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Violence-Related Behaviors Among High School Students — United States, 1991–2003

Homicide and suicide are responsible for approximately one fourth of deaths among persons aged 10–24 years in the United States (*1*). Two of the national health objectives for 2010 are to reduce the prevalence of physical fighting among adolescents to ≤32% and to reduce the prevalence of carrying a weapon by adolescents on school property to ≤4.9% (objective nos. 15-38 and 15-39) (*2*). To examine changes in violence-related behaviors among high school students in the United States during 1991–2003, CDC analyzed data from the national Youth Risk Behavior Survey (YRBS). This report summarizes the results of that analysis, which indicated that most violence-related behaviors decreased during 1991–2003; however, students increasingly were likely to miss school because they felt too unsafe to attend. In addition, in 2003, nearly one in 10 high school students reported being threatened or injured with a weapon on school property during the preceding 12 months. Schools and communities should continue efforts to establish physical and social environments that prevent violence and promote actual and perceived safety in schools.

The national YRBS, a component of CDC's Youth Risk Behavior Surveillance System, used independent three-stage (i.e., primary sampling units, schools, and classes) cluster samples for the 1991–2003 surveys to obtain cross-sectional data representative of public- and private-school students in grades 9–12 in the 50 states and the District of Columbia. During 1991–2003, sample sizes ranged from 10,904 to 16,296, school response rates ranged from 70% to 81%, student response rates ranged from 83% to 90%, and overall response rates ranged from 60% to 70%. For each cross-sectional national survey, students completed an anonymous, self-administered questionnaire that included identically worded questions about violence.

For this analysis, temporal changes during 1991–2003 for three behaviors were assessed: 1) weapon (e.g., a gun, knife, or club) carrying (on ≥1 of the 30 days preceding the survey), 2) physical fighting (one or more times during the 12 months preceding the survey), and 3) being in a physical fight that resulted in injuries that had to be treated by a doctor or nurse (one or more times during the 12 months preceding the survey). In addition, temporal changes from 1993–2003 for four school-related behaviors were assessed: 1) weapon carrying on school property (on ≥1 of the 30 days preceding the survey), 2) physical fighting on school property (one or more times during the 12 months preceding the survey), 3) being threatened or injured with a weapon on school property (one or more times during the 12 months preceding the survey), and 4) not going to school because of safety concerns (i.e., feeling too unsafe at school or on the way to or from school on ≥1 of the 30 days preceding the survey). Data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students because the numbers of students from other racial/ethnic populations were too small for meaningful analysis.

Data were weighted to provide national estimates, and SUDAAN was used for all data analyses. Temporal changes were analyzed by using logistic regression analyses that assessed linear and quadratic time effects simultaneously and controlled for sex, race/ethnicity, and grade. Quadratic trends indicated

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significant but nonlinear trends in the data over time. When a significant quadratic trend accompanied a significant linear trend, the data demonstrated a nonlinear variation (e.g., leveling off or change in direction) in addition to an overall increase or decrease over time. All results were statistically significant ($p<0.05$) unless otherwise noted.

Significant linear and quadratic trends were detected for weapon carrying. Overall, the prevalence of weapon carrying declined significantly, from 26.1% in 1991 to 18.3% in 1997, and then leveled off through 2003 (17.1%) (Table). Similar significant linear and quadratic trends were detected among female, male, white, 10th-, 11th-, and 12th-grade students. Among black, Hispanic, and 9th-grade students, a significant linear decline was detected during 1991–2003.

Overall, physical fighting declined significantly, from 42.5% in 1991 to 33.0% in 2003. Physical fighting also declined significantly among all subgroups except 11th-grade students. Among 11th-grade students, physical fighting declined during 1991–1999 and then remained level through 2003. No significant changes were detected in the prevalence of being injured in a physical fight overall or by subgroup.

Weapon carrying on school property declined significantly, from 11.8% in 1993 to 6.1% in 2003. Weapon carrying also declined significantly among female, male, white, Hispanic, 9th-, 10th-, and 11th-grade students. Significant linear and quadratic trends were detected for weapon carrying on school property among black and 12th-grade students, with the prevalence of carrying a weapon on school property declining during 1993–1999 and then remaining level through 2003.

Physical fighting on school property declined significantly, from 16.2% in 1993 to 12.8% in 2003. A similar significant linear trend was detected among all subgroups.

No significant changes were detected in the prevalence of being threatened or injured with a weapon on school property during 1993–2003 overall or among female, male, Hispanic, 10th-, and 12th-grade students. A significant linear increase during 1993–2003 was detected among white and 9th-grade students. Among black students, being threatened or injured with a weapon on school property declined during 1993–1999 and then increased through 2003. Among 11th-grade students, being threatened or injured with a weapon on school property declined during 1993–1999 and then remained level through 2003.

Not going to school because of safety concerns increased significantly, from 4.4% in 1993 to 5.4% in 2003. Not going to school because of safety concerns also increased significantly among female, white, and 11th-grade students. No significant changes were detected during 1993–2003 among male, black, Hispanic, 9th-, 10th-, and 12th-grade students.

TABLE. Percentage of high school students who reported violence-related behaviors, by sex, race/ethnicity, and grade — Youth Risk Behavior Survey, United States, 1991–2003*

Behavior	1991 % (95% CI†)	1993 % (95% CI)	1995 % (95% CI)	1997 % (95% CI)	1999 % (95% CI)	2001 % (95% CI)	2003 % (95% CI)
Carried a weapon (e.g., a gun, knife, or club)§							
Overall	**26.1 (±2.3)**	**22.1 (±2.3)**	**20.0 (±1.3)**	**18.3 (±1.8)**	**17.3 (±1.9)**	**17.4 (±1.9)**	**17.1 (±1.8)¶****
Sex							
Female	10.9 (±2.1)	9.2 (±1.7)	8.3 (±1.4)	7.0 (±1.1)	6.0 (±1.1)	6.2 (±0.8)	6.7 (±1.2)¶**
Male	40.6 (±2.9)	34.3 (±3.3)	31.1 (±2.0)	27.7 (±3.1)	28.6 (±3.4)	29.3 (±3.3)	26.9 (±2.6)¶**
Race/Ethnicity							
White, non-Hispanic	25.1 (±2.6)	20.6 (±2.8)	18.9 (±1.8)	17.0 (±2.5)	16.4 (±2.7)	17.9 (±2.6)	16.7 (±1.9)¶**
Black, non-Hispanic	32.7 (±3.2)	28.5 (±2.3)	21.8 (±4.1)	21.7 (±3.9)	17.2 (±5.2)	15.2 (±2.4)	17.3 (±3.5)¶
Hispanic	25.8 (±4.4)	24.4 (±2.6)	24.7 (±4.1)	23.3 (±2.8)	18.7 (±2.7)	16.5 (±1.5)	16.5 (±2.6)¶
Grade							
9th	27.5 (±4.0)	25.5 (±2.8)	22.6 (±2.5)	22.6 (±2.6)	17.6 (±3.1)	19.8 (±2.8)	18.0 (±3.5)¶
10th	26.8 (±3.2)	21.4 (±2.2)	21.1 (±1.8)	17.4 (±2.6)	18.7 (±2.6)	16.7 (±2.2)	15.9 (±2.2)¶**
11th	29.0 (±2.5)	21.5 (±3.2)	20.3 (±2.8)	18.2 (±3.3)	16.1 (±2.6)	16.8 (±2.5)	18.2 (±2.4)¶**
12th	21.3 (±2.3)	19.9 (±2.9)	16.1 (±1.8)	15.4 (±3.2)	15.9 (±2.8)	15.1 (±2.5)	15.5 (±2.1)¶**
In a physical fight††							
Overall	**42.5 (±2.4)**	**41.8 (±1.9)**	**38.7 (±2.1)**	**36.6 (±2.0)**	**35.7 (±2.3)**	**33.2 (±1.4)**	**33.0 (±1.9)¶**
Sex							
Female	34.4 (±2.9)	31.7 (±2.3)	30.6 (±2.8)	26.0 (±2.5)	27.3 (±3.3)	23.9 (±1.9)	25.1 (±1.7)¶
Male	50.2 (±2.6)	51.2 (±2.0)	46.1 (±2.0)	45.5 (±2.1)	44.0 (±2.5)	43.1 (±1.6)	40.5 (±2.6)¶
Race/Ethnicity							
White, non-Hispanic	41.0 (±2.8)	40.3 (±2.2)	36.0 (±2.0)	33.7 (±2.5)	33.1 (±2.8)	32.2 (±1.9)	30.5 (±2.2)¶
Black, non-Hispanic	50.6 (±4.7)	49.5 (±3.5)	41.6 (±3.9)	43.0 (±3.8)	41.4 (±6.1)	36.5 (±3.1)	39.7 (±2.4)¶
Hispanic	41.3 (±4.2)	43.2 (±3.0)	47.9 (±5.0)	40.7 (±3.3)	39.9 (±3.2)	35.8 (±1.8)	36.1 (±1.9)¶
Grade							
9th	50.5 (±3.9)	50.4 (±3.0)	47.3 (±4.5)	44.8 (±3.9)	41.1 (±3.9)	39.5 (±2.5)	38.6 (±2.7)¶
10th	43.1 (±4.6)	42.2 (±3.0)	40.4 (±2.7)	40.2 (±3.7)	37.7 (±4.1)	34.7 (±2.7)	33.5 (±2.3)¶
11th	43.0 (±3.1)	40.5 (±3.0)	36.9 (±2.6)	34.2 (±3.4)	31.3 (±3.0)	29.1 (±2.2)	30.9 (±2.7)¶**
12th	33.9 (±3.7)	34.8 (±3.1)	31.0 (±3.4)	28.8 (±2.7)	30.4 (±3.7)	26.5 (±2.0)	26.5 (±2.1)¶
Injured in a physical fight††§§							
Overall	**4.4 (±0.8)**	**4.0 (±0.9)**	**4.2 (±0.6)**	**3.5 (±0.6)**	**4.0 (±0.7)**	**4.0 (±0.4)**	**4.2 (±1.0)**
Sex							
Female	2.7 (±1.0)	2.7 (±0.8)	2.5 (±1.0)	2.2 (±0.5)	2.8 (±0.8)	2.9 (±0.5)	2.6 (±0.6)
Male	6.0 (±1.0)	5.2 (±1.1)	5.7 (±1.0)	4.6 (±0.9)	5.3 (±0.8)	5.2 (±0.7)	5.7 (±1.4)
Race/Ethnicity							
White, non-Hispanic	3.8 (±0.9)	3.2 (±1.0)	3.3 (±0.9)	2.5 (±0.5)	3.2 (±0.7)	3.4 (±0.5)	2.9 (±0.8)
Black, non-Hispanic	6.6 (±1.2)	6.4 (±1.8)	4.3 (±1.4)	5.7 (±1.7)	6.3 (±2.2)	5.3 (±0.8)	5.5 (±1.0)
Hispanic	4.3 (±1.6)	5.1 (±1.2)	6.4 (±1.7)	4.3 (±1.0)	5.8 (±1.6)	4.4 (±1.1)	5.2 (±1.3)
Grade							
9th	5.2 (±1.2)	4.1 (±1.0)	4.7 (±1.4)	4.6 (±1.2)	4.4 (±1.1)	4.5 (±0.7)	5.0 (±2.1)
10th	4.7 (±1.6)	4.0 (±1.1)	3.4 (±0.8)	4.0 (±1.0)	4.1 (±1.7)	4.6 (±1.0)	4.2 (±0.8)
11th	3.9 (±0.9)	4.0 (±1.4)	4.3 (±1.1)	2.8 (±0.9)	3.7 (±1.5)	3.1 (±0.8)	3.6 (±0.8)
12th	3.6 (±1.4)	3.7 (±1.3)	4.3 (±0.7)	2.8 (±0.7)	3.7 (±1.3)	3.4 (±0.8)	3.1 (±1.0)
Carried a weapon (e.g., a gun, knife, or club) on school property§							
Overall	**—**	**11.8 (±1.4)**	**9.8 (±0.9)**	**8.5 (±1.5)**	**6.9 (±1.2)**	**6.4 (±1.0)**	**6.1 (±1.1)¶**
Sex							
Female	—	5.1 (±1.3)	4.9 (±1.0)	3.7 (±0.7)	2.8 (±0.8)	2.9 (±0.5)	3.1 (±1.0)¶
Male	—	17.9 (±1.9)	14.3 (±1.4)	12.5 (±2.9)	11.0 (±2.1)	10.2 (±1.7)	8.9 (±1.5)¶
Race/Ethnicity							
White, non-Hispanic	—	10.9 (±1.7)	9.0 (±1.3)	7.8 (±2.3)	6.4 (±1.7)	6.1 (±1.2)	5.5 (±1.1)¶
Black, non-Hispanic	—	15.0 (±1.6)	10.3 (±2.1)	9.2 (±1.9)	5.0 (±1.0)	6.3 (±1.8)	6.9 (±1.9)¶**
Hispanic	—	13.3 (±2.2)	14.1 (±3.3)	10.4 (±1.9)	7.9 (±1.4)	6.4 (±1.0)	6.0 (±1.1)¶
Grade							
9th	—	12.6 (±1.4)	10.7 (±1.4)	10.2 (±1.8)	7.2 (±2.1)	6.7 (±1.3)	5.3 (±2.2)¶
10th	—	11.5 (±1.9)	10.4 (±1.5)	7.7 (±1.9)	6.6 (±1.6)	6.7 (±1.2)	6.0 (±1.0)¶
11th	—	11.9 (±2.8)	10.2 (±1.8)	9.4 (±2.6)	7.0 (±1.2)	6.1 (±1.4)	6.6 (±1.6)¶
12th	—	10.8 (±1.6)	7.6 (±1.3)	7.0 (±1.8)	6.2 (±1.5)	6.0 (±1.4)	6.4 (±1.3)¶**

