | — | — | — | — | — |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | — | 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 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Hepatitis (viral, acute), by type | | | | | |
|---|---|---|---|---|---|---|
| | A | | B | | C | |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 1,412 | 2,329 | 2,112 | 2,175 | 235 | 281 |
| NEW ENGLAND | 189 | 319 | 114 | 141 | 6 | 4 |
| Maine | — | 7 | 4 | 1 | — | — |
| N.H. | 20 | 8 | 5 | 20 | — | — |
| Vt. | 1 | 5 | 1 | 2 | 6 | 1 |
| Mass. | 143 | 265 | 89 | 66 | — | 3 |
| R.I. | 5 | 6 | — | 1 | — | — |
| Conn. | 20 | 28 | 15 | 51 | — | — |
| MID. ATLANTIC | 222 | 279 | 481 | 298 | 41 | 46 |
| Upstate N.Y. | 34 | 33 | 44 | 33 | 9 | 2 |
| N.Y. City | 106 | 105 | 39 | 65 | — | — |
| N.J. | 38 | 60 | 317 | 77 | — | — |
| Pa. | 44 | 81 | 81 | 123 | 32 | 44 |
| E.N. CENTRAL | 141 | 180 | 146 | 193 | 45 | 28 |
| Ohio | 24 | 22 | 57 | 57 | 2 | 2 |
| Ind. | 20 | 18 | 10 | 9 | 7 | 2 |
| Ill. | 27 | 58 | 14 | — | — | 6 |
| Mich. | 56 | 62 | 65 | 106 | 36 | 18 |
| Wis. | 14 | 20 | — | 21 | — | — |
| W.N. CENTRAL | 48 | 56 | 105 | 136 | 14 | 1 |
| Minn. | 3 | 10 | 8 | 12 | — | 1 |
| Iowa | 9 | 17 | 9 | 7 | — | — |
| Mo. | 27 | 9 | 63 | 96 | 13 | — |
| N. Dak. | — | 1 | — | 1 | 1 | — |
| S. Dak. | — | 2 | — | — | — | — |
| Nebr. | 2 | 10 | 13 | 11 | — | — |
| Kans. | 7 | 7 | 12 | 9 | — | — |
| S. ATLANTIC | 209 | 388 | 616 | 686 | 51 | 70 |
| Del. | — | 4 | 26 | 17 | — | 2 |
| Md. | 20 | 57 | 76 | 60 | 12 | 1 |
| D.C. | 2 | 3 | — | 12 | — | 1 |
| Va. | 28 | 27 | 74 | 72 | 6 | 7 |
| W. Va. | 2 | 1 | 14 | 2 | 5 | 8 |
| N.C. | 29 | 25 | 57 | 57 | 7 | 6 |
| S.C. | 8 | 20 | 41 | 47 | 1 | 6 |
| Ga. | 41 | 157 | 113 | 212 | 3 | 7 |
| Fla. | 79 | 94 | 215 | 207 | 17 | 32 |
| E.S. CENTRAL | 85 | 65 | 125 | 187 | 27 | 27 |
| Ky. | 4 | 9 | 29 | 21 | 1 | 13 |
| Tenn. | 60 | 45 | 56 | 87 | 7 | 6 |
| Ala. | 9 | 6 | 23 | 29 | 7 | 1 |
| Miss. | 12 | 5 | 17 | 50 | 12 | 7 |
| W.S. CENTRAL | 87 | 443 | 101 | 102 | 25 | 65 |
| Ark. | 2 | 46 | 17 | 50 | — | — |
| La. | 28 | 11 | 20 | 23 | 6 | 3 |
| Okla. | 3 | 16 | 7 | 23 | — | 2 |
| Tex. | 54 | 370 | 57 | 6 | 19 | 60 |
| MOUNTAIN | 144 | 169 | 202 | 159 | 9 | 17 |
| Mont. | 6 | 3 | 2 | — | — | 2 |
| Idaho | 12 | 10 | 5 | 6 | — | 1 |
| Wyo. | — | — | — | 3 | — | — |
| Colo. | 15 | 14 | 12 | 21 | — | 4 |
| N. Mex. | 7 | 6 | 5 | 9 | — | 5 |
| Ariz. | 86 | 117 | 146 | 78 | — | 2 |
| Utah | 12 | 17 | 20 | 17 | 6 | 1 |
| Nev. | 6 | 2 | 12 | 25 | 3 | 2 |
| PACIFIC | 287 | 430 | 222 | 273 | 17 | 23 |
| Wash. | 16 | 26 | 17 | 22 | 3 | 6 |
| Oreg. | 17 | 33 | 39 | 40 | 8 | 7 |
| Calif. | 242 | 359 | 161 | 200 | 6 | 10 |
| Alaska | 3 | 2 | 4 | 8 | — | — |
| Hawaii | 9 | 10 | 1 | 3 | — | — |
| Guam | — | 1 | — | 4 | — | — |
| P.R. | 2 | 11 | 3 | 21 | — | — |
| V.I. | — | — | — | — | — | — |
| Amer. Samoa | U | U | U | U | U | U |
| C.N.M.I. | — | 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 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Legionellosis | | Listeriosis | | Lyme disease | | Malaria | |
|---|---|---|---|---|---|---|---|---|
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 388 | 462 | 168 | 192 | 1,910 | 3,043 | 348 | 450 |
| NEW ENGLAND | 19 | 9 | 6 | 11 | 108 | 401 | 15 | 31 |
| Maine | 1 | — | — | 2 | 2 | 20 | — | 2 |
| N.H. | 3 | — | 1 | 1 | 18 | 14 | 3 | — |
| Vt. | — | — | — | — | 2 | 11 | — | 1 |
| Mass. | 11 | 4 | 2 | 3 | 69 | 234 | 10 | 19 |
| R.I. | 1 | 1 | 1 | 1 | 3 | 32 | 2 | 2 |
| Conn. | 3 | 4 | 2 | 4 | 14 | 90 | — | 7 |
| MID. ATLANTIC | 109 | 84 | 31 | 44 | 1,315 | 2,100 | 94 | 111 |
| Upstate N.Y. | 30 | 18 | 8 | 12 | 217 | 758 | 19 | 13 |
| N.Y. City | 12 | 10 | 7 | 6 | — | 68 | 40 | 55 |
