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Source of Firearms Used by Students in School-Associated Violent Deaths — United States, 1992–1999

During July 1, 1992–June 30, 1999, a total of 323 school-associated violent death events occurred in the United States, resulting in 358 deaths (*1,2*). To guide prevention efforts, CDC examined school-associated firearm violent death events committed by students in elementary and secondary schools in the United States and determined the sources of the firearms used in these events. The findings indicate that, among the incidents for which data are available, the majority of the firearms used in these events were obtained from perpetrators' homes or from friends or relatives. The safe storage of firearms is critically important and should be continued. In addition, other strategies that might prevent firearm-related injuries and deaths among students, such as safety and design changes for firearms, should be evaluated.

A school-associated violent death event was defined as a firearm-related homicide or suicide in which the homicide perpetrator or the suicide victim was an elementary or secondary school student and the fatal injury occurred during July 1, 1992–June 30, 1999, either 1) on the campus of a functioning public or private elementary or secondary school in the United States, 2) while the victim was on the way to or from regular sessions at such a school, or 3) while the victim was attending or traveling to or from an official school-sponsored event. Cases of school-associated violent deaths were identified through a systematic search of two computerized newspaper and broadcast media databases (Lexis-Nexis and Dialog). Data on the types of weapons used and their sources were collected through interviews with school and police officials and by reviewing official police reports. A perpetrator was defined as a student who committed either a homicide or suicide. Firearms used by perpetrators who committed a homicide and then killed themselves (i.e., a homicide-suicide event) were included in analyses of firearms used by homicide perpetrators.

During July 1, 1992–June 30, 1999, a total of 218 student perpetrators were involved directly in a school-associated homicide or suicide; 123 (56.4%) of these persons used at least one firearm at the time of the event. Among the student perpetrators who were carrying a firearm at the time of the event, 33 (26.8%) committed suicide, 85 (69.1%) perpetrated a homicide, and five (4.1%) perpetrated a homicide-suicide. The majority of these student perpetrators were male (n = 115 [93.5%]). The median age of student perpetrators was 16 years (range: 10–21 years). Of the 90 homicide perpetrators (homicide and homicide-suicide combined), 14 (15.6%) participated in a multiple-victim homicide event, and 76 (84.4%) participated in a single-victim homicide event. One student committed suicide as part of a multiple-victim suicide event.

Five student perpetrators were carrying two firearms each, resulting in a total of 128 firearms used in these events. Of the 128 firearms, 48 (37.5%) came from the perpetrator's home, and 30 (23.4%) came from a friend or relative of the perpetrator; 26 (76.5%) of the firearms used by a student to commit suicide came from the home of the student, and 48 (51.0%) of the firearms used in homicide events came from the home (n = 22 [23.4%]) or from a friend or relative (n = 26 [27.6%]) of the homicide perpetrator (Table 1). The source of 29 (22.7%) firearms used by student perpetrators was unknown.

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Centers for Disease Control and Prevention
Julie L. Gerberding, M.D., M.P.H.
Director

David W. Fleming, M.D.
Deputy Director for Public Health Science

Dixie E. Snider, Jr., M.D., M.P.H.
Associate Director for Science

Epidemiology Program Office
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Director

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Firearms used by students who committed a school-associated suicide were approximately 11 times more likely (odds ratio [OR] = 11.5; 95% confidence interval [CI] = 4.4–30.1) to come from their home than firearms used by students who committed homicide (Table 2). Multiple-victim events were more likely to involve firearms from the home than single-victim events (OR = 3.7; 95% CI = 1.2–11.6). Firearms from the home were used more often by female perpetrators than male perpetrators (OR = 5.3; 95% CI = 1.0–27.0) and by non-Hispanic white perpetrators than perpetrators from other racial/ethnic groups (OR = 11.5; 95% CI = 4.6–28.7). Perpetrators from two-parent families were four times more likely to use a firearm obtained from their home than perpetrators from single-parent/caretaker families (OR = 4.0; 95% CI = 1.9–8.6). In addition, firearms used by perpetrators with no criminal history (OR = 3.8; 95% CI = 1.7–8.6) and perpetrators with no previous gang involvement (OR = 18.9; 95% CI = 4.3–83.3) were more likely to come from home than the firearms used by perpetrators who were members of a gang or had a criminal history.