TABLE. (*Continued*) Percentage of high school students who reported violence-related behaviors, by sex, race/ethnicity, and grade — Youth Risk Behavior Survey, United States, 1991–2003*

Behavior	1991 % (95% CI†)	1993 % (95% CI)	1995 % (95% CI)	1997 % (95% CI)	1999 % (95% CI)	2001 % (95% CI)	2003 % (95% CI)
In a physical fight on school property††							
Overall	—	**16.2 (±1.2)**	**15.5 (±1.6)**	**14.8 (±1.3)**	**14.2 (±1.2)**	**12.5 (±1.0)**	**12.8 (±1.5)¶**
Sex							
Female	—	8.6 (±1.4)	9.5 (±1.9)	8.6 (±1.5)	9.8 (±1.9)	7.2 (±0.9)	8.0 (±1.4)¶
Male	—	23.5 (±1.4)	21.0 (±1.9)	20.0 (±2.0)	18.5 (±1.3)	18.0 (±1.5)	17.1 (±1.8)¶
Race/Ethnicity							
White, non-Hispanic	—	15.0 (±1.3)	12.9 (±1.2)	13.3 (±1.7)	12.3 (±1.7)	11.2 (±1.2)	10.0 (±1.4)¶
Black, non-Hispanic	—	22.0 (±2.7)	20.3 (±2.2)	20.7 (±2.4)	18.7 (±3.0)	16.8 (±2.5)	17.1 (±2.5)¶
Hispanic	—	17.9 (±3.1)	21.1 (±3.3)	19.0 (±2.9)	15.7 (±1.8)	14.1 (±1.7)	16.7 (±2.2)¶
Grade							
9th	—	23.1 (±3.0)	21.6 (±3.5)	21.3 (±2.5)	18.6 (±2.0)	17.3 (±1.5)	18.0 (±2.4)¶
10th	—	17.2 (±2.1)	16.5 (±3.0)	17.0 (±3.3)	17.2 (±2.4)	13.5 (±1.7)	12.8 (±1.8)¶
11th	—	13.8 (±2.5)	13.6 (±2.0)	12.5 (±1.7)	10.8 (±2.0)	9.4 (±1.4)	10.4 (±1.8)¶
12th	—	11.4 (±1.3)	10.6 (±1.3)	9.5 (±1.4)	8.1 (±2.0)	7.5 (±1.1)	7.3 (±1.4)¶
Threatened or injured with a weapon (e.g., a gun, knife, or club) on school property††							
Overall	—	**7.3 (±0.9)**	**8.4 (±1.1)**	**7.4 (±0.9)**	**7.7 (±0.8)**	**8.9 (±1.1)**	**9.2 (±1.5)**
Sex							
Female	—	5.4 (±0.8)	5.8 (±1.4)	4.0 (±0.6)	5.8 (±1.3)	6.5 (±1.0)	6.5 (±1.2)
Male	—	9.2 (±1.3)	10.9 (±1.2)	10.2 (±1.4)	9.5 (±1.6)	11.5 (±1.3)	11.6 (±1.9)
Race/Ethnicity							
White, non-Hispanic	—	6.3 (±1.1)	7.0 (±1.0)	6.2 (±1.1)	6.6 (±0.7)	8.5 (±1.3)	7.8 (±1.5)¶
Black, non-Hispanic	—	11.2 (±1.8)	11.0 (±3.3)	9.9 (±1.8)	7.6 (±1.7)	9.3 (±1.4)	10.9 (±1.6)**
Hispanic	—	8.6 (±1.5)	12.4 (±3.2)	9.0 (±1.2)	9.8 (±2.1)	8.9 (±2.1)	9.4 (±2.4)
Grade							
9th	—	9.4 (±1.8)	9.6 (±2.0)	10.1 (±2.0)	10.5 (±1.9)	12.7 (±1.7)	12.1 (±2.5)¶
10th	—	7.3 (±1.2)	9.6 (±2.1)	7.9 (±2.2)	8.2 (±1.8)	9.1 (±1.5)	9.2 (±2.0)
11th	—	7.3 (±1.3)	7.7 (±1.3)	5.9 (±1.4)	6.1 (±0.9)	6.9 (±1.3)	7.3 (±1.4)**
12th	—	5.5 (±1.2)	6.7 (±1.1)	5.8 (±1.6)	5.1 (±1.6)	5.3 (±1.0)	6.3 (±1.8)
Did not go to school because of safety concerns§							
Overall	—	**4.4 (±0.7)**	**4.5 (±0.7)**	**4.0 (±0.6)**	**5.2 (±1.3)**	**6.6 (±1.0)**	**5.4 (±0.8)¶**
Sex							
Female	—	4.4 (±0.9)	4.3 (±1.1)	3.9 (±0.7)	5.7 (±1.5)	7.4 (±1.3)	5.3 (±1.0)¶
Male	—	4.3 (±0.8)	4.7 (±1.1)	4.1 (±0.8)	4.8 (±1.6)	5.8 (±1.1)	5.5 (±1.0)
Race/Ethnicity							
White, non-Hispanic	—	3.0 (±0.7)	2.8 (±0.8)	2.4 (±0.6)	3.9 (±1.3)	5.0 (±1.2)	3.1 (±0.6)¶
Black, non-Hispanic	—	7.1 (±1.4)	7.7 (±1.8)	6.8 (±1.5)	6.0 (±1.2)	9.8 (±1.5)	8.4 (±1.2)
Hispanic	—	10.1 (±1.7)	8.5 (±2.7)	7.2 (±1.7)	11.2 (±3.3)	10.2 (±1.3)	9.4 (±1.5)
Grade							
9th	—	6.1 (±0.8)	5.6 (±1.6)	5.5 (±1.0)	7.0 (±1.8)	8.8 (±1.7)	6.9 (±1.2)
10th	—	5.2 (±1.4)	5.0 (±1.2)	4.0 (±1.0)	4.8 (±1.4)	6.3 (±1.3)	5.2 (±1.1)
11th	—	3.3 (±1.0)	4.1 (±1.0)	4.2 (±1.7)	4.5 (±1.8)	5.9 (±1.2)	4.5 (±1.0)¶
12th	—	3.0 (±1.0)	3.3 (±1.0)	2.6 (±0.8)	3.9 (±1.5)	4.4 (±0.7)	3.8 (±1.1)

* Linear and quadratic trend analyses were conducted by using a logistic regression model controlling for sex, race/ethnicity, and grade. Prevalence estimates shown here were not standardized by demographic variables.
† Confidence interval.
§ On ≥1 of the 30 days preceding the survey.
¶ Significant ($p<0.05$) linear effect.
** Significant quadratic effect.
†† One or more times during the 12 months preceding the survey.
§§ Injuries had to be treated by a doctor or nurse.

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Editorial Note: The declines observed in weapon carrying and physical fighting, both in general and on school property, correspond with a decline in the national youth homicide rate (*3*). However, not all violent behaviors among youths are declining. The prevalence of being injured in a physical fight has remained stable for each subgroup. In addition, the prevalence of being threatened or injured with a weapon on school property increased among white and 9th-grade students and increased in recent years among black students.

The increasing prevalence of not going to school because of safety concerns might be attributed in part to the increases in students being threatened or injured with a weapon on school property as well as students' heightened sense of vulnerability after an increase in high-profile, school-associated, multiple-victim homicides during the 1990s (*4,5*). Efforts to establish physical and social environments that promote safety and prevent violence, such as those described in CDC's *School Health Guidelines to Prevent Unintentional Injuries and Violence* (*6*), are likely to reduce students' actual and perceived risk for violence. Prevention programs have been effective in helping young persons at high risk and their families acquire the knowledge, skills, and support needed to avoid violence (*7,8*).

The findings in this report are subject to at least two limitations. First, these data pertain only to youths who attended high school. Nationwide, among persons aged 16–17 years, approximately 6% were not enrolled in a high school program and had not completed high school (*9*). Second, the extent of underreporting or overreporting in YRBS cannot be determined; however, the survey questions demonstrate test/retest reliability (*10*).

Although the declines in violence-related behaviors are encouraging, prevention efforts must be sustained if the nation is to achieve its 2010 national health objectives. In 2003, one in three high school students reported involvement in a physical fight, and approximately one in 16 high school students reported carrying a weapon on school property. To further reduce violence-related behaviors among young persons and to have an impact on behaviors that are more resistant to change, continued efforts are needed to monitor these behaviors and to develop, evaluate, and disseminate effective prevention strategies.

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Racial/Ethnic Disparities in Neonatal Mortality — United States, 1989–2001

Neonatal mortality (i.e., death at age <28 days) accounts for approximately two thirds of infant deaths in the United States. During 1989–2001, neonatal mortality rates (NMRs) declined; however, 2002 preliminary data indicated an increase. To characterize trends in neonatal mortality by gestational age and race/ethnicity, CDC analyzed linked birth/infant death data sets for 1989–1991 and 1995–2001 (2002 linked data were not available). This report summarizes the results of that analysis, which indicated that 1) extremely preterm infants (i.e., born at <28 weeks' gestation) accounted for 49%–58% of neonatal deaths during 1989–2001 and 2) racial/ethnic disparities persisted despite NMR declines among infants of all gestational ages. Public health practitioners, researchers, and clinicians can use these results to determine the efficacy of prevention programs at a national level and consider new studies and programs aimed at reducing preterm births and NMR disparities among racial/ethnic populations.

The number of neonatal deaths was obtained from linked birth/infant death data sets for 1989–1991 and 1995–2001 from CDC's National Center for Health Statistics (*1*). These

data sets link birth- and death-certificate files for infants aged <1 year who died in the United States*.

NMRs (i.e., deaths at age <28 days per 1,000 live births) among births to U.S. residents were stratified by gestational age and maternal race/ethnicity. Period of gestation was measured on the birth certificate from the first day of the last normal menstrual period to the day of birth. Births with unknown gestational age or implausible birthweight/gestational age combinations (*2*) accounted for <3% of births annually and were excluded from the gestational age-specific analysis. Births at <37 weeks' gestation were classified as preterm and further classified into <28, 28–31, and 32–36 weeks' gestation. Ethnicity was based on the mother's origin as Hispanic or non-Hispanic. For this report, whites, blacks, American Indians/Alaska Natives (AI/ANs), and Asians/Pacific Islanders (A/PIs) are all non-Hispanic. Log-linear–weighted least squares regression was used to estimate the average annual percentage change in mortality during 1989–2001 for gestational age and race/ethnicity.

During 1989–2001, neonatal mortality in the United States declined 25%, from 6.0 deaths per 1,000 live births to 4.5. In 1989 and 2001, NMRs were highest for blacks (11.5 and 8.9, respectively) and lowest for A/PIs (4.3 and 3.1, respectively) (Table 1). In 2001, the NMR for AI/ANs was 4.1; whites, 3.8; and Hispanics, 3.6. Average annual percentage decline in NMRs during 1989–2001 ranged from 1.9% (A/PIs) to 3.0% (AI/ANs).

In 1989 and 2001, preterm infants accounted for approximately 70% of all neonatal deaths. In 2001, preterm infants accounted for 84% of black neonatal deaths and 72%–75%

* Data for 1992–1994 were not analyzed because no national files linked deaths to births for those years.

TABLE 1. Number and rate* of neonatal deaths† and average annual percentage decline, by maternal race/ethnicity — United States, 1989–2001

Maternal race/ethnicity	1989§ No.	1989§ Rate	2001¶ No.	2001¶ Rate	Average annual % decline 1989–2001**
Non-Hispanic					
White	13,240	4.9	8,964	3.8	2.0
Black	7,630	11.5	5,280	8.9	2.1
American Indian/ Alaska Native	237	6.3	161	4.1	3.0
Asian/Pacific Islander	557	4.3	603	3.1	1.9
Hispanic	2,762	5.2	3,052	3.6	2.8
Total	**24,426**	**6.0**	**18,060**	**4.5**	**2.3**

* Per 1,000 live births.
† Deaths at age <28 days.
§ Rates are based on unweighted birth cohort data.
¶ Rates are based on period file by using unweighted data.
** Estimated by using log-linear–regression models and data from 1989–1991 and 1995–2001.

of deaths among infants of other races/ethnicities. Extremely preterm infants accounted for 49% of neonatal deaths overall in 1989 and 58% in 2001. In addition, in 2001, extremely preterm infants accounted for 50%–54% of neonatal deaths among all racial/ethnic populations, except blacks, for whom they comprised 70% of neonatal deaths.