| N.J. | 22 | 13 | 7 | 15 | 597 | 476 | 24 | 23 |
| Pa. | 45 | 43 | 9 | 11 | 501 | 798 | 11 | 20 |
| E.N. CENTRAL | 83 | 93 | 19 | 27 | 33 | 129 | 19 | 31 |
| Ohio | 42 | 39 | 7 | 9 | 21 | 15 | 3 | 8 |
| Ind. | 5 | 9 | 1 | 5 | 2 | 1 | — | 4 |
| Ill. | 9 | 15 | — | 5 | — | 19 | 5 | 9 |
| Mich. | 23 | 25 | 6 | 6 | 2 | — | 8 | 6 |
| Wis. | 4 | 5 | 5 | 2 | 8 | 94 | 3 | 4 |
| W.N. CENTRAL | 11 | 10 | 11 | 3 | 68 | 38 | 16 | 24 |
| Minn. | 1 | — | 2 | 1 | 54 | 12 | 6 | 9 |
| Iowa | — | 3 | 4 | 1 | 8 | 10 | 2 | 1 |
| Mo. | 8 | 4 | 2 | 1 | 5 | 13 | 7 | 5 |
| N. Dak. | 1 | 1 | 2 | — | — | — | — | 2 |
| S. Dak. | — | 1 | — | — | — | — | — | 1 |
| Nebr. | — | — | — | — | — | 3 | — | 1 |
| Kans. | 1 | 1 | 1 | — | 1 | — | 1 | 5 |
| S. ATLANTIC | 83 | 99 | 40 | 26 | 328 | 307 | 84 | 113 |
| Del. | 1 | 2 | N | N | 77 | 44 | — | 2 |
| Md. | 19 | 14 | 5 | 5 | 171 | 189 | 26 | 26 |
| D.C. | 1 | 3 | — | — | 3 | 2 | 2 | 5 |
| Va. | 5 | 7 | 1 | 3 | 28 | 11 | 8 | 10 |
| W. Va. | 4 | 2 | — | 1 | 3 | 2 | 1 | — |
| N.C. | 9 | 8 | 9 | 4 | 18 | 34 | 13 | 5 |
| S.C. | 2 | 2 | 1 | — | 7 | 3 | 3 | 6 |
| Ga. | 6 | 14 | 8 | 6 | — | 6 | 14 | 20 |
| Fla. | 36 | 47 | 16 | 7 | 21 | 16 | 17 | 39 |
| E.S. CENTRAL | 10 | 20 | 9 | 9 | 11 | 12 | 11 | 13 |
| Ky. | 2 | 4 | 1 | 2 | — | 5 | 2 | 1 |
| Tenn. | 3 | 9 | 4 | 5 | 11 | 5 | 6 | 3 |
| Ala. | 5 | 6 | 3 | 1 | — | 2 | 3 | 7 |
| Miss. | — | 1 | 1 | 1 | — | — | — | 2 |
| W.S. CENTRAL | 11 | 98 | 5 | 32 | 15 | 26 | 22 | 57 |
| Ark. | 1 | — | — | 1 | 2 | — | 1 | 2 |
| La. | 4 | 5 | 3 | 1 | 3 | 1 | — | 3 |
| Okla. | 1 | 2 | — | — | — | — | 2 | 1 |
| Tex. | 5 | 91 | 2 | 30 | 10 | 25 | 19 | 51 |
| MOUNTAIN | 37 | 25 | 1 | 3 | 2 | 5 | 15 | 15 |
| Mont. | 2 | — | — | — | — | — | — | — |
| Idaho | 1 | 1 | — | 1 | — | 2 | — | 1 |
| Wyo. | 2 | 4 | — | — | — | 2 | 1 | — |
| Colo. | 7 | 4 | 1 | 1 | — | — | 8 | 6 |
| N. Mex. | 1 | — | — | — | — | — | — | 1 |
| Ariz. | 12 | 5 | — | — | — | 1 | 2 | 2 |
| Utah | 5 | 8 | — | — | 2 | — | 4 | 3 |
| Nev. | 7 | 3 | — | 1 | — | — | — | 2 |
| PACIFIC | 25 | 24 | 46 | 37 | 30 | 25 | 72 | 55 |
| Wash. | — | 4 | 2 | 5 | — | 2 | 3 | 1 |
| Oreg. | N | N | 3 | 4 | 2 | 13 | 1 | 8 |
| Calif. | 25 | 20 | 41 | 28 | 27 | 10 | 62 | 44 |
| Alaska | — | — | — | — | 1 | — | 2 | — |
| Hawaii | — | — | — | — | N | N | 4 | 2 |
| Guam | — | — | — | — | — | — | — | — |
| P.R. | — | 1 | — | — | N | N | — | — |
| V.I. | — | — | — | — | — | — | — | — |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | — | 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 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Meningococcal disease | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | All serogroups | | Serogroup A, C, Y, and W-135 | | Serogroup B | | Other serogroup | | Serogroup unknown | |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 518 | 617 | 42 | 39 | 26 | 24 | 1 | — | 449 | 554 |
| NEW ENGLAND | 36 | 29 | 1 | 4 | — | 2 | — | — | 35 | 23 |
| Maine | 1 | 8 | — | — | — | 1 | — | — | 1 | 7 |
| N.H. | 3 | 3 | — | — | — | — | — | — | 3 | 3 |
| Vt. | 3 | 1 | — | — | — | — | — | — | 3 | 1 |
| Mass. | 18 | 17 | — | 4 | — | 1 | — | — | 18 | 12 |
| R.I. | 2 | — | — | — | — | — | — | — | 2 | — |
| Conn. | 9 | — | 1 | — | — | — | — | — | 8 | — |
| MID. ATLANTIC | 74 | 86 | 21 | 23 | 4 | 5 | — | — | 49 | 58 |
| Upstate N.Y. | 19 | 25 | 2 | 4 | 3 | 3 | — | — | 14 | 18 |
| N.Y. City | 10 | 15 | — | — | — | — | — | — | 10 | 15 |
| N.J. | 20 | 17 | — | — | — | — | — | — | 20 | 17 |
| Pa. | 25 | 29 | 19 | 19 | 1 | 2 | — | — | 5 | 8 |
| E.N. CENTRAL | 51 | 57 | 13 | 8 | 4 | 4 | — | — | 34 | 45 |
| Ohio | 23 | 34 | — | 3 | 4 | 4 | — | — | 19 | 27 |
| Ind. | 8 | 8 | — | — | — | — | — | — | 8 | 8 |
| Ill. | 2 | 1 | — | — | — | — | — | — | 2 | 1 |