Among extremely preterm infants, NMRs were highest for AI/ANs in 1989 and whites in 2001 (Table 2). Among infants born at 28–31 weeks' gestation, NMRs were highest for whites. NMRs for whites also were highest among infants born at 32–36 weeks' gestation in 1989 but were second to NMRs for AI/ANs in 2001 (Table 2). During 1989–2001, the average annual percentage decline in NMRs among preterm gestational age groups in all racial/ethnic categories was lowest for infants born at <28 weeks' gestation (0.9%–2.5%), compared with infants born at 28–31 and 32–36 weeks' gestation (3.1%–6.4% and 2.3%–4.5%, respectively). Among each preterm group, average annual percentage declines in mortality were lower for blacks and A/PIs. Preterm white infants had greater percentage declines in mortality during this period; however, they continued to have higher NMRs compared with preterm infants of other races/ethnicities (Table 2).

In 1989 and 2001, NMRs among infants born at ≥37 weeks' gestation were highest among blacks and AI/ANs (Table 2). Average annual percentage declines were highest among AI/ANs (5.6%) and A/PIs (5.3%) and lowest for whites (3.0%). In 2001, NMRs within all racial/ethnic populations ranged from 0.7 to 1.2 (Table 2).

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Editorial Note: The findings in this report document a considerable decline in neonatal mortality among infants of all gestational ages and racial/ethnic populations during the 1990s; despite this decline, racial/ethnic disparities persisted. Implementation of new therapies and recommendations likely contributed to the decline; however, the effects of these advances might differ within racial/ethnic populations. The medical advances include 1) surfactant therapy, which improves infant lung maturity, resulting in a decreased risk for death for high-risk preterm infants (*3*); 2) folic acid consumption by women of childbearing age to reduce the risk for neural tube defects (*4*); and 3) intrapartum antimicrobial prophylaxis for women colonized with or at high risk for maternal-infant transmission of group B streptococcal infection (*5,6*).

In 2001, blacks continued to have the highest overall NMR, more than twice that of any other racial/ethnic population. The high rate among this population is likely attributable to a combination of high mortality among black infants born at ≥37 weeks' gestation (full-term infants account for approximately 90% of all births) and a high proportion of preterm births (17.6% black preterm births versus 10.8% white preterm births) (*7*).

Preterm white infants had higher NMRs in 2001, compared with other racial/ethnic populations, despite a greater rate of decline in mortality. Although black preterm infants had lower NMRs in 2001, the annual rate of decline was lower than among other racial/ethnic populations. The narrowing gap in mortality between preterm white infants and preterm black

TABLE 2. Number and rate* of neonatal deaths† and average annual percentage decline, by gestational age and maternal race/ethnicity — United States, 1989–2001

Gestational age/ Maternal race/ethnicity	1989§		2001¶		Average annual % decline 1989–2001**
	No.	Rate	No.	Rate	
<28 weeks					
Non-Hispanic					
White	5,850	528.3	4,812	404.2	2.1
Black	4,540	439.0	3,702	376.1	1.2
American Indian/ Alaska Native	100	561.8	79	354.3	2.5
Asian/Pacific Islander	199	446.2	312	381.0	0.9
Hispanic	1,231	481.6	1,563	354.7	2.2
Total	**11,920**	**484.7**	**10,468**	**384.9**	**1.8**
28–31 weeks					
Non-Hispanic					
White	1,494	78.0	829	40.4	5.4
Black	766	51.7	381	32.8	3.1
American Indian/ Alaska Native	25	69.1††	11	—§§	6.4
Asian/Pacific Islander	50	55.1	41	26.9††	3.9
Hispanic	278	61.2	263	35.5	3.8
Total	**2,613**	**65.7**	**1,525**	**36.8**	**4.4**
32–36 weeks					
Non-Hispanic					
White	1,629	8.9	1,090	5.1	4.5
Black	539	5.9	336	4.3	2.6
American Indian/ Alaska Native	21	5.9††	27	6.4††	2.7
Asian/Pacific Islander	78	7.2	80	4.7	2.3
Hispanic	319	6.7	377	4.7	3.4
Total	**2,586**	**7.7**	**1,910**	**4.9**	**3.8**
≥37 weeks					
Non-Hispanic					
White	3,204	1.3	1,845	0.9	3.0
Black	967	1.8	597	1.2	3.4
American Indian/ Alaska Native	70	2.1	34	1.0††	5.6
Asian/Pacific Islander	164	1.4	124	0.7	5.3
Hispanic	623	1.3	615	0.8	4.0
Total	**5,028**	**1.4**	**3,215**	**0.9**	**3.3**

* Per 1,000 live births.
† Deaths at age <28 days.
§ Rates are based on unweighted birth cohort data.
¶ Rates are based on period file by using unweighted data.
** Estimated by using log-linear–regression models and data from 1989–1991 and 1995–2001.
†† Estimates are considered highly variable. Rates are based on <50 deaths.
§§ Rates not shown are based on <20 deaths.

infants might reflect the widened distribution of neonatal intensive care in the 1990s beyond urban tertiary-care centers and a possible difference in benefit from surfactant therapy between black and white infants (*8*).

Differences in neonatal mortality trends among racial/ethnic populations also might be explained by changing patterns in the occurrence of multiple births (*9*). The rate of multiple births has increased substantially over the preceding decade, and trends vary among infants of different races/ethnicities. Further analysis examining these differences is needed.

The findings in the report are subject to at least four limitations. First, although greater declines in mortality were found among AI/ANs, the number of infants in this population is small, and trends should be interpreted with caution. Second, NMRs for AI/ANs might be underestimated because of underreporting of very low birthweight infants born on reservations (*10*). Third, gestational age reporting on birth certificate data might be misclassified; however, exclusion of implausible birthweight/gestational age combinations reduces the impact of this limitation. Finally, NMRs during 1995–2001 might vary from reported U.S. vital statistics rates during 1995–2001, which used weighted data to adjust for unlinked infant deaths. To be consistent with data during 1989–1991, unweighted data were used for this trend analysis.

Approximately half of all neonatal mortality occurred in infants born at <28 weeks' gestation, and the percentage has increased over the preceding decade. This increasing trend deserves more detailed analysis and suggests that prevention of these extremely preterm births will contribute to reducing neonatal mortality in the future.

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National, State, and Urban Area Vaccination Coverage Among Children Aged 19–35 Months — United States, 2003

Each annual birth cohort in the United States comprises approximately 4 million infants. Maintaining the gains in vaccination coverage achieved during the 1990s among these children poses a continuing challenge for public health practitioners. The National Immunization Survey (NIS) provides estimates of vaccination coverage among children aged 19–35 months for each of the 50 states and 28 selected urban areas*. This report summarizes NIS results for 2003†, which indicated substantial increases nationwide in coverage with ≥1 dose of varicella vaccine (VAR) and ≥3 doses of pneumococcal conjugate vaccine (PCV) and the highest coverage ever for all vaccines; however, wide variability in coverage continues among states and urban areas. Continued vigilance is needed to maintain high levels of coverage, and sustained efforts will be required to reduce geographic disparities in coverage.

To collect vaccination data for all age-eligible children, NIS uses a quarterly random-digit–dialing sample of telephone numbers for each of the 78 survey areas. NIS methodology, including the weighting of responses to represent the population of children aged 19–35 months, has been described previously (*1,2*). During 2003, health-care provider vaccination records were obtained for 21,210 children. The overall response rate for eligible households was 62.7%.

National vaccination coverage with ≥1 dose of VAR increased from 80.6% (95% confidence interval [CI] = ±0.9%) in 2002

* Jefferson County, Alabama; Maricopa County, Arizona; Los Angeles, San Diego, and Santa Clara counties, California; District of Columbia; Miami-Dade and Duval counties, Florida; Fulton/DeKalb counties, Georgia; Chicago, Illinois; Marion County, Indiana; Orleans Parish, Louisiana; Baltimore, Maryland; Boston, Massachusetts; Detroit, Michigan; Newark, New Jersey; New York, New York; Cuyahoga and Franklin counties, Ohio; Philadelphia County, Pennsylvania; Davidson and Shelby counties, Tennessee; Bexar, Dallas, and El Paso counties, and Houston, Texas; King County, Washington; and Milwaukee County, Wisconsin.

† For the 2003 reporting period, NIS included children born during February 2000–June 2002.

to 84.8% (95% CI = ±0.8%) in 2003. Coverage for ≥3 doses of PCV increased from 40.9% (95% CI = ±1.1%) in 2002 to 68.1% (95% CI = ±1.0%) in 2003. Coverage for ≥4 doses of PCV, reported for the first time in 2003, was 36.7% (95% CI = ±1.1%). For all other vaccines and series, coverage increased in 2003 compared with 2002 (Table 1).

In 2003, substantial differences remained in estimated vaccination coverage among states (Table 2). Estimated coverage with the 4:3:1:3:3 series[§] ranged from 94.0% in Connecticut to 67.5% in Colorado. The range in coverage among the 28 urban areas was less than that among the states. Among the 28 urban areas, the highest estimated coverage for the 4:3:1:3:3 series was 88.8% in Boston, Massachusetts, and the lowest was 69.2% in Houston, Texas.

[§] Comprises ≥4 doses of diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis (DTP/DT/DTaP) vaccine; ≥3 doses of poliovirus vaccine; ≥1 dose of measles-containing vaccine (MCV); ≥3 doses of *Haemophilus influenzae* type B vaccine (Hib); and ≥3 doses of hepatitis B vaccine (hep B).

Reported by: *L Barker, PhD, J Santoli, MD, Immunization Svcs Div; M McCauley, MTSC, Office of the Director, National Immunization Program, CDC.*

Editorial Note: The findings in this report indicate that among U.S. children aged 19–35 months, estimated coverage with recommended vaccines was greater in 2003 than in 2002 and represented all-time highs. In addition, coverage for the two most recently recommended vaccines, VAR and PCV, increased substantially. The increases in coverage reflect ongoing progress toward achieving the 2010 national health objectives for childhood vaccinations (objectives 14-22 to 14-24) (*3*). Notably, vaccine coverage for the fourth dose of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine continues to lag behind other vaccines in the 4:3:1:3:3 series, reducing the coverage percentage for the overall series.

Continued vigilance is needed to maintain high levels of coverage. Moreover, increasing coverage in areas where coverage is low remains a priority to reduce the risk for infection and ongoing transmission if disease is introduced.

TABLE 1. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages — National Immunization Survey, United States, 1999–2003

Vaccine	1999* % (95% CI††)	2000† % (95% CI)	2001§ % (95% CI)	2002¶ % (95% CI)	2003** % (95% CI)
DTP/DT/DTaP§§					
≥3 doses	95.9 (±0.4)	94.1 (±0.5)	94.3 (±0.5)	94.9 (±0.6)	96.0 (±0.5)
≥4 doses	83.8 (±0.8)	81.7 (±0.8)	82.1 (±0.8)	81.6 (±0.9)	84.8 (±0.8)
Poliovirus ≥3 doses	89.6 (±0.6)	89.5 (±0.6)	89.4 (±0.7)	90.2 (±0.7)	91.6 (±0.7)
Hib¶¶ ≥3 doses	93.5 (±0.5)	93.4 (±0.5)	93.0 (±0.6)	93.1 (±0.6)	93.9 (±0.6)
MMR* ≥1 dose**	91.5 (±0.6)	90.5 (±0.6)	91.4 (±0.6)	91.6 (±0.7)	93.0 (±0.6)
Hepatitis B ≥3 doses	88.1 (±0.7)	90.3 (±0.6)	88.9 (±0.7)	89.9 (±0.7)	92.4 (±0.6)
Varicella ≥1 dose	57.5 (±1.0)	67.8 (±0.9)	76.3 (±0.8)	80.6 (±0.9)	84.8 (±0.8)
PCV†††					
≥3 doses	—	—	—	40.9 (±1.1)	68.1 (±1.0)
≥4 doses	—	—	—	—	36.7 (±1.1)
Combined series					
4:3:1§§§	79.9 (±0.8)	77.6 (±0.9)	78.6 (±0.9)	78.5 (±1.0)	82.2 (±0.9)
4:3:1:3¶¶¶	78.4 (±0.9)	76.2 (±0.9)	77.2 (±0.9)	77.5 (±1.0)	81.3 (±0.9)
4:3:1:3:3****	73.2 (±0.9)	72.9 (±0.9)	73.7 (±0.9)	74.8 (±1.0)	79.4 (±0.9)
4:3:1:3:3:1††††	—	54.1 (±1.0)	61.3 (±1.0)	65.5 (±1.1)	72.5 (±1.0)

* Born during February 1996–June 1998.
† Born during February 1997–June 1999.
§ Born during February 1998–June 2000.
¶ Born during February 1999–June 2001.
** Born during February 2000–June 2002.
†† Confidence interval.
§§ Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis vaccine.
¶¶ *Haemophilus influenzae* type b.
*** Measles, mumps, and rubella vaccine.
††† Pneumococcal conjugate vaccine.
§§§ Comprises ≥4 doses of DTP/DT/DTaP, ≥3 doses of poliovirus vaccine, and ≥1 dose of measles-containing vaccine.
¶¶¶ 4:3:1 plus ≥3 doses of Hib vaccine.
**** 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.
†††† 4:3:1:3:3 plus ≥1 dose of varicella vaccine.