| Mich. | 13 | 5 | 13 | 5 | — | — | — | — | — | — |
| Wis. | 5 | 9 | — | — | — | — | — | — | 5 | 9 |
| W.N. CENTRAL | 31 | 37 | 2 | — | 1 | 3 | — | — | 28 | 34 |
| Minn. | 6 | 9 | 1 | — | — | — | — | — | 5 | 9 |
| Iowa | 9 | 8 | — | — | 1 | 2 | — | — | 8 | 6 |
| Mo. | 9 | 11 | 1 | — | — | 1 | — | — | 8 | 10 |
| N. Dak. | — | 1 | — | — | — | — | — | — | — | 1 |
| S. Dak. | 1 | 1 | — | — | — | — | — | — | 1 | 1 |
| Nebr. | 2 | 3 | — | — | — | — | — | — | 2 | 3 |
| Kans. | 4 | 4 | — | — | — | — | — | — | 4 | 4 |
| S. ATLANTIC | 92 | 121 | 2 | 2 | 4 | 2 | — | — | 86 | 117 |
| Del. | — | 1 | — | — | — | — | — | — | — | 1 |
| Md. | 8 | 6 | 1 | — | 2 | — | — | — | 5 | 6 |
| D.C. | — | 5 | — | 2 | — | — | — | — | — | 3 |
| Va. | 11 | 7 | — | — | — | — | — | — | 11 | 7 |
| W. Va. | 4 | 4 | — | — | — | — | — | — | 4 | 4 |
| N.C. | 11 | 18 | 1 | — | 2 | 2 | — | — | 8 | 16 |
| S.C. | 11 | 12 | — | — | — | — | — | — | 11 | 12 |
| Ga. | 8 | 7 | — | — | — | — | — | — | 8 | 7 |
| Fla. | 39 | 61 | — | — | — | — | — | — | 39 | 61 |
| E.S. CENTRAL | 27 | 29 | — | — | 2 | — | — | — | 25 | 29 |
| Ky. | 8 | 3 | — | — | 2 | — | — | — | 6 | 3 |
| Tenn. | 13 | 10 | — | — | — | — | — | — | 13 | 10 |
| Ala. | 2 | 6 | — | — | — | — | — | — | 2 | 6 |
| Miss. | 4 | 10 | — | — | — | — | — | — | 4 | 10 |
| W.S. CENTRAL | 41 | 56 | 1 | 1 | 3 | 1 | — | — | 37 | 54 |
| Ark. | 8 | 10 | — | — | — | — | — | — | 8 | 10 |
| La. | 19 | 20 | — | 1 | 2 | — | — | — | 17 | 19 |
| Okla. | 6 | 3 | 1 | — | 1 | 1 | — | — | 4 | 2 |
| Tex. | 8 | 23 | — | — | — | — | — | — | 8 | 23 |
| MOUNTAIN | 41 | 30 | 1 | — | 3 | 3 | 1 | — | 36 | 27 |
| Mont. | — | 1 | — | — | — | — | — | — | — | 1 |
| Idaho | 1 | 4 | — | — | — | — | — | — | 1 | 4 |
| Wyo. | — | 3 | — | — | — | — | — | — | — | 3 |
| Colo. | 10 | 9 | 1 | — | — | — | 1 | — | 8 | 9 |
| N. Mex. | 1 | 4 | — | — | — | 2 | — | — | 1 | 2 |
| Ariz. | 21 | 5 | — | — | 2 | — | — | — | 19 | 5 |
| Utah | 5 | 2 | — | — | 1 | — | — | — | 4 | 2 |
| Nev. | 3 | 2 | — | — | — | 1 | — | — | 3 | 1 |
| PACIFIC | 125 | 172 | 1 | 1 | 5 | 4 | — | — | 119 | 167 |
| Wash. | 20 | 15 | 1 | 1 | 4 | 4 | — | — | 15 | 10 |
| Oreg. | 23 | 35 | — | — | — | — | — | — | 23 | 35 |
| Calif. | 75 | 115 | — | — | — | — | — | — | 75 | 115 |
| Alaska | 1 | 2 | — | — | — | — | — | — | 1 | 2 |
| Hawaii | 6 | 5 | — | — | 1 | — | — | — | 5 | 5 |
| Guam | — | — | — | — | — | — | — | — | — | — |
| P.R. | 3 | 5 | — | — | — | — | — | — | 3 | 5 |
| V.I. | — | — | — | — | — | — | — | — | — | — |
| Amer. Samoa | — | — | — | — | — | — | — | — | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — |

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Pertussis | | Rabies, animal | | Rocky Mountain spotted fever | | Salmonellosis | | Shigellosis | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 5,935 | 3,772 | 1,887 | 2,614 | 219 | 212 | 8,927 | 10,479 | 3,520 | 4,978 |
| NEW ENGLAND | 304 | 572 | 287 | 183 | 1 | 5 | 539 | 481 | 68 | 86 |
| Maine | 12 | 3 | 19 | 19 | N | N | 26 | 29 | 2 | 1 |
| N.H. | 13 | 21 | 4 | 6 | — | — | 39 | 30 | 4 | 3 |
| Vt. | 46 | 38 | 22 | 6 | — | — | 33 | 18 | 4 | 2 |
| Mass. | 211 | 484 | 174 | 79 | — | 5 | 289 | 266 | 38 | 55 |
| R.I. | 8 | 9 | 6 | 10 | 1 | — | 19 | 31 | 2 | 4 |
| Conn. | 14 | 17 | 62 | 63 | — | — | 133 | 107 | 18 | 21 |
| MID. ATLANTIC | 583 | 862 | 204 | 271 | 15 | 25 | 1,142 | 1,333 | 395 | 464 |
| Upstate N.Y. | 199 | 620 | 152 | 130 | — | 1 | 292 | 310 | 98 | 194 |
| N.Y. City | 28 | 63 | 9 | 5 | 1 | 8 | 292 | 388 | 163 | 139 |
| N.J. | 98 | 58 | N | N | 5 | 6 | 190 | 234 | 105 | 83 |
| Pa. | 258 | 121 | 43 | 136 | 9 | 10 | 368 | 401 | 29 | 48 |
| E.N. CENTRAL | 1,436 | 804 | 38 | 14 | 4 | 10 | 950 | 1,420 | 228 | 324 |
| Ohio | 627 | 163 | 21 | 5 | 3 | 4 | 291 | 336 | 23 | 66 |
| Ind. | 132 | 22 | 3 | 2 | — | 1 | 112 | 151 | 33 | 53 |
| Ill. | 83 | 152 | 8 | 4 | — | 4 | 108 | 431 | 24 | 131 |
| Mich. | 98 | 39 | 6 | 2 | 1 | 1 | 231 | 255 | 96 | 33 |
| Wis. | 496 | 428 | — | 1 | — | — | 208 | 247 | 52 | 41 |
| W.N. CENTRAL | 805 | 213 | 127 | 213 | 24 | 10 | 647 | 664 | 262 | 135 |
| Minn. | 140 | 41 | 28 | 17 | — | — | 163 | 163 | 23 | 17 |
| Iowa | 277 | 32 | 26 | 21 | — | — | 101 | 132 | 38 | 29 |
| Mo. | 165 | 112 | 19 | 6 | 22 | 9 | 195 | 181 | 157 | 49 |
| N. Dak. | 48 | 6 | 6 | 23 | — | — | 11 | 13 | 2 | 1 |
| S. Dak. | 1 | 8 | 12 | 43 | — | — | 45 | 23 | 8 | 6 |
| Nebr. | 72 | 4 | — | 58 | 1 | 1 | 48 | 49 | 20 | 7 |
| Kans. | 102 | 10 | 36 | 45 | 1 | — | 84 | 103 | 14 | 26 |
| S. ATLANTIC | 450 | 197 | 631 | 959 | 130 | 115 | 2,500 | 2,132 | 617 | 1,127 |
| Del. | 12 | — | — | 9 | 1 | 2 | 13 | 19 | 4 | 3 |
| Md. | 73 | 44 | 109 | 112 | 10 | 5 | 196 | 185 | 27 | 44 |
| D.C. | 3 | 5 | — | — | — | — | 14 | 15 | 6 | 21 |
| Va. | 74 | 48 | 224 | 176 | 4 | — | 255 | 238 | 33 | 34 |
| W. Va. | 22 | 3 | 13 | 28 | 1 | — | 33 | 46 | — | — |
| N.C. | 27 | 33 | 189 | 250 | 87 | 78 | 410 | 247 | 63 | 129 |
| S.C. | 161 | 30 | 5 | 58 | 6 | 10 | 161 | 136 | 35 | 205 |
| Ga. | 15 | 9 | 86 | 121 | 13 | 17 | 407 | 366 | 175 | 253 |
| Fla. | 63 | 25 | 5 | 205 | 8 | 3 | 1,011 | 880 | 274 | 438 |
| E.S. CENTRAL | 161 | 47 | 50 | 54 | 14 | 26 | 469 | 574 | 493 | 221 |
| Ky. | 49 | 7 | 6 | 11 | — | — | 90 | 98 | 43 | 31 |
| Tenn. | 65 | 26 | 15 | 17 | 11 | 15 | 173 | 174 | 302 | 87 |
| Ala. | 34 | 7 | 29 | 21 | 3 | 5 | 147 | 168 | 115 | 78 |
| Miss. | 13 | 7 | — | 5 | — | 6 | 59 | 134 | 33 | 25 |
| W.S. CENTRAL | 149 | 139 | 438 | 812 | 8 | 16 | 591 | 1,481 | 665 | 1,816 |
| Ark. | 74 | 12 | 13 | 23 | 2 | — | 122 | 102 | 20 | 18 |
| La. | 13 | 7 | — | — | 1 | 3 | 175 | 174 | 41 | 123 |
| Okla. | — | 13 | 41 | 54 | 5 | 13 | 90 | 93 | 281 | 166 |
| Tex. | 62 | 107 | 384 | 735 | — | — | 204 | 1,112 | 323 | 1,509 |
| MOUNTAIN | 1,447 | 405 | 70 | 43 | 19 | 2 | 605 | 706 | 212 | 272 |
| Mont. | 307 | 11 | — | 5 | 1 | — | 32 | 51 | 2 | 3 |
| Idaho | 46 | 17 | — | — | — | 1 | 30 | 55 | — | 5 |
| Wyo. | 13 | 3 | 9 | — | 1 | — | 12 | 20 | — | 1 |
| Colo. | 595 | 215 | 3 | 4 | 1 | 1 | 155 | 162 | 34 | 48 |
| N. Mex. | 52 | 59 | — | — | — | — | 48 | 73 | 28 | 50 |
| Ariz. | 261 | 71 | 58 | 34 | 13 | — | 201 | 229 | 107 | 132 |
| Utah | 155 | 28 | — | — | 3 | — | 72 | 76 | 16 | 15 |
| Nev. | 18 | 1 | — | — | — | — | 55 | 40 | 25 | 18 |
| PACIFIC | 600 | 533 | 42 | 65 | 4 | 3 | 1,484 | 1,688 | 580 | 533 |
| Wash. | 135 | 160 | — | — | — | — | 106 | 118 | 22 | 28 |
| Oreg. | 245 | 181 | — | — | — | 2 | 97 | 139 | 23 | 26 |
| Calif. | 160 | 175 | 41 | 54 | 4 | 1 | 1,162 | 1,280 | 519 | 459 |
| Alaska | 15 | 9 | 1 | 11 | — | — | 17 | 28 | 5 | 4 |
| Hawaii | 45 | 8 | — | — | — | — | 102 | 123 | 11 | 16 |
| Guam | — | — | — | — | — | — | — | 15 | — | 16 |
| P.R. | — | 1 | 28 | 18 | N | N | 29 | 75 | — | 1 |
| 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. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Streptococcal disease, invasive, group A | | *Streptococcus pneumoniae*, invasive disease | | | | Syphilis | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Drug resistant, all ages | | Age <5 years | | Primary & secondary | | Congenital | |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 |
| UNITED STATES | 1,951 | 2,323 | 1,135 | 1,181 | 352 | 392 | 2,558 | 2,863 | 97 | 150 |
| NEW ENGLAND | 70 | 165 | 11 | 57 | 32 | 57 | 73 | 68 | — | — |
| Maine | 2 | 3 | N | N | — | 1 | 1 | — | — | — |
| N.H. | 5 | 11 | — | — | 2 | N | 5 | 1 | — | — |
| Vt. | 7 | 5 | 5 | 5 | 3 | 1 | — | — | — | — |