TABLE 2. Estimated vaccination coverage levels with 4:3:1*, 4:3:1:3†, 4:3:1:3:3§, and 4:3:1:3:3:1¶ series among children aged 19–35 months, by state and selected urban area — National Immunization Survey, United States, 2003

Area	4:3:1		4:3:1:3		4:3:1:3:3		4:3:1:3:3:1	
	%	(95% CI**)	%	(95% CI)	%	(95% CI)	%	(95% CI)
United States	82.2	(±0.9)	81.3	(±0.9)	79.4	(±0.9)	72.5	(±1.0)
Alabama	82.7	(±4.8)	82.2	(±4.9)	80.4	(±5.0)	79.1	(±5.0)
Jefferson County	83.7	(±5.3)	83.1	(±5.4)	80.6	(±5.6)	78.6	(±5.7)
Alaska	81.9	(±5.0)	81.4	(±5.1)	79.7	(±5.2)	72.9	(±5.7)
Arizona	78.9	(±3.9)	78.8	(±3.9)	76.9	(±4.0)	68.4	(±4.4)
Maricopa County	79.8	(±5.2)	79.8	(±5.2)	77.4	(±5.3)	69.3	(±5.8)
Arkansas	79.7	(±6.0)	79.5	(±6.0)	76.5	(±6.4)	74.5	(±6.6)
California	81.2	(±3.4)	79.6	(±3.5)	77.4	(±3.6)	75.6	(±3.7)
Los Angeles County	84.8	(±4.9)	83.5	(±5.0)	80.3	(±5.4)	79.1	(±5.5)
San Diego County	83.1	(±5.7)	81.1	(±6.1)	79.2	(±6.2)	75.2	(±6.6)
Santa Clara County	87.1	(±4.8)	84.8	(±5.1)	83.6	(±5.3)	77.3	(±5.9)
Colorado	69.6	(±6.4)	68.6	(±6.4)	67.5	(±6.4)	63.0	(±6.6)
Connecticut	95.0	(±2.7)	94.6	(±2.8)	94.0	(±2.9)	89.1	(±3.9)
Delaware	80.1	(±6.3)	79.6	(±6.3)	76.3	(±6.6)	66.1	(±7.0)
District of Columbia	80.5	(±6.3)	77.2	(±6.5)	76.2	(±6.5)	71.9	(±6.8)
Florida	83.8	(±4.3)	82.7	(±5.0)	81.0	(±5.1)	73.7	(±5.5)
Miami-Dade County	84.7	(±4.9)	83.2	(±5.1)	81.5	(±5.2)	73.1	(±5.9)
Duval County	81.9	(±6.2)	81.4	(±6.2)	80.2	(±6.3)	75.3	(±6.6)
Georgia	77.1	(±6.4)	76.6	(±6.4)	76.6	(±6.4)	74.6	(±6.5)
Fulton/DeKalb counties	77.9	(±5.7)	75.4	(±5.9)	75.3	(±5.9)	71.2	(±6.2)
Hawaii	83.3	(±4.7)	82.8	(±4.8)	82.0	(±4.9)	78.7	(±5.4)
Idaho	82.5	(±5.4)	81.6	(±5.5)	78.1	(±5.9)	61.4	(±6.8)
Illinois	84.9	(±3.9)	84.6	(±3.9)	82.9	(±4.1)	69.1	(±5.1)
Chicago	77.8	(±7.2)	76.8	(±7.2)	76.0	(±7.2)	71.3	(±7.3)
Indiana	82.0	(±5.7)	81.7	(±5.7)	79.0	(±5.9)	62.3	(±6.8)
Marion County	80.2	(±5.5)	79.2	(±5.6)	75.1	(±6.0)	65.9	(±6.3)
Iowa	84.5	(±5.0)	82.6	(±5.3)	81.1	(±5.5)	63.4	(±6.7)
Kansas	78.1	(±6.0)	77.7	(±6.0)	75.7	(±6.1)	62.8	(±6.6)
Kentucky	82.7	(±6.2)	81.2	(±6.6)	81.0	(±6.6)	78.5	(±6.7)
Louisiana	72.7	(±5.5)	72.4	(±5.6)	69.9	(±5.7)	64.7	(±5.8)
Orleans Parish	74.8	(±7.2)	74.3	(±7.2)	73.3	(±7.3)	68.4	(±7.7)
Maine	84.1	(±5.0)	81.8	(±5.2)	78.6	(±5.4)	68.6	(±6.0)
Maryland	84.6	(±5.3)	84.3	(±5.3)	81.3	(±5.8)	77.4	(±5.9)
Baltimore	81.4	(±6.1)	80.9	(±6.1)	77.4	(±6.4)	74.3	(±6.6)
Massachusetts	92.5	(±3.1)	91.7	(±3.2)	90.7	(±3.4)	82.5	(±4.8)
Boston	90.1	(±4.5)	90.1	(±4.5)	88.8	(±4.7)	85.7	(±5.2)
Michigan	83.3	(±4.7)	82.9	(±4.8)	81.5	(±4.9)	78.6	(±5.0)
Detroit	70.7	(±7.7)	70.5	(±7.7)	69.6	(±7.7)	64.1	(±8.1)
Minnesota	85.3	(±5.2)	84.4	(±5.4)	83.9	(±5.5)	70.7	(±6.9)
Mississippi	84.0	(±5.9)	84.0	(±5.9)	83.6	(±5.9)	78.2	(±6.3)
Missouri	84.9	(±4.8)	84.2	(±4.9)	83.3	(±5.0)	74.4	(±5.7)
Montana	84.9	(±4.6)	84.6	(±4.6)	80.0	(±5.3)	64.7	(±6.2)
Nebraska	82.7	(±5.6)	82.0	(±5.6)	80.4	(±5.7)	67.8	(±6.9)
Nevada	78.1	(±5.5)	78.1	(±5.5)	75.7	(±5.7)	65.5	(±6.3)
New Hampshire	88.8	(±4.1)	88.4	(±4.1)	86.5	(±4.4)	76.1	(±5.5)
New Jersey	77.0	(±5.9)	75.8	(±6.1)	75.0	(±6.1)	63.6	(±6.8)
Newark	74.4	(±6.4)	74.0	(±6.4)	72.7	(±6.5)	64.4	(±6.9)
New Mexico	77.6	(±6.5)	77.0	(±6.6)	75.2	(±6.8)	70.8	(±7.2)
New York	83.5	(±3.7)	81.9	(±3.9)	78.6	(±4.2)	73.1	(±4.5)
New York City	80.1	(±5.7)	77.2	(±6.1)	72.7	(±6.7)	69.3	(±6.8)
North Carolina	89.4	(±4.3)	88.6	(±4.4)	86.7	(±4.6)	77.3	(±5.7)
North Dakota	82.5	(±5.7)	82.5	(±5.7)	80.4	(±5.9)	63.1	(±6.7)

* Comprises ≥4 doses of diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis vaccine, ≥3 doses of poliovirus vaccine, and ≥1 dose of measles-containing vaccine.
† 4:3:1 plus ≥3 doses of *Haemophilus influenzae* type b vaccine.
§ 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.
¶ 4:3:1:3:3 plus ≥1 doses of varicella vaccine.
** Confidence interval.

The findings in this report are subject to at least three limitations. First, NIS is a telephone survey; although statistical weights adjust for nonresponse and households without telephones, some bias might remain. Second, NIS relies on provider-verified vaccination histories and assumes that coverage among children whose providers did not respond is similar to that among children whose providers responded; incomplete records and reporting could result in underestimates of coverage. Finally, although national estimates are precise, estimates for states and urban areas should be interpreted with caution (*4*).

Shortages in the supplies of several vaccines used for routine childhood vaccination began in late 2000. Most of these shortages (i.e., DTaP; measles, mumps, and rubella [MMR]; VAR; and combined tetanus and diphtheria toxoids [Td]) ended during 2002; however, a shortage of PCV continued until May 2003 (and was followed by a new PCV shortage in 2004). Although children in the 2003 cohort were eligible to receive one or more vaccines during the shortages, the data in this report do not indicate a negative impact of the vaccine shortage on vaccination coverage of DTaP or MMR at a national level. The effect of the shortage on the rate of increase in usage of VAR or PCV is unknown.

Additional analyses of NIS data are necessary to define the impact of the vaccine supply shortages. A previous analysis focused on the timeliness of vaccination with the third and fourth doses of DTaP and the first dose of MMR for children included in the 2001 and 2002 NIS (*5*). Among children vaccinated only at public clinics or who resided outside metropolitan statistical areas or in the Southern United States census region, those eligible to receive the fourth dose of DTaP during the

TABLE 2. (*Continued*) Estimated vaccination coverage levels with 4:3:1*, 4:3:1:3†, 4:3:1:3:3§, and 4:3:1:3:3:1¶ series among children aged 19–35 months, by state and selected urban area — National Immunization Survey, United States, 2003

Area	4:3:1		4:3:1:3		4:3:1:3:3		4:3:1:3:3:1	
	%	(95% CI**)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Ohio	84.4	(±4.2)	84.2	(±4.2)	82.3	(±4.3)	71.0	(±5.2)
Cuyahoga County	76.2	(±7.7)	75.1	(±7.7)	73.0	(±7.7)	65.9	(±7.8)
Franklin County	82.9	(±5.7)	82.9	(±5.7)	81.8	(±5.7)	70.7	(±6.5)
Oklahoma	73.7	(±7.0)	72.3	(±7.1)	70.5	(±7.2)	67.0	(±7.3)
Oregon	79.9	(±5.7)	79.3	(±5.8)	76.5	(±6.1)	70.3	(±6.4)
Pennsylvania	87.7	(±4.0)	86.9	(±4.1)	86.2	(±4.1)	79.1	(±4.9)
Philadelphia County	81.3	(±5.5)	80.0	(±5.6)	77.2	(±5.9)	75.2	(±6.0)
Rhode Island	88.9	(±4.7)	87.3	(±4.9)	85.2	(±5.2)	79.8	(±6.0)
South Carolina	85.5	(±5.1)	84.6	(±5.2)	84.3	(±5.2)	80.3	(±5.7)
South Dakota	83.4	(±5.6)	83.4	(±5.6)	80.9	(±5.8)	60.0	(±7.1)
Tennessee	81.1	(±4.4)	80.5	(±4.5)	78.8	(±4.6)	73.5	(±4.8)
Davidson County	83.2	(±5.4)	82.7	(±5.4)	79.6	(±5.8)	76.0	(±6.0)
Shelby County	78.6	(±5.6)	77.2	(±5.8)	76.9	(±5.8)	68.9	(±6.2)
Texas	78.1	(±3.8)	77.2	(±3.8)	74.8	(±3.9)	69.8	(±4.1)
Bexar County	79.1	(±6.1)	78.8	(±6.2)	77.3	(±6.2)	74.9	(±6.3)
City of Houston	74.8	(±5.7)	74.8	(±5.7)	69.2	(±6.2)	63.3	(±6.4)
Dallas County	75.9	(±5.9)	74.9	(±5.9)	70.2	(±6.1)	67.0	(±6.2)
El Paso County	81.6	(±5.7)	80.9	(±5.7)	77.2	(±6.1)	71.6	(±6.5)
Utah	80.4	(±5.7)	80.2	(±5.7)	78.8	(±5.9)	70.1	(±6.7)
Vermont	89.7	(±3.9)	89.5	(±3.9)	83.6	(±4.8)	65.3	(±6.2)
Virginia	85.8	(±5.2)	84.8	(±5.3)	84.0	(±5.4)	79.8	(±5.7)
Washington	81.0	(±4.3)	79.7	(±4.3)	75.3	(±4.6)	56.2	(±5.1)
King County	83.8	(±5.1)	83.1	(±5.2)	77.1	(±6.0)	61.2	(±7.0)
West Virginia	78.9	(±7.0)	77.4	(±7.2)	74.6	(±7.4)	63.2	(±7.8)
Wisconsin	83.6	(±4.3)	82.7	(±4.3)	81.2	(±4.5)	73.4	(±5.0)
Milwaukee County	82.3	(±6.0)	80.9	(±6.1)	78.9	(±6.3)	71.1	(±6.9)
Wyoming	77.2	(±5.5)	77.2	(±5.5)	75.8	(±5.6)	56.8	(±6.6)

* Comprises ≥4 doses of diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis vaccine, ≥3 doses of poliovirus vaccine, and ≥1 dose of measles-containing vaccine.
† 4:3:1 plus ≥3 doses of *Haemophilus influenzae* type b vaccine.
§ 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.
¶ 4:3:1:3:3 plus ≥1 doses of varicella vaccine.
** Confidence interval.

shortage were less likely to receive it than those who were eligible at some time other than the shortage. No adverse impact on coverage during the shortages was determined for the third dose of DTaP or the first dose of MMR. In addition, a supplementary NIS survey module is being conducted during 2004 to assess parental reports of deferral of vaccination during the shortages and receipt of recall messages from providers. Given the most recent PCV shortage, which began early in 2004 and has begun to resolve (*6–8*), and the likelihood that vaccine shortages will continue to occur (*9,10*), further analyses will be necessary to develop strategies to manage future vaccine supply shortages.