| Mass. | 50 | 77 | — | 9 | 27 | 36 | 56 | 43 | — | — |
| R.I. | 6 | 16 | 6 | 7 | — | 3 | 2 | 6 | — | — |
| Conn. | — | 53 | U | 36 | U | 16 | 9 | 18 | — | — |
| MID. ATLANTIC | 433 | 381 | 121 | 87 | 58 | 53 | 330 | 385 | 15 | 21 |
| Upstate N.Y. | 155 | 114 | 46 | 39 | 36 | 34 | 27 | 31 | 11 | 1 |
| N.Y. City | 63 | 65 | U | U | U | U | 215 | 225 | 3 | 9 |
| N.J. | 85 | 82 | N | N | 11 | 4 | 44 | 74 | 1 | 10 |
| Pa. | 130 | 120 | 75 | 48 | 11 | 15 | 44 | 55 | — | 1 |
| E.N. CENTRAL | 391 | 518 | 286 | 264 | 94 | 93 | 216 | 342 | 15 | 22 |
| Ohio | 99 | 130 | 186 | 196 | 44 | 45 | 76 | 97 | 2 | 1 |
| Ind. | 42 | 48 | 98 | 68 | 22 | 18 | 28 | 21 | 1 | 1 |
| Ill. | 82 | 155 | 2 | — | 24 | — | 72 | 130 | 3 | 2 |
| Mich. | 160 | 147 | — | N | — | N | 32 | 78 | 7 | 18 |
| Wis. | 8 | 38 | N | N | 4 | 30 | 8 | 16 | 2 | — |
| W.N. CENTRAL | 137 | 163 | 28 | 10 | 43 | 32 | 68 | 77 | — | 2 |
| Minn. | 52 | 72 | — | — | 24 | 18 | 12 | 12 | — | 1 |
| Iowa | N | N | N | N | — | N | 1 | 4 | — | — |
| Mo. | 43 | 40 | 26 | 9 | 4 | 8 | 46 | 44 | — | 1 |
| N. Dak. | 2 | 6 | — | — | 1 | — | — | — | — | — |
| S. Dak. | 9 | 8 | 2 | 1 | — | — | — | — | — | — |
| Nebr. | 9 | 11 | — | — | 4 | 4 | 2 | 5 | — | — |
| Kans. | 22 | 26 | N | N | 10 | 2 | 7 | 12 | — | — |
| S. ATLANTIC | 398 | 434 | 488 | 576 | 43 | 26 | 674 | 706 | 20 | 24 |
| Del. | — | 2 | 1 | 3 | — | N | 6 | 2 | — | — |
| Md. | 110 | 66 | — | — | 29 | 18 | 119 | 134 | 7 | 3 |
| D.C. | 5 | 4 | 13 | 5 | 2 | 4 | 46 | 20 | — | 1 |
| Va. | 27 | 37 | N | N | — | N | 35 | 25 | 3 | 1 |
| W. Va. | 7 | 13 | 49 | 65 | 12 | 4 | 2 | 3 | — | — |
| N.C. | 63 | 56 | N | N | U | U | 89 | 57 | 3 | 1 |
| S.C. | 11 | 43 | — | 58 | — | N | 26 | 52 | — | 7 |
| Ga. | 75 | 114 | 155 | 147 | — | N | 74 | 129 | — | 1 |
| Fla. | 100 | 99 | 270 | 298 | — | N | 277 | 284 | 7 | 10 |
| E.S. CENTRAL | 79 | 114 | 87 | 73 | 3 | 9 | 139 | 145 | 11 | 7 |
| Ky. | 19 | 35 | 14 | 18 | N | N | 12 | 22 | — | — |
| Tenn. | 60 | 79 | 73 | 53 | — | N | 60 | 54 | 8 | 1 |
| Ala. | — | — | — | — | — | N | 56 | 54 | 3 | 4 |
| Miss. | — | — | — | 2 | 3 | 9 | 11 | 15 | — | 2 |
| W.S. CENTRAL | 84 | 266 | 75 | 36 | 51 | 97 | 468 | 427 | 20 | 30 |
| Ark. | 7 | 5 | 8 | 5 | 10 | 5 | 22 | 13 | — | 3 |
| La. | 5 | 1 | 67 | 31 | 16 | 19 | 92 | 93 | 2 | 2 |
| Okla. | 61 | 32 | N | N | 16 | 23 | 16 | 12 | 1 | 2 |
| Tex. | 11 | 228 | N | N | 9 | 50 | 338 | 309 | 17 | 23 |
| MOUNTAIN | 319 | 246 | 39 | 17 | 28 | 25 | 136 | 147 | 12 | 11 |
| Mont. | — | — | — | — | — | — | 5 | — | — | — |
| Idaho | 1 | 4 | N | N | — | N | 9 | 10 | — | 2 |
| Wyo. | 2 | 5 | 16 | 4 | — | — | — | 1 | — | — |
| Colo. | 124 | 48 | N | N | 27 | 25 | 15 | 27 | — | — |
| N. Mex. | 23 | 52 | — | 5 | — | — | 18 | 39 | 1 | 2 |
| Ariz. | 127 | 116 | N | N | — | N | 56 | 61 | 11 | 7 |
| Utah | 41 | 21 | 22 | 6 | 1 | — | 4 | 2 | — | — |
| Nev. | 1 | — | 1 | 2 | — | — | 29 | 7 | — | — |
| PACIFIC | 40 | 36 | — | 61 | — | — | 454 | 566 | 4 | 33 |
| Wash. | N | N | N | N | N | N | 56 | 31 | — | — |
| Oreg. | N | N | N | N | — | N | 12 | 14 | — | — |
| Calif. | — | — | N | N | N | N | 380 | 518 | 4 | 33 |
| Alaska | — | — | — | — | — | N | 4 | — | — | — |
| Hawaii | 40 | 36 | — | 61 | — | — | 2 | 3 | — | — |
| Guam | — | — | — | — | — | — | — | — | — | — |
| P.R. | N | N | N | N | — | N | 55 | 50 | 6 | 3 |
| V.I. | — | — | — | — | — | — | — | 4 | — | — |
| 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 2004 and 2005 are provisional and cumulative (year-to-date).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 21, 2005, and May 22, 2004 (20th Week)***

| Reporting area | Tuberculosis | | Typhoid fever | | Varicella (chickenpox) | | West Nile virus disease† | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Neuroinvasive | | Non-neuroinvasive§ |
| | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 | Cum. 2004 | Cum. 2005 |
| UNITED STATES | 3,343 | 4,618 | 68 | 96 | 9,332 | 10,689 | — | 14 | — |
| NEW ENGLAND | 102 | 140 | 6 | 10 | 355 | 1,232 | — | — | — |
| Maine | 7 | 8 | — | — | 101 | 43 | — | — | — |
| N.H. | 4 | 6 | — | — | 52 | — | — | — | — |
| Vt. | — | — | — | — | 24 | 315 | — | — | — |
| Mass. | 68 | 78 | 5 | 9 | 178 | 15 | — | — | — |
| R.I. | 6 | 15 | — | 1 | — | — | — | — | — |
| Conn. | 17 | 33 | 1 | — | — | 859 | — | — | — |
| MID. ATLANTIC | 741 | 695 | 18 | 27 | 2,157 | 29 | — | 1 | — |
| Upstate N.Y. | 85 | 81 | 3 | 2 | — | — | — | — | — |
| N.Y. City | 384 | 353 | 3 | 9 | — | — | — | — | — |
| N.J. | 165 | 148 | 5 | 11 | — | — | — | — | — |
| Pa. | 107 | 113 | 7 | 5 | 2,157 | 29 | — | 1 | — |
| E.N. CENTRAL | 486 | 394 | 3 | 11 | 3,114 | 3,342 | — | — | — |
| Ohio | 93 | 64 | — | 2 | 733 | 862 | — | — | — |
| Ind. | 48 | 50 | — | — | 119 | N | — | — | — |
| Ill. | 242 | 183 | 1 | 5 | 17 | 1 | — | — | — |
| Mich. | 71 | 70 | 1 | 3 | 2,024 | 2,127 | — | — | — |
| Wis. | 32 | 27 | 1 | 1 | 221 | 352 | — | — | — |
| W.N. CENTRAL | 172 | 150 | 1 | 2 | 72 | 120 | — | 1 | — |
| Minn. | 69 | 60 | 1 | 1 | — | — | — | — | — |
| Iowa | 17 | 15 | — | — | N | N | — | — | — |
| Mo. | 43 | 41 | — | 1 | 3 | 2 | — | — | — |
| N. Dak. | 2 | 3 | — | — | 10 | 68 | — | — | — |
| S. Dak. | 5 | 4 | — | — | 59 | 50 | — | 1 | — |
| Nebr. | 15 | 6 | — | — | — | — | — | — | — |
| Kans. | 21 | 21 | — | — | — | — | — | — | N |
| S. ATLANTIC | 714 | 911 | 9 | 8 | 878 | 1,222 | — | 1 | — |
| Del. | 2 | 9 | — | — | 6 | 4 | — | — | — |
| Md. | 81 | 81 | 1 | 2 | — | — | — | — | — |
| D.C. | 27 | 4 | — | — | 15 | 17 | — | — | — |
| Va. | 94 | 72 | 2 | 2 | 141 | 316 | — | — | — |
| W. Va. | 8 | 10 | — | — | 539 | 628 | — | — | N |
| N.C. | 72 | 85 | 1 | 2 | — | N | — | — | — |
| S.C. | 80 | 72 | — | — | 177 | 257 | — | — | — |
| Ga. | 58 | 265 | 2 | — | — | — | — | — | — |
| Fla. | 292 | 313 | 3 | 2 | — | — | — | 1 | — |
| E.S. CENTRAL | 192 | 170 | 1 | 4 | — | — | — | — | — |
| Ky. | 40 | 29 | 1 | 2 | N | N | — | — | — |
| Tenn. | 92 | 48 | — | 2 | — | — | — | — | — |
| Ala. | 60 | 60 | — | — | — | — | — | — | — |
| Miss. | — | 33 | — | — | — | — | — | — | — |
| W.S. CENTRAL | 276 | 817 | 3 | 9 | 1,348 | 3,382 | — | 1 | — |
| Ark. | 36 | 52 | — | — | — | — | — | — | — |
| La. | — | — | — | — | 96 | 42 | — | — | — |
| Okla. | 52 | 55 | — | — | — | — | — | — | — |
| Tex. | 188 | 710 | 3 | 9 | 1,252 | 3,340 | — | 1 | — |
| MOUNTAIN | 81 | 192 | 3 | 3 | 1,408 | 1,362 | — | 10 | — |
| Mont. | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | — | — | — | — | — | — |
| Wyo. | — | 1 | — | — | 42 | 17 | — | — | — |
| Colo. | 16 | 51 | — | 1 | 994 | 1,041 | — | 1 | — |
| N. Mex. | 4 | 14 | — | — | 78 | 35 | — | — | — |
| Ariz. | 56 | 80 | 1 | 1 | — | — | — | 9 | — |
| Utah | 5 | 15 | 1 | 1 | 294 | 269 | — | — | — |
| Nev. | — | 31 | 1 | — | — | — | — | — | — |
| PACIFIC | 579 | 1,149 | 24 | 22 | — | — | — | — | — |
| Wash. | 76 | 78 | 1 | 1 | N | N | — | — | — |
| Oreg. | 38 | 36 | 2 | — | — | — | — | — | — |
| Calif. | 405 | 981 | 17 | 15 | — | — | — | — | — |
| Alaska | 13 | 12 | — | — | — | — | — | — | — |
| Hawaii | 47 | 42 | 4 | 6 | — | — | — | — | — |
| Guam | — | 14 | — | — | — | 95 | — | — | — |
| P.R. | — | 21 | — | — | 76 | 134 | — | — | — |
| V.I. | — | — | — | — | — | — | — | — | — |
| Amer. Samoa | U | U | U | U | U | U | U | U | — |
| C.N.M.I. | — | 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 2004 and 2005 are provisional and cumulative (year-to-date).

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

§ Not previously notifiable.