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West Nile Virus Activity — United States, July 21–27, 2004

During July 21–27, a total of 83 cases of human West Nile virus (WNV) illness were reported from 13 states (Alabama, Arizona, Arkansas, California, Colorado, Florida, Illinois, Iowa, Missouri, New Mexico, Ohio, Pennsylvania, and South Dakota).

During 2004, a total of 265 cases of human West Nile virus illness have been reported through ArboNET from a total of 18 states (Table, Figure). Of these, 161 (61%) cases were reported from Arizona. A total of 143 (56%) of the 265 cases occurred in males; the median age of patients was 50 years (range: 1–85 years). Illness onset ranged from April 23 to July 23; six cases were fatal.

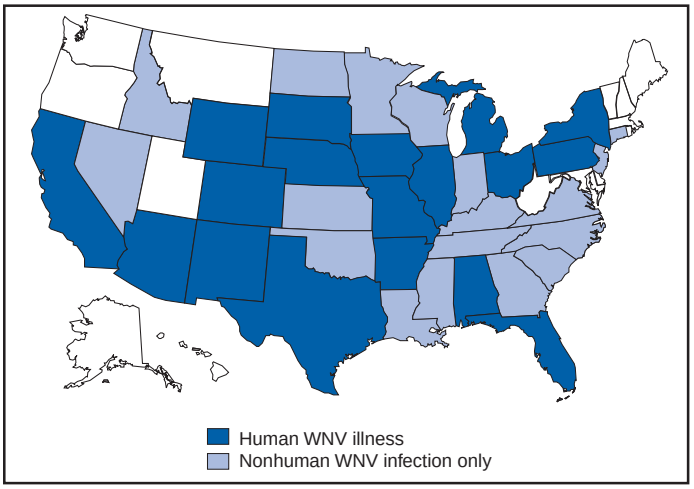
A total of 28 presumptive West Nile viremic blood donors (PVDs) have been reported in 2004 to ArboNET. Of these,

TABLE. Number of human cases of West Nile virus (WNV) illness, by state — United States, 2004*

State	Neuroinvasive disease†	West Nile fever§	Other clinical/ unspecified¶	Total reported to CDC**	Deaths
Alabama	0	0	1	**1**	0
Arizona	92	24	45	**161**	2
Arkansas	1	2	0	**3**	0
California	18	19	5	**42**	1
Colorado	5	25	0	**30**	0
Florida	4	2	0	**6**	0
Illinois	0	0	1	**1**	0
Iowa	1	2	0	**3**	1
Michigan	1	0	0	**1**	0
Missouri	1	0	0	**1**	0
Nebraska	0	1	0	**1**	0
New Mexico	1	4	0	**5**	0
New York	1	0	0	**1**	0
Ohio	1	0	0	**1**	1
Pennsylvania	1	0	0	**1**	0
South Dakota	1	3	0	**4**	0
Texas	2	0	0	**2**	1
Wyoming	0	1	0	**1**	0
Total	**130**	**83**	**52**	**265**	**6**

* As of July 27, 2004.
† Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).
§ Cases with no evidence of neuroinvasion.
¶ Illnesses for which sufficient clinical information was not provided.
** Total number of human cases of WNV illness reported to ArboNet by state and local health departments.

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*



* As of 3 a.m., Mountain Standard Time, July 27, 2004.

26 (93%) were reported from Arizona, and one each from Iowa and New Mexico. Of the 28 PVDs, two persons aged 66 and 69 years subsequently had neuroinvasive illness, and five persons (median age: 52 years [range: 22–63 years]) subsequently had West Nile fever.

In addition, during 2004, a total of 1,513 dead corvids and 162 other dead birds with WNV infection have been reported from 32 states. WNV infections in horses have been reported from 16 states (Alabama, Arizona, California, Florida, Idaho, Kentucky, Mississippi, Missouri, Nevada, North Carolina, Oklahoma, South Dakota, Tennessee, Texas, Virginia, and Wyoming) and in a dog from New Mexico. WNV seroconversions have been reported in 209 sentinel chicken flocks from four states (Arizona, California, Florida, and Louisiana) and in a wild hatchling bird from Ohio. Three seropositive sentinel horses were reported from Puerto Rico. A total of 1,030 WNV-positive mosquito pools have been reported from 18 states (Arizona, Arkansas, California, Georgia, Illinois, Indiana, Louisiana, Michigan, Missouri, Nevada, New Jersey, New Mexico, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, and Virginia).

Additional information about national WNV activity is available from CDC at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm and at http://westnilemaps.usgs.gov.

Notice to Readers

Inadvertent Intradermal Administration of Tetanus Toxoid–Containing Vaccines Instead of Tuberculosis Skin Tests

CDC and the Food and Drug Administration (FDA) have been notified about the potential for inadvertent administration of tetanus toxoid–containing vaccines (TTCVs) instead of tuberculin purified protein derivative (PPD) (Tubersol®, Aventis-Pasteur, Swiftwater, Pennsylvania; Aplisol®, Parkedale Pharmaceuticals, Rochester, Michigan) used for tuberculosis skin tests (TSTs). The Vaccine Adverse Event Reporting System (VAERS), a passive surveillance system jointly operated by CDC and FDA (*1*), detected clusters of medication errors in at least two states. These findings, along with another previously reported investigation involving the same error (*2*), suggest the need for health-care providers to take additional steps to minimize the risk for inadvertent intradermal injections of TTCVs.

In April 2004, five reports of medication error involving tetanus toxoid (TT) from a health-care provider were identified. Patients were vaccinated on three different dates; all experienced local reactions without complications. Another cluster reported to VAERS in June 2003 involved an undisclosed number of patients; a health-care provider confused tetanus and diphtheria toxoids (Td) vaccine for adult use (adsorbed) with PPD and administered Td intradermally. Patients with adverse reactions to these administrations had skin reactions interpreted as positive TSTs, which resulted in treatment with isoniazid (INH). Review of the lot numbers on products thought to be PPD revealed they were Td.

trust•wor•thy: *adj*

('trəst-"wər-thē) 1 : worthy of belief

2 : capable of being depended upon;

see also *MMWR*.

know what matters.

MMWR™

Affected patients were identified and retested with PPD; all TSTs were negative. INH was discontinued, and no adverse reactions were observed.

As of March 2004, approximately 100 patients had been identified in reports of TTCV administration instead of PPD. A total of 21 states have reported both clusters and single cases. Vaccines substituted mistakenly for PPD include Td (n = 13 reports), TT (n = 12), and diphtheria and tetanus toxoids, (DT) adsorbed (n = five). For reports of Td, TT, and DT, products involved included those manufactured by Aventis-Pasteur and Wyeth (Collegeville, Pennsylvania) and vaccines from other unspecified manufacturers. CDC and FDA have initiated a full review of adverse events caused by inadvertent administration of vaccines and PPD products reported to VAERS and the FDA MedWatch Program. A preliminary review indicates that multiple vaccines other than TTCVs have been involved.

Similarities in packaging of PPD and TTCVs might have contributed to the medication errors (*3,4*). Both products require refrigeration and often are stored side by side. Lack of availability of Td in single-dose syringes, resulting in provider purchase of multiple-dose vials, was cited as a contributing factor to medication error in one cluster. Conversely, at least eight reports have been documented of inadvertent substitution for vaccine products, resulting in intramuscular administration of PPD (FDA, unpublished data, 2004).

Health-care providers should consider ways to prevent vaccine misadministration. As more vaccines and combination products become available, the potential for medication errors might increase. Possible measures to prevent misadministration should include pharmacy dispensing of vaccines when feasible, physical separation of products, careful visual inspection and reading of labels, preparation of PPD for patient use only at time of testing, and improved record keeping of lot numbers of vaccines and other injectable products. Prevention of such errors through barcode scanning technology is the goal of a recent FDA rule requiring individual drug packages to have identifying barcodes (*5*). For health-care facilities that possess such technology, package scanning could help prevent errors made during pharmacy dispensing of products or during vaccine or PPD administration. In addition, the *Product Identification Guide for Routine Vaccines* is a helpful resource for distinguishing commonly used vaccine products; the guide can be ordered from the California Department of Health Services, telephone 619-594-5933. Adverse events associated with inadvertent vaccine administration can be reported to VAERS at http://www.vaers.org or by telephone, 800-822-7967. Adverse events after PPD administration can be reported to the FDA MedWatch program at http://www.fda.gov/medwatch or by telephone, 800-332-1088.