**TABLE III. Deaths in 122 U.S. cities,* week ending May 21, 2005 (20th Week)**

| Reporting Area | All causes, by age (years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45–64 | 25–44 | 1–24 | <1 | |
| NEW ENGLAND | 558 | 391 | 117 | 34 | 11 | 5 | 61 |
| Boston, Mass. | 137 | 90 | 37 | 6 | 4 | — | 11 |
| Bridgeport, Conn. | 54 | 40 | 9 | 4 | 1 | — | 7 |
| Cambridge, Mass. | 14 | 9 | 3 | 2 | — | — | 3 |
| Fall River, Mass. | 17 | 13 | 3 | 1 | — | — | — |
| Hartford, Conn. | 61 | 45 | 11 | 2 | 3 | — | 7 |
| Lowell, Mass. | 19 | 16 | 2 | 1 | — | — | — |
| Lynn, Mass. | 9 | 5 | 3 | 1 | — | — | 1 |
| New Bedford, Mass. | 21 | 16 | 2 | 3 | — | — | 7 |
| New Haven, Conn. | 42 | 27 | 10 | 4 | — | 1 | 6 |
| Providence, R.I. | 60 | 48 | 9 | 2 | 1 | — | 5 |
| Somerville, Mass. | 6 | 5 | 1 | — | — | — | — |
| Springfield, Mass. | 31 | 14 | 8 | 5 | 2 | 2 | 5 |
| Waterbury, Conn. | 27 | 19 | 6 | 2 | — | — | — |
| Worcester, Mass. | 60 | 44 | 13 | 1 | — | 2 | 9 |
| MID. ATLANTIC | 2,107 | 1,520 | 413 | 115 | 33 | 25 | 112 |
| Albany, N.Y. | 46 | 29 | 11 | 2 | 2 | 2 | 1 |
| Allentown, Pa. | 27 | 23 | 1 | 1 | — | 2 | 1 |
| Buffalo, N.Y. | 78 | 51 | 21 | 4 | — | 2 | 4 |
| Camden, N.J. | 2 | 1 | — | 1 | — | — | 2 |
| Elizabeth, N.J. | 13 | 7 | 2 | 4 | — | — | 1 |
| Erie, Pa. | 39 | 31 | 7 | 1 | — | — | 1 |
| Jersey City, N.J. | 36 | 23 | 8 | 2 | 1 | 2 | — |
| New York City, N.Y. | 1,036 | 752 | 206 | 55 | 17 | 6 | 53 |
| Newark, N.J. | 42 | 22 | 9 | 7 | 1 | 3 | 4 |
| Paterson, N.J. | U | U | U | U | U | U | U |
| Philadelphia, Pa. | 380 | 262 | 81 | 22 | 9 | 5 | 20 |
| Pittsburgh, Pa.§ | 31 | 25 | 5 | 1 | — | — | 1 |
| Reading, Pa. | 18 | 11 | 4 | 3 | — | — | — |
| Rochester, N.Y. | 139 | 114 | 21 | 4 | — | — | 16 |
| Schenectady, N.Y. | 18 | 13 | 5 | — | — | — | 1 |
| Scranton, Pa. | 29 | 24 | 2 | 3 | — | — | 1 |
| Syracuse, N.Y. | 107 | 84 | 17 | 3 | 1 | 2 | 5 |
| Trenton, N.J. | 26 | 19 | 4 | — | 2 | 1 | — |
| Utica, N.Y. | 21 | 14 | 6 | 1 | — | — | — |
| Yonkers, N.Y. | 19 | 15 | 3 | 1 | — | — | 1 |
| E.N. CENTRAL | 2,054 | 1,370 | 455 | 126 | 56 | 45 | 120 |
| Akron, Ohio | 39 | 27 | 7 | 3 | 1 | 1 | 7 |
| Canton, Ohio | 30 | 28 | 2 | — | — | — | 3 |
| Chicago, Ill. | 318 | 187 | 83 | 32 | 6 | 8 | 18 |
| Cincinnati, Ohio | 99 | 58 | 30 | 5 | 4 | 2 | 4 |
| Cleveland, Ohio | 203 | 138 | 46 | 13 | 3 | 3 | 6 |
| Columbus, Ohio | 218 | 152 | 48 | 12 | 2 | 4 | 14 |
| Dayton, Ohio | 117 | 82 | 29 | 5 | 1 | — | 10 |
| Detroit, Mich. | 174 | 91 | 52 | 16 | 11 | 4 | 7 |
| Evansville, Ind. | 36 | 30 | 3 | 3 | — | — | 1 |
| Fort Wayne, Ind. | 77 | 50 | 19 | 2 | 5 | 1 | 8 |
| Gary, Ind. | 17 | 8 | 6 | 3 | — | — | — |
| Grand Rapids, Mich. | 62 | 40 | 11 | 2 | 5 | 4 | 3 |
| Indianapolis, Ind. | 210 | 136 | 40 | 15 | 8 | 11 | 13 |
| Lansing, Mich. | 55 | 35 | 16 | 1 | 2 | 1 | 2 |
| Milwaukee, Wis. | 104 | 81 | 16 | 4 | — | 3 | 10 |
| Peoria, Ill. | 39 | 30 | 4 | 4 | 1 | — | 2 |
| Rockford, Ill. | 54 | 43 | 10 | 1 | — | — | 1 |
| South Bend, Ind. | 54 | 39 | 10 | 1 | 2 | 2 | — |
| Toledo, Ohio | 91 | 67 | 16 | 3 | 4 | 1 | 5 |
| Youngstown, Ohio | 57 | 48 | 7 | 1 | 1 | — | 6 |
| W.N. CENTRAL | 601 | 395 | 137 | 37 | 15 | 15 | 37 |
| Des Moines, Iowa | 53 | 42 | 10 | 1 | — | — | 5 |
| Duluth, Minn. | 28 | 23 | 5 | — | — | — | 5 |
| Kansas City, Kans. | 40 | 25 | 8 | 5 | — | 2 | 1 |
| Kansas City, Mo. | 91 | 62 | 20 | 6 | 2 | 1 | 4 |
| Lincoln, Nebr. | 32 | 17 | 11 | 3 | 1 | — | — |
| Minneapolis, Minn. | 56 | 36 | 12 | 3 | 2 | 3 | 3 |
| Omaha, Nebr. | 76 | 47 | 25 | 1 | — | 3 | 8 |
| St. Louis, Mo. | 99 | 51 | 26 | 8 | 7 | 5 | 4 |
| St. Paul, Minn. | 50 | 37 | 6 | 5 | 2 | — | 5 |