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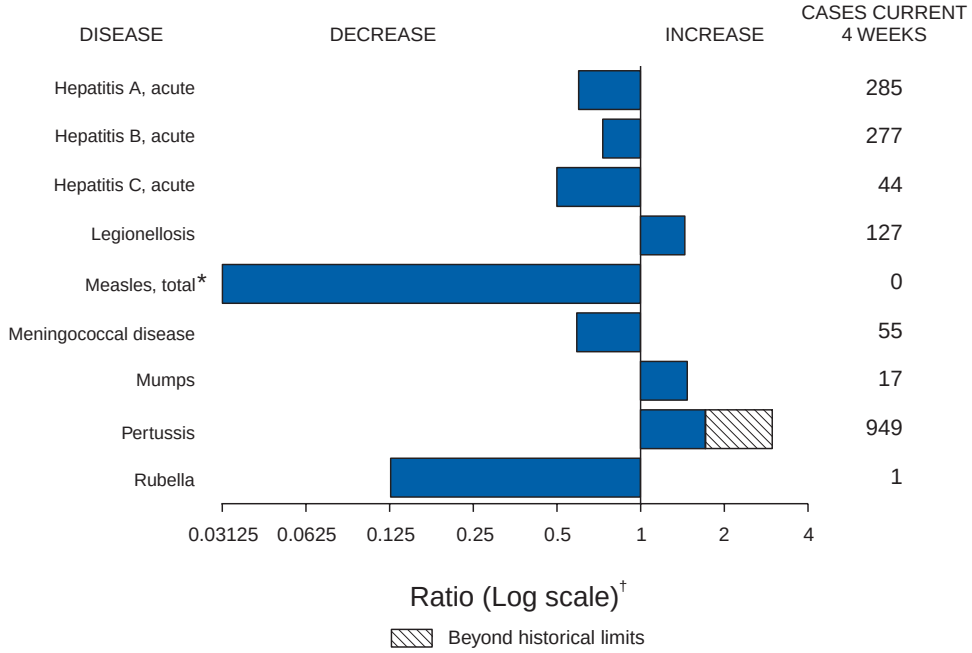
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals July 24, 2004, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 29 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 July 24, 2004 (29th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	59	70
Botulism:	-	-	HIV infection, pediatric†¶	88	126
foodborne	7	8	Measles, total	15**	34††
infant	40	34	Mumps	115	122
other (wound & unspecified)	6	12	Plague	-	1
Brucellosis†	61	48	Poliomyelitis, paralytic	-	-
Chancroid	18	35	Psittacosis†	4	6
Cholera	2	1	Q fever†	30	45
Cyclosporiasis†	100	39	Rabies, human	3	-
Diphtheria	-	-	Rubella	14	6
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	86	106	SARS-associated coronavirus disease† §§	-	7
human monocytic (HME)†	75	87	Smallpox† ¶¶	-	NA
human, other and unspecified	3	19	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† ¶¶	4	NA
California serogroup viral† §	5	20	Vancomycin-resistant (VRSA)† ¶¶	1	NA
eastern equine† §	-	6	Streptococcal toxic-shock syndrome†	62	118
Powassan† §	-	-	Tetanus	6	5
St. Louis† §	1	3	Toxic-shock syndrome	58	75
western equine† §	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	41	49	Tularemia†	37	35
Hantavirus pulmonary syndrome†	10	14	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated 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 — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update June 27, 2004.
** Of 15 cases reported, eight were indigenous, and seven were imported from another country.
†† Of 34 cases reported, 22 were indigenous, and 12 were imported from another country.
§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
¶¶ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile§	
	Cum. 2004¶	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	20,281	22,888	471,782	472,421	3,129	1,749	1,292	1,176	129	142
NEW ENGLAND	727	784	16,270	15,049	-	-	73	81	-	-
Maine	10	35	1,087	1,074	N	N	13	6	-	-
N.H.	26	18	890	860	-	-	16	10	-	-
Vt.	13	6	567	547	-	-	10	15	-	-
Mass.	235	326	7,531	5,878	-	-	23	38	-	-
R.I.	70	63	1,821	1,650	-	-	2	9	-	-
Conn.	373	336	4,374	5,040	N	N	9	3	-	-
MID. ATLANTIC	4,432	5,065	62,404	58,499	-	-	199	161	2	8
Upstate N.Y.	591	618	12,220	10,544	N	N	49	40	-	-
N.Y. City	2,341	2,315	17,941	19,200	-	-	47	56	1	-
N.J.	788	929	9,363	8,714	-	-	11	9	-	-
Pa.	712	1,203	22,880	20,041	N	N	92	56	1	8
E.N. CENTRAL	1,724	2,373	79,169	85,449	7	3	308	302	2	7
Ohio	237	419	19,305	23,124	-	-	86	41	1	4
Ind.	219	305	9,969	9,463	N	N	39	31	-	3
Ill.	852	1,117	20,573	26,547	-	-	13	43	-	-
Mich.	326	417	20,410	16,911	7	3	71	52	1	-
Wis.	90	115	8,912	9,404	-	-	99	135	-	-
W.N. CENTRAL	407	410	28,291	27,017	4	2	185	127	2	22
Minn.	95	77	5,261	5,921	N	N	60	47	-	2
Iowa	28	45	3,136	3,102	N	N	36	25	-	4
Mo.	181	203	10,687	9,810	3	1	31	10	1	-
N. Dak.	12	1	875	856	N	N	8	10	-	1
S. Dak.	6	6	1,369	1,362	-	-	23	21	1	6
Nebr.**	18	30	2,895	2,193	1	1	14	6	-	8
Kans.	67	48	4,068	3,773	N	N	13	8	-	1
S. ATLANTIC	6,151	6,435	90,552	88,543	-	3	234	159	4	5
Del.	83	133	1,558	1,684	N	N	-	3	-	-
Md.	690	729	10,212	8,994	-	3	10	8	-	-
D.C.	354	656	1,716	1,811	-	-	6	3	-	-
Va.	336	507	12,286	10,494	-	-	25	14	-	-
W. Va.	31	49	1,546	1,382	N	N	3	3	-	-
N.C.	344	632	15,666	14,177	N	N	41	19	-	-
S.C.**	376	435	8,716	7,716	-	-	9	2	-	1
Ga.	894	953	15,391	19,164	-	-	78	60	-	-
Fla.	3,043	2,341	23,461	23,121	N	N	62	47	4	4
E.S. CENTRAL	958	982	29,548	30,574	2	1	54	62	-	8
Ky.	107	83	3,109	4,490	N	N	21	13	-	-
Tenn.**	391	437	12,213	10,926	N	N	12	23	-	-
Ala.	233	249	5,847	8,164	-	-	12	23	-	5
Miss.	227	213	8,379	6,994	2	1	9	3	-	3
W.S. CENTRAL	2,544	2,352	60,759	59,017	2	-	39	31	3	59
Ark.	124	86	4,263	4,226	1	-	12	5	1	-
La.	576	400	12,666	11,938	1	-	-	2	-	15
Okla.	90	109	6,349	5,913	N	N	12	6	-	3
Tex.	1,754	1,757	37,481	36,940	-	-	15	18	2	41
MOUNTAIN	729	887	24,134	27,730	1,981	1,162	66	54	98	33
Mont.	5	10	1,215	1,132	N	N	13	12	-	-
Idaho	9	16	1,580	1,333	N	N	7	8	-	-
Wyo.	7	5	598	543	-	1	2	2	-	2
Colo.	137	211	5,076	7,002	N	N	27	11	5	30
N. Mex.	107	62	2,586	4,124	9	5	3	3	1	1
Ariz.	284	392	8,915	8,272	1,920	1,132	11	3	92	-
Utah	34	39	1,922	2,059	18	4	2	9	-	-
Nev.	146	152	2,242	3,265	34	20	1	6	-	-
PACIFIC	2,609	3,600	80,655	80,543	1,133	578	134	199	18	-
Wash.	214	247	9,779	8,630	N	N	14	25	-	-
Oreg.	133	145	4,497	4,196	-	-	17	25	-	-
Calif.	2,201	3,136	62,862	62,643	1,133	578	102	149	18	-
Alaska	15	13	1,988	2,131	-	-	-	-	-	-
Hawaii	46	59	1,529	2,943	-	-	1	-	-	-
Guam	2	5	-	385	-	-	-	-	-	-
P.R.	209	620	1,374	1,318	N	N	N	N	-	-
V.I.	6	17	143	198	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