| Wichita, Kans. | 76 | 55 | 14 | 5 | 1 | 1 | 2 |
| S. ATLANTIC | 1,209 | 787 | 270 | 94 | 26 | 31 | 69 |
| Atlanta, Ga. | 137 | 84 | 38 | 12 | 3 | — | 4 |
| Baltimore, Md. | 150 | 84 | 46 | 13 | 5 | 2 | 15 |
| Charlotte, N.C. | 109 | 78 | 14 | 10 | 3 | 4 | 6 |
| Jacksonville, Fla. | 157 | 99 | 35 | 15 | 4 | 3 | 5 |
| Miami, Fla. | 134 | 102 | 18 | 11 | 2 | 1 | 8 |
| Norfolk, Va. | 61 | 37 | 13 | 2 | 1 | 8 | 6 |
| Richmond, Va. | 50 | 33 | 12 | 2 | 2 | 1 | 5 |
| Savannah, Ga. | 60 | 45 | 8 | 4 | — | 3 | 4 |
| St. Petersburg, Fla. | 56 | 38 | 7 | 6 | 2 | 3 | 3 |
| Tampa, Fla. | 179 | 123 | 40 | 10 | 2 | 4 | 12 |
| Washington, D.C. | 102 | 55 | 36 | 7 | 2 | 2 | 1 |
| Wilmington, Del. | 14 | 9 | 3 | 2 | — | — | — |
| E.S. CENTRAL | 936 | 606 | 213 | 64 | 29 | 23 | 70 |
| Birmingham, Ala. | 193 | 117 | 49 | 13 | 11 | 2 | 12 |
| Chattanooga, Tenn. | 73 | 49 | 13 | 7 | 2 | 2 | 7 |
| Knoxville, Tenn. | 100 | 73 | 21 | 4 | 2 | — | 1 |
| Lexington, Ky. | 99 | 58 | 21 | 12 | 3 | 5 | 9 |
| Memphis, Tenn. | 183 | 123 | 38 | 12 | 5 | 5 | 19 |
| Mobile, Ala. | 72 | 48 | 18 | 1 | 2 | 3 | 4 |
| Montgomery, Ala. | 59 | 44 | 12 | 1 | — | 2 | 6 |
| Nashville, Tenn. | 157 | 94 | 41 | 14 | 4 | 4 | 12 |
| W.S. CENTRAL | 2,461 | 1,565 | 589 | 170 | 65 | 72 | 123 |
| Austin, Tex. | 85 | 59 | 17 | 7 | — | 2 | 4 |
| Baton Rouge, La. | 82 | 52 | 12 | 5 | 3 | 10 | — |
| Corpus Christi, Tex. | 70 | 50 | 12 | 5 | 2 | 1 | 8 |
| Dallas, Tex. | 166 | 91 | 52 | 9 | 7 | 7 | 17 |
| El Paso, Tex. | 93 | 65 | 22 | 4 | — | 2 | 4 |
| Ft. Worth, Tex. | 113 | 74 | 27 | 5 | 4 | 3 | 1 |
| Houston, Tex. | 347 | 206 | 99 | 23 | 5 | 14 | 17 |
| Little Rock, Ark. | 87 | 48 | 29 | 3 | 3 | 4 | — |
| New Orleans, La. | 965 | 632 | 213 | 78 | 26 | 16 | 59 |
| San Antonio, Tex. | 238 | 150 | 59 | 17 | 7 | 5 | 12 |
| Shreveport, La. | 76 | 42 | 22 | 3 | 6 | 3 | 1 |
| Tulsa, Okla. | 139 | 96 | 25 | 11 | 2 | 5 | — |
| MOUNTAIN | 1,138 | 737 | 255 | 81 | 38 | 27 | 72 |
| Albuquerque, N.M. | 155 | 102 | 33 | 16 | 3 | 1 | 8 |
| Boise, Idaho | 37 | 21 | 8 | — | 5 | 3 | 2 |
| Colo. Springs, Colo. | 56 | 38 | 12 | 4 | 2 | — | — |
| Denver, Colo. | 104 | 60 | 27 | 10 | 3 | 4 | 5 |
| Las Vegas, Nev. | 243 | 156 | 53 | 21 | 9 | 4 | 20 |
| Ogden, Utah | 25 | 18 | 5 | — | 2 | — | 2 |
| Phoenix, Ariz. | 198 | 111 | 52 | 22 | 4 | 9 | 12 |
| Pueblo, Colo. | 36 | 27 | 8 | 1 | — | — | 3 |
| Salt Lake City, Utah | 101 | 75 | 21 | 3 | — | 2 | 10 |
| Tucson, Ariz. | 183 | 129 | 36 | 4 | 10 | 4 | 10 |
| PACIFIC | 1,668 | 1,187 | 326 | 90 | 33 | 32 | 169 |
| Berkeley, Calif. | 11 | 6 | 2 | 1 | — | 2 | — |
| Fresno, Calif. | 108 | 77 | 22 | 6 | 3 | — | 11 |
| Glendale, Calif. | 25 | 19 | 6 | — | — | — | 4 |
| Honolulu, Hawaii | 84 | 67 | 11 | 3 | 1 | 2 | 11 |
| Long Beach, Calif. | 70 | 46 | 16 | 6 | 2 | — | 11 |
| Los Angeles, Calif. | 339 | 240 | 67 | 20 | 6 | 6 | 35 |
| Pasadena, Calif. | 12 | 9 | 3 | — | — | — | 2 |
| Portland, Oreg. | 135 | 92 | 28 | 9 | 3 | 3 | 7 |
| Sacramento, Calif. | 178 | 126 | 38 | 7 | 4 | 3 | 21 |
| San Diego, Calif. | 164 | 113 | 30 | 14 | 3 | 4 | 15 |
| San Francisco, Calif. | 59 | 37 | 15 | 5 | 1 | 1 | 10 |
| San Jose, Calif. | 181 | 141 | 31 | 4 | 2 | 3 | 18 |
| Santa Cruz, Calif. | 28 | 18 | 5 | 2 | 1 | 2 | 3 |
| Seattle, Wash. | 110 | 74 | 26 | 5 | 4 | 1 | 8 |
| Spokane, Wash. | 50 | 38 | 7 | 1 | 2 | 2 | 6 |
| Tacoma, Wash. | 114 | 84 | 19 | 7 | 1 | 3 | 7 |
| TOTAL | 12,732¶ | 8,558 | 2,775 | 811 | 306 | 275 | 833 |

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.

† Pneumonia and influenza.

§ 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.

¶ Total includes unknown ages.

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