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

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

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

§ Updated 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 — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update June 27, 2004.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	941	886	104	106	81	62	8,204	8,732	163,592	177,472
NEW ENGLAND	56	49	27	22	13	4	716	634	3,826	3,712
Maine	2	5	-	-	-	-	68	69	135	120
N.H.	10	10	5	2	-	-	18	22	64	60
Vt.	5	4	-	-	1	-	70	46	47	44
Mass.	26	16	4	7	12	4	322	310	1,747	1,419
R.I.	5	1	1	-	-	-	54	55	488	495
Conn.	8	13	17	13	-	-	184	132	1,345	1,574
MID. ATLANTIC	114	112	15	10	14	14	1,859	1,828	19,936	22,377
Upstate N.Y.	53	41	8	4	4	6	622	450	4,056	4,048
N.Y. City	23	3	-	-	-	-	559	638	5,817	7,369
N.J.	14	17	3	1	4	-	180	267	3,581	4,751
Pa.	24	51	4	5	6	8	498	473	6,482	6,209
E.N. CENTRAL	185	226	20	18	10	9	996	1,559	32,299	37,473
Ohio	47	43	6	10	10	9	401	439	9,640	12,006
Ind.	15	39	-	-	-	-	-	-	3,451	3,555
Ill.	32	41	-	1	-	-	84	496	8,752	11,601
Mich.	43	35	4	-	-	-	335	347	8,169	7,118
Wis.	48	68	10	7	-	-	176	277	2,287	3,193
W.N. CENTRAL	202	143	17	17	16	9	959	853	8,897	9,164
Minn.	38	49	7	8	2	-	336	307	1,778	1,544
Iowa	55	22	-	-	-	-	135	118	556	734
Mo.	46	39	10	2	5	1	248	246	4,388	4,678
N. Dak.	5	5	-	3	7	2	17	22	63	37
S. Dak.	13	9	-	3	-	-	34	23	150	107
Nebr.	30	8	-	1	-	-	68	65	568	691
Kans.	15	11	-	-	2	6	121	72	1,394	1,373
S. ATLANTIC	78	65	15	25	19	15	1,336	1,308	40,285	43,481
Del.	1	2	N	N	N	N	26	19	501	648
Md.	17	3	1	1	3	1	56	58	4,442	4,208
D.C.	1	1	-	-	-	-	35	20	1,249	1,350
Va.	14	18	6	5	-	-	222	187	4,913	4,876
W. Va.	1	2	-	-	-	-	17	20	486	470
N.C.	-	-	-	-	9	14	N	N	8,305	8,036
S.C.	4	-	-	-	-	-	28	66	4,119	4,428
Ga.	16	15	4	3	-	-	392	417	6,599	9,348
Fla.	24	24	4	16	7	-	560	521	9,671	10,117
E.S. CENTRAL	41	38	1	-	8	4	167	178	12,601	14,875
Ky.	15	11	1	-	5	4	N	N	1,358	1,916
Tenn.	12	15	-	-	3	-	77	80	4,446	4,401
Ala.	8	9	-	-	-	-	90	98	3,588	5,056
Miss.	6	3	-	-	-	-	-	-	3,209	3,502
W.S. CENTRAL	44	38	1	3	1	3	137	151	22,656	24,149
Ark.	8	5	-	-	-	-	62	82	2,063	2,291
La.	2	1	-	-	-	-	19	8	5,685	6,719
Okla.	10	10	-	-	-	-	56	61	2,662	2,302
Tex.	24	22	1	3	1	3	-	-	12,246	12,837
MOUNTAIN	89	100	7	9	-	4	704	722	5,235	5,871
Mont.	10	4	-	-	-	-	24	38	38	57
Idaho	22	25	3	6	-	-	85	81	43	39
Wyo.	1	2	1	-	-	-	11	11	28	26
Colo.	18	27	1	1	-	4	239	206	1,537	1,610
N. Mex.	4	3	-	2	-	-	40	27	313	675
Ariz.	10	16	N	N	N	N	102	134	1,974	2,175
Utah	15	17	1	-	-	-	151	157	291	189
Nev.	9	6	1	-	-	-	52	68	1,011	1,100
PACIFIC	132	115	1	2	-	-	1,330	1,499	17,857	16,370
Wash.	45	30	-	1	-	-	165	139	1,465	1,505
Oreg.	17	19	1	1	-	-	218	193	600	566
Calif.	62	65	-	-	-	-	870	1,076	15,109	13,393
Alaska	1	1	-	-	-	-	33	45	315	302
Hawaii	7	-	-	-	-	-	44	46	368	604
Guam	N	N	-	-	-	-	-	-	-	40
P.R.	-	1	-	-	-	-	13	116	111	149
V.I.	-	-	-	-	-	-	-	-	49	49
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,100	1,082	9	15	53	72	110	124	2,949	3,462
NEW ENGLAND	99	72	1	1	5	5	3	3	491	157
Maine	7	2	-	-	-	-	-	1	9	7
N.H.	13	8	-	-	2	-	-	-	11	9
Vt.	5	6	-	-	-	-	1	-	8	4
Mass.	44	41	1	1	-	5	2	1	422	77
R.I.	3	4	-	-	-	-	-	1	10	11
Conn.	27	11	-	-	3	-	-	-	31	49
MID. ATLANTIC	235	227	-	1	3	2	28	29	334	737
Upstate N.Y.	81	78	-	1	3	2	4	7	48	62
N.Y. City	47	42	-	-	-	-	9	7	127	268
N.J.	42	48	-	-	-	-	3	7	62	117
Pa.	65	59	-	-	-	-	12	8	97	290
E.N. CENTRAL	183	178	-	2	6	3	27	34	266	351
Ohio	69	43	-	-	2	-	11	7	32	68
Ind.	33	28	-	-	4	-	1	2	15	35
Ill.	41	69	-	-	-	-	9	18	103	101
Mich.	14	13	-	2	-	3	5	1	93	114
Wis.	26	25	-	-	-	-	1	6	23	33
W.N. CENTRAL	64	71	2	-	3	6	4	8	114	102
Minn.	27	25	1	-	3	6	-	1	28	32
Iowa	1	-	1	-	-	-	-	-	30	16
Mo.	21	31	-	-	-	-	2	7	36	31
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	5	1	-	-	-	-	-	-	7	7
Kans.	7	11	-	-	-	-	2	-	10	16
S. ATLANTIC	264	219	-	-	16	8	20	14	562	739
Del.	8	-	-	-	-	-	2	-	5	4
Md.	43	51	-	-	4	4	1	-	74	74
D.C.	-	-	-	-	-	-	-	-	4	24
Va.	23	30	-	-	-	-	1	5	53	46
W. Va.	10	8	-	-	-	-	3	-	2	11
N.C.	40	17	-	-	5	1	1	1	44	38
S.C.	2	4	-	-	-	-	-	1	21	23
Ga.	70	42	-	-	-	-	12	4	201	300
Fla.	68	67	-	-	7	3	-	3	158	219
E.S. CENTRAL	38	47	-	1	-	2	8	4	83	98
Ky.	3	3	-	-	-	1	-	-	13	17
Tenn.	24	27	-	-	-	1	6	3	46	56
Ala.	11	16	-	1	-	-	2	1	6	12
Miss.	-	1	-	-	-	-	-	-	18	13
W.S. CENTRAL	46	51	1	1	5	7	1	4	223	344
Ark.	1	5	-	-	-	1	-	-	38	19
La.	8	17	-	-	-	2	1	4	15	32
Okla.	36	27	-	-	5	4	-	-	17	6
Tex.	1	2	1	1	-	-	-	-	153	287
MOUNTAIN	128	117	3	6	15	19	13	12	263	263
Mont.	-	-	-	-	-	-	-	-	4	2
Idaho	5	3	-	-	-	-	2	1	12	9
Wyo.	-	1	-	-	-	-	-	-	3	1
Colo.	28	22	-	-	-	-	3	4	26	39
N. Mex.	25	15	-	-	5	4	3	1	9	11
Ariz.	49	61	-	6	7	8	1	4	168	149
Utah	10	9	2	-	1	4	2	2	34	17
Nev.	11	6	1	-	2	3	2	-	7	35
PACIFIC	43	100	2	3	-	20	6	16	613	671
Wash.	3	6	2	-	-	4	1	1	34	35
Oreg.	29	25	-	-	-	-	2	2	42	36
Calif.	3	44	-	3	-	16	2	8	517	588
Alaska	4	18	-	-	-	-	1	5	4	7
Hawaii	4	7	-	-	-	-	-	-	16	5
Guam	-	-	-	-	-	-	-	-	-	2
P.R.	-	-	-	-	-	-	-	-	11	50
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	3,328	3,775	634	597	742	890	283	312	6,250	8,415
NEW ENGLAND	185	179	4	3	15	37	11	20	650	1,391
Maine	1	1	-	-	-	1	3	2	53	46
N.H.	23	11	-	-	1	5	1	2	52	27
Vt.	2	2	1	3	1	1	-	-	17	11
Mass.	99	125	3	-	4	20	2	11	189	861
R.I.	3	4	-	-	2	2	1	-	80	121
Conn.	57	36	U	U	7	8	4	5	259	325
MID. ATLANTIC	607	448	68	73	197	208	60	55	4,650	5,704
Upstate N.Y.	53	47	7	9	40	46	22	14	1,580	1,505
N.Y. City	57	137	-	-	16	21	7	12	-	122
N.J.	329	114	-	-	38	27	11	10	1,131	1,788
Pa.	168	150	61	64	103	114	20	19	1,939	2,289
E.N. CENTRAL	285	281	51	89	184	183	48	40	176	519
Ohio	75	80	3	6	99	96	19	10	47	26
Ind.	8	17	2	3	14	11	12	2	3	8
Ill.	33	37	9	14	10	21	-	12	-	41
Mich.	146	119	37	62	59	41	15	11	12	-
Wis.	23	28	-	4	2	14	2	5	114	444
W.N. CENTRAL	222	174	207	127	17	40	6	8	136	104
Minn.	27	21	8	4	1	3	2	2	70	60
Iowa	10	4	-	-	3	6	1	-	12	15
Mo.	151	122	199	122	11	19	2	3	45	25
N. Dak.	3	-	-	-	1	1	-	-	-	-
S. Dak.	-	2	-	-	1	1	-	-	-	-
Nebr.	16	15	-	1	-	2	1	3	6	2
Kans.	15	10	-	-	-	8	-	-	3	2
S. ATLANTIC	1,025	1,027	103	94	175	247	46	61	538	555
Del.	22	6	-	-	4	8	N	N	53	102
Md.	86	64	13	6	34	61	5	9	339	352
D.C.	13	1	1	-	5	1	-	-	2	4
Va.	117	86	13	3	18	46	9	7	42	31
W. Va.	6	10	17	1	4	8	1	3	2	5
N.C.	107	95	7	6	18	16	12	10	57	35
S.C.	54	89	7	23	1	5	-	2	5	1
Ga.	330	331	7	7	24	20	7	17	7	9
Fla.	290	345	38	48	67	82	12	13	31	16
E.S. CENTRAL	225	248	55	47	39	59	17	12	26	29
Ky.	31	41	17	8	15	23	4	2	11	6
Tenn.	96	100	21	10	15	19	8	2	9	8
Ala.	36	53	1	5	8	13	3	6	1	1
Miss.	62	54	16	24	1	4	2	2	5	14
W.S. CENTRAL	107	622	79	108	34	41	20	35	14	66
Ark.	31	50	1	3	-	2	1	1	2	-
La.	34	82	44	66	3	1	2	1	2	6
Okla.	22	37	2	2	2	4	-	1	-	-
Tex.	20	453	32	37	29	34	17	32	10	60
MOUNTAIN	283	328	29	21	43	39	14	18	12	7
Mont.	2	8	2	1	1	2	-	1	-	-
Idaho	6	4	-	1	6	3	1	1	2	2
Wyo.	7	22	-	-	4	2	-	-	2	-
Colo.	26	49	5	5	5	7	5	6	1	-
N. Mex.	10	24	7	-	-	2	-	2	-	1
Ariz.	158	155	4	4	10	9	-	5	1	-
Utah	28	22	2	-	14	10	1	2	6	1
Nev.	46	44	9	10	3	4	7	1	-	3
PACIFIC	389	468	38	35	38	36	61	63	48	40
Wash.	31	36	12	11	6	4	6	4	3	-
Oreg.	67	73	10	6	N	N	5	2	19	9
Calif.	275	344	13	17	32	32	48	54	26	30
Alaska	13	3	-	-	-	-	-	-	-	1
Hawaii	3	12	3	1	-	-	2	3	N	N
Guam	-	4	-	3	-	-	-	-	-	-
P.R.	20	75	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	607	581	854	1,058	5,672	3,960	2,739	3,892	474	296
NEW ENGLAND	46	16	43	50	702	433	295	272	11	3
Maine	5	1	8	5	2	9	29	27	-	-
N.H.	1	3	3	3	26	26	11	13	-	-
Vt.	3	-	2	-	42	38	10	18	-	-
Mass.	22	12	24	31	604	334	119	97	9	3
R.I.	2	-	1	2	16	7	16	35	1	-
Conn.	13	-	5	9	12	19	110	82	1	-
MID. ATLANTIC	138	142	105	133	1,335	391	263	479	35	20
Upstate N.Y.	23	29	26	32	971	163	230	195	1	-
N.Y. City	63	70	18	31	76	55	4	5	5	7
N.J.	21	24	22	18	99	71	-	62	10	10
Pa.	31	19	39	52	189	102	29	217	19	3
E.N. CENTRAL	53	60	118	173	1,160	339	39	53	18	8
Ohio	18	11	46	45	266	120	15	19	10	4
Ind.	3	1	16	30	53	30	5	6	5	-
Ill.	9	28	12	47	177	30	11	7	-	2
Mich.	15	16	34	29	69	41	8	17	3	2
Wis.	8	4	10	22	595	118	-	4	-	-
W.N. CENTRAL	42	26	60	79	560	181	274	388	57	23
Minn.	18	13	16	18	94	59	37	16	-	1
Iowa	2	3	11	16	36	44	40	51	-	2
Mo.	10	3	18	30	183	43	20	7	47	17
N. Dak.	3	1	1	1	207	3	39	37	-	-
S. Dak.	1	1	2	1	9	3	10	83	3	1
Nebr.	2	-	2	6	3	3	53	69	6	2
Kans.	6	5	10	7	28	26	75	125	1	-
S. ATLANTIC	157	140	161	182	298	279	958	1,580	198	181
Del.	3	-	13	8	5	2	9	23	-	-
Md.	35	34	8	19	60	40	50	231	25	47
D.C.	8	7	4	3	2	-	-	-	-	-
Va.	15	16	10	18	85	59	258	308	9	6
W. Va.	-	4	5	3	5	6	34	50	1	4
N.C.	9	9	24	21	49	75	361	443	130	74
S.C.	7	3	12	14	28	35	85	129	9	10
Ga.	26	33	10	19	9	20	159	208	12	36
Fla.	54	34	75	77	55	42	2	188	12	4
E.S. CENTRAL	19	13	34	50	69	86	69	123	56	49
Ky.	1	1	4	10	15	20	15	21	-	-
Tenn.	3	4	10	12	36	44	23	83	25	28
Ala.	11	5	10	14	12	14	28	18	16	6
Miss.	4	3	10	14	6	8	3	1	15	15
W.S. CENTRAL	56	75	82	119	289	299	675	793	86	8
Ark.	6	4	12	10	9	21	31	25	56	-
La.	2	3	23	31	7	7	-	1	3	-
Okla.	2	3	5	10	17	37	71	139	27	2
Tex.	46	65	42	68	256	234	573	628	-	6
MOUNTAIN	27	17	41	54	578	556	73	82	9	4
Mont.	-	-	3	3	18	1	13	11	3	1
Idaho	1	1	6	6	20	35	-	3	1	1
Wyo.	-	1	2	2	11	119	-	1	1	2
Colo.	8	11	10	12	292	194	11	13	-	-
N. Mex.	1	-	5	7	65	36	2	5	1	-
Ariz.	8	2	8	20	120	98	45	40	1	-
Utah	5	1	4	-	42	54	2	5	2	-
Nev.	4	1	3	4	10	19	-	4	-	-
PACIFIC	69	92	210	218	681	1,396	93	122	4	-
Wash.	6	13	20	18	365	313	-	-	-	-
Oreg.	11	7	47	34	255	273	2	5	2	-
Calif.	51	69	138	152	44	802	83	112	2	-
Alaska	-	-	1	4	8	1	8	5	-	-
Hawaii	1	3	4	10	9	7	-	-	-	-
Guam	-	-	-	-	-	1	-	-	-	-
P.R.	-	-	4	7	2	1	31	43	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	17,287	19,234	5,658	12,588	2,956	3,897	1,350	1,329	370	458
NEW ENGLAND	895	1,006	133	170	135	352	15	70	7	6
Maine	37	62	2	6	6	20	2	-	1	-
N.H.	51	79	5	5	15	23	-	-	N	N
Vt.	28	35	2	5	8	16	7	6	1	3
Mass.	533	597	83	115	89	155	N	N	N	N
R.I.	48	40	9	4	17	5	6	10	5	3
Conn.	198	193	32	35	-	133	-	54	U	U
MID. ATLANTIC	2,571	2,285	647	1,322	485	688	99	88	72	67
Upstate N.Y.	560	471	308	178	165	261	46	46	50	49
N.Y. City	608	620	185	207	71	93	U	U	U	U
N.J.	330	394	98	222	94	137	-	-	2	2
Pa.	1,073	800	56	715	155	197	53	42	20	16
E.N. CENTRAL	2,012	2,850	383	1,084	606	954	322	305	107	200
Ohio	647	724	85	199	165	227	232	201	56	71
Ind.	212	273	87	77	70	88	90	104	22	18
Ill.	321	1,068	87	583	133	240	-	-	-	77
Mich.	432	389	61	151	206	276	N	N	N	N
Wis.	400	396	63	74	32	123	N	N	29	34
W.N. CENTRAL	1,237	1,094	202	393	205	231	11	11	52	52
Minn.	282	267	25	50	106	110	-	-	37	36
Iowa	249	184	40	26	N	N	N	N	N	N
Mo.	351	349	90	203	42	50	8	7	7	2
N. Dak.	19	23	2	6	9	11	-	3	2	4
S. Dak.	54	46	7	9	9	18	3	1	-	-
Nebr.	82	77	10	63	10	22	-	-	4	5
Kans.	200	148	28	36	29	20	N	N	2	5
S. ATLANTIC	4,192	4,322	1,505	3,921	582	647	698	697	26	12
Del.	32	48	3	144	3	6	4	1	N	N
Md.	426	402	69	310	120	161	-	5	15	-
D.C.	25	15	24	32	4	5	4	-	3	4
Va.	504	440	73	218	49	80	N	N	N	N
W. Va.	100	63	3	-	17	29	80	48	8	8
N.C.	491	533	153	515	85	75	N	N	U	U
S.C.	282	224	204	251	35	31	65	102	N	N
Ga.	661	777	348	811	120	125	160	156	N	N
Fla.	1,671	1,820	628	1,640	149	135	385	385	N	N
E.S. CENTRAL	1,037	1,232	336	555	138	133	80	98	-	-
Ky.	167	211	42	61	46	35	21	12	N	N
Tenn.	221	360	121	188	92	98	59	86	N	N
Ala.	319	285	141	187	-	-	-	-	N	N
Miss.	330	376	32	119	-	-	-	-	-	-
W.S. CENTRAL	1,499	2,784	1,310	3,444	167	178	36	52	72	71
Ark.	245	290	36	56	12	5	6	17	7	4
La.	274	391	170	271	2	1	30	35	12	14
Okla.	184	196	268	495	43	57	N	N	30	34
Tex.	796	1,907	836	2,622	110	115	N	N	23	19
MOUNTAIN	1,194	1,076	401	515	340	335	20	4	34	50
Mont.	77	50	4	2	-	1	-	-	-	-
Idaho	91	99	6	12	6	14	N	N	N	N
Wyo.	27	50	1	1	6	2	6	3	-	-
Colo.	286	268	67	93	89	90	-	-	30	38
N. Mex.	113	106	59	107	58	84	5	-	-	8
Ariz.	386	314	221	245	151	121	N	N	N	N
Utah	122	104	22	27	28	22	7	1	4	4
Nev.	92	85	21	28	2	1	2	-	-	-
PACIFIC	2,650	2,585	741	1,184	298	379	69	4	-	-
Wash.	251	299	58	96	34	41	-	-	N	N
Oreg.	227	221	37	55	N	N	N	N	N	N
Calif.	1,937	1,908	618	1,010	210	271	N	N	N	N
Alaska	37	50	4	4	-	-	-	-	N	N
Hawaii	198	107	24	19	54	67	69	4	-	-
Guam	-	28	-	23	-	-	-	-	-	-
P.R.	84	348	1	6	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 24, 2004, and July 19, 2003 (29th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	3,957	3,884	188	254	5,214	6,856	126	178	9,209	10,361
NEW ENGLAND	108	121	1	-	196	222	14	17	587	2,151
Maine	2	6	-	-	-	11	-	-	179	638
N.H.	3	14	-	-	9	10	-	1	-	-
Vt.	-	-	-	-	-	5	-	-	408	489
Mass.	70	77	-	-	122	107	12	9	-	107
R.I.	14	12	-	-	17	28	1	2	-	3
Conn.	19	12	1	-	48	61	1	5	-	914
MID. ATLANTIC	565	451	31	40	1,079	1,192	32	31	58	13
Upstate N.Y.	47	20	2	6	131	133	3	4	-	-
N.Y. City	307	260	10	22	547	641	10	18	-	-
N.J.	88	85	19	12	216	224	9	8	-	-
Pa.	123	86	-	-	185	194	10	1	58	13
E.N. CENTRAL	430	544	34	43	631	598	6	21	3,884	3,746
Ohio	124	116	1	2	108	104	2	-	1,016	924
Ind.	32	28	8	9	72	71	-	4	-	-
Ill.	146	223	3	16	279	275	-	10	-	-
Mich.	112	165	22	16	130	113	3	7	2,521	2,254
Wis.	16	12	-	-	42	35	1	-	347	568
W.N. CENTRAL	79	95	2	4	223	256	4	4	119	39
Minn.	14	32	-	-	84	93	3	2	-	-
Iowa	5	7	-	-	19	14	-	1	N	N
Mo.	40	32	1	4	61	70	1	1	2	-
N. Dak.	-	-	-	-	3	-	-	-	74	39
S. Dak.	-	1	-	-	5	16	-	-	43	-
Nebr.	4	3	-	-	15	11	-	-	-	-
Kans.	16	20	1	-	36	52	-	-	-	-
S. ATLANTIC	1,050	1,028	24	48	1,055	1,264	23	32	1,514	1,504
Del.	3	4	1	-	-	-	-	-	4	16
Md.	193	157	3	8	141	126	5	8	-	-
D.C.	46	31	1	-	40	-	-	-	17	18
Va.	60	54	2	1	117	129	2	11	378	422
W. Va.	2	1	-	-	12	11	-	-	890	882
N.C.	98	93	5	10	139	167	3	5	N	N
S.C.	63	63	1	4	112	85	-	-	225	166
Ga.	160	276	1	12	11	285	9	3	-	-
Fla.	425	349	10	13	483	461	4	5	-	-
E.S. CENTRAL	216	180	14	10	326	376	4	3	-	-
Ky.	25	23	1	1	54	67	2	-	-	-
Tenn.	76	74	7	2	127	122	2	1	-	-
Ala.	93	66	4	5	112	129	-	2	-	-
Miss.	22	17	2	2	33	58	-	-	-	-
W.S. CENTRAL	641	453	28	43	376	1,046	7	12	1,484	2,553
Ark.	24	29	-	1	63	54	-	-	-	-
La.	118	59	-	1	-	-	-	-	42	9
Okla.	19	30	2	1	80	75	-	-	-	-
Tex.	480	335	26	40	233	917	7	12	1,442	2,544
MOUNTAIN	189	170	32	24	253	211	5	4	1,563	355
Mont.	-	-	-	-	4	-	-	-	-	-
Idaho	13	4	2	1	-	5	-	-	-	-
Wyo.	1	-	-	-	2	2	-	-	22	37
Colo.	19	23	-	3	57	51	1	3	1,174	-
N. Mex.	26	34	1	4	14	29	-	-	67	-
Ariz.	114	99	29	16	117	85	2	1	-	-
Utah	3	2	-	-	23	18	1	-	300	318
Nev.	13	8	-	-	36	21	1	-	-	-
PACIFIC	679	842	22	42	1,075	1,691	31	54	-	-
Wash.	55	40	-	-	129	134	2	2	-	-
Oreg.	18	28	-	-	40	62	1	2	-	-
Calif.	603	767	22	42	828	1,404	22	50	-	-
Alaska	-	1	-	-	17	34	-	-	-	-
Hawaii	3	6	-	-	61	57	6	-	-	-
Guam	-	1	-	-	-	38	-	-	-	90
P.R.	66	114	3	8	14	49	-	-	156	362
V.I.	4	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending July 24, 2004 (29th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	509	352	112	23	14	8	45
Boston, Mass.	128	82	31	6	5	4	13
Bridgeport, Conn.	36	24	10	2	-	-	1
Cambridge, Mass.	16	12	3	1	-	-	1
Fall River, Mass.	30	23	7	-	-	-	2
Hartford, Conn.	50	37	6	3	1	3	8
Lowell, Mass.	19	11	7	-	1	-	3
Lynn, Mass.	7	5	2	-	-	-	1
New Bedford, Mass.	31	26	5	-	-	-	4
New Haven, Conn.	22	14	3	4	-	1	4
Providence, R.I.	44	32	9	3	-	-	1
Somerville, Mass.	1	1	-	-	-	-	-
Springfield, Mass.	38	25	7	3	3	-	3
Waterbury, Conn.	26	18	6	1	1	-	2
Worcester, Mass.	61	42	16	-	3	-	2
MID. ATLANTIC	2,042	1,337	461	146	55	39	91
Albany, N.Y.	41	29	9	2	-	1	-
Allentown, Pa.	21	17	4	-	-	-	1
Buffalo, N.Y.	74	55	12	7	-	-	6
Camden, N.J.	29	14	8	2	3	2	-
Elizabeth, N.J.	17	10	6	1	-	-	-
Erie, Pa.	46	28	16	2	-	-	1
Jersey City, N.J.	25	16	6	3	-	-	-
New York City, N.Y.	1,006	677	218	65	24	18	43
Newark, N.J.	46	21	13	6	4	2	2
Paterson, N.J.	14	8	4	1	1	-	-
Philadelphia, Pa.	394	223	102	41	16	12	21
Pittsburgh, Pa.§	16	12	4	-	-	-	1
Reading, Pa.	20	14	3	1	1	1	2
Rochester, N.Y.	111	83	19	6	2	1	7
Schenectady, N.Y.	16	12	3	-	1	-	1
Scranton, Pa.	22	18	3	-	1	-	1
Syracuse, N.Y.	67	52	9	2	2	2	3
Trenton, N.J.	41	24	13	4	-	-	1
Utica, N.Y.	16	9	6	1	-	-	-
Yonkers, N.Y.	20	15	3	2	-	-	1
E.N. CENTRAL	2,095	1,388	456	159	48	43	118
Akron, Ohio	45	28	12	3	1	1	4
Canton, Ohio	27	20	6	-	1	-	4
Chicago, Ill.	332	200	90	34	4	3	17
Cincinnati, Ohio	55	41	9	1	3	1	3
Cleveland, Ohio	227	170	40	10	5	2	6
Columbus, Ohio	205	141	38	13	7	6	17
Dayton, Ohio	117	93	17	5	1	1	8
Detroit, Mich.	179	98	49	21	5	6	14
Evansville, Ind.	49	36	9	4	-	-	3
Fort Wayne, Ind.	78	53	15	7	1	2	6
Gary, Ind.	10	4	3	1	2	-	-
Grand Rapids, Mich.	72	48	15	4	1	4	4
Indianapolis, Ind.	203	116	58	15	7	7	9
Lansing, Mich.	46	32	8	5	1	-	2
Milwaukee, Wis.	132	72	38	13	3	6	7
Peoria, Ill.	47	34	10	2	1	-	2
Rockford, Ill.	51	32	11	5	3	-	4
South Bend, Ind.	31	27	3	1	-	-	-
Toledo, Ohio	104	75	15	11	1	2	4
Youngstown, Ohio	85	68	10	4	1	2	4
W.N. CENTRAL	599	394	135	38	22	10	37
Des Moines, Iowa	55	43	9	2	-	1	5
Duluth, Minn.	17	12	3	1	-	1	-
Kansas City, Kans.	30	19	7	2	1	1	2
Kansas City, Mo.	91	56	21	7	5	2	7
Lincoln, Nebr.	49	37	7	3	1	1	4
Minneapolis, Minn.	70	39	20	6	3	2	2
Omaha, Nebr.	78	49	18	8	3	-	7
St. Louis, Mo.	83	52	22	5	3	1	6
St. Paul, Minn.	63	41	14	4	3	1	1
Wichita, Kans.	63	46	14	-	3	-	3
S. ATLANTIC	1,182	726	293	106	30	27	55
Atlanta, Ga.	139	80	37	17	3	2	3
Baltimore, Md.	161	88	45	19	7	2	13
Charlotte, N.C.	97	63	21	7	3	3	3
Jacksonville, Fla.	154	97	28	22	4	3	2
Miami, Fla.	99	64	24	7	2	2	11
Norfolk, Va.	58	34	15	4	2	3	6
Richmond, Va.	55	29	18	3	1	4	1
Savannah, Ga.	50	32	10	3	4	1	3
St. Petersburg, Fla.	63	46	11	4	2	-	3
Tampa, Fla.	191	123	53	8	1	6	8
Washington, D.C.	102	59	30	12	-	1	2
Wilmington, Del.	13	11	1	-	1	-	-
E.S. CENTRAL	824	502	217	64	24	14	47
Birmingham, Ala.	190	124	39	12	8	4	19
Chattanooga, Tenn.	92	61	19	7	2	3	4
Knoxville, Tenn.	122	76	34	8	4	-	2
Lexington, Ky.	34	21	10	3	-	-	-
Memphis, Tenn.	132	71	48	10	2	1	10
Mobile, Ala.	83	54	25	3	1	-	1
Montgomery, Ala.	23	13	8	2	-	-	3
Nashville, Tenn.	148	82	34	19	7	6	8
W.S. CENTRAL	1,585	985	383	112	61	44	85
Austin, Tex.	78	48	16	8	3	3	6
Baton Rouge, La.	12	6	1	2	1	2	-
Corpus Christi, Tex.	72	49	15	2	4	2	3
Dallas, Tex.	245	149	54	24	7	11	13
El Paso, Tex.	142	96	34	5	5	2	7
Ft. Worth, Tex.	138	86	29	12	8	3	5
Houston, Tex.	364	219	91	26	16	12	22
Little Rock, Ark.	82	43	26	5	5	3	-
New Orleans, La.	48	23	16	7	2	-	-
San Antonio, Tex.	275	196	57	12	6	4	14
Shreveport, La.	43	24	15	1	1	2	4
Tulsa, Okla.	86	46	29	8	3	-	11
MOUNTAIN	968	624	214	71	33	25	53
Albuquerque, N.M.	158	99	34	18	6	1	4
Boise, Idaho	35	28	2	1	2	2	6
Colo. Springs, Colo.	47	32	9	1	4	1	2
Denver, Colo.	102	59	30	9	-	4	10
Las Vegas, Nev.	259	167	57	20	10	5	10
Ogden, Utah	22	16	4	1	-	1	2
Phoenix, Ariz.	71	39	21	5	4	1	2
Pueblo, Colo.	37	30	6	1	-	-	4
Salt Lake City, Utah	80	51	17	3	3	6	4
Tucson, Ariz.	157	103	34	12	4	4	9
PACIFIC	1,482	987	312	101	52	29	119
Berkeley, Calif.	13	8	3	-	-	2	1
Fresno, Calif.	101	70	17	10	3	1	3
Glendale, Calif.	12	8	3	1	-	-	2
Honolulu, Hawaii	61	40	17	2	-	2	4
Long Beach, Calif.	74	41	23	4	4	2	9
Los Angeles, Calif.	196	138	34	13	9	2	27
Pasadena, Calif.	23	14	3	4	1	1	4
Portland, Oreg.	98	62	25	6	3	2	3
Sacramento, Calif.	203	144	38	12	5	4	11
San Diego, Calif.	155	106	32	7	5	4	10
San Francisco, Calif.	76	46	22	6	1	1	9
San Jose, Calif.	191	130	33	14	9	5	19
Santa Cruz, Calif.	27	18	6	2	1	-	2
Seattle, Wash.	116	66	32	10	6	2	9
Spokane, Wash.	44	30	9	4	1	-	3
Tacoma, Wash.	92	66	15	6	4	1	3
TOTAL	11,286¶	7,295	2,583	820	339	239	650

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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