Reported by: *A Reza, MD, Emory Univ School of Medicine, Atlanta, Georgia. W Modzeleski, MS, Office of Safe and Drug-Free Schools, U.S. Dept of Education. T Feucht, PhD, National Institute of Justice, U.S. Dept of Justice. M Anderson, MD, TR Simon, PhD, Div of Violence Prevention, National Center for Injury Prevention and Control; L Barrios, DrPH, Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: The findings in this report indicate that the firearms used in school-associated homicides and suicides committed by student perpetrators came primarily from perpetrators' homes or from friends or relatives. Students who committed a school-associated suicide or a multiple-victim homicide were more likely to have obtained firearms from their homes than from any other source.

Prevention strategies to reduce firearm homicides and suicides among children and youth typically involve both behavior-oriented and product-oriented approaches. Behavior-oriented approaches (e.g., firearm-safety counseling and child-access prevention laws for parents and firearm-avoidance and firearm-safety programs for children) rarely have been evaluated, and those that have been evaluated have shown limited effectiveness in reducing firearm violence (*3*).

One behavior-oriented approach in reducing firearm violence is firearm-safety counseling by pediatric health-care providers. Pediatric providers have been encouraged to counsel parents on the risks for having firearms in the home and the need to store them securely (*4*). Typical recommendations include storing firearms unloaded and locked with a trigger lock or in a locked firearm safe or portable locked handgun box. However, counseling alone might not be effective in

TABLE 1. Number and percentage of firearms used by student perpetrators in all school-associated, firearm-related events and firearm-related suicide and homicide events, by source of firearm — United States, 1992–1999*

Source	Firearms used in suicide events		Firearms used in homicide events		Total	
	No.	(%)	No.	(%)	No.	(%)
Home of perpetrator	26	(76.5)	22	(23.4)	**48**	**(37.5)**
Friend/relative of perpetrator	4	(11.8)	26	(27.6)	**30**	**(23.4)**
Purchased	0	(0.0)	9	(9.6)	**9**	**(7.0)**
Stolen	2	(5.9)	5	(5.3)	**7**	**(5.5)**
Victim	—	—	2	(2.1)	**2**	**(1.6)**
Other	0	(0.0)	3	(3.2)	**3**	**(2.3)**
Unknown	2	(5.9)	27	(28.7)	**29**	**(22.7)**
Total	**34**		**94**		**128**	

* Firearms used by perpetrators who committed a homicide and then killed themselves as part of a homicide-suicide event were included in analyses of firearms used by homicide perpetrators.

TABLE 2. Number and percentage of firearms used by student perpetrators of school-associated homicides and suicides that involved a firearm from home, by selected characteristics — United States, 1992–1999*

Characteristic	Firearm from home		OR†	(95% CI§)
	No.	(%)		
Type of death				
Suicide	26	(78.8)	11.5	(4.4 – 30.1)
Homicide	22	(24.4)	Referent	—
Type of event				
Multiple victim	10	(66.7)	3.7	(1.2 – 11.6)
Single victim	38	(35.2)	Referent	—
Type of firearm				
Long-gun	12	(52.2)	1.8	(0.7 – 4.4)
Handgun	36	(38.3)	Referent	—
Sex				
Female	6	(75.0)	5.3	(1.0 – 27.0)
Male	42	(36.5)	Referent	—
Age group (yrs)				
<15	9	(45.0)	1.3	(0.5 – 3.5)
≥15	39	(37.9)	Referent	—
Race/Ethnicity				
White, non-Hispanic	28	(70.0)	11.5	(4.6 – 28.7)
Other	12	(16.9)	Referent	—
Family structure				
Two-parent	32	(56.1)	4.0	(1.9 – 8.6)
Single-parent/caretaker	16	(24.2)	Referent	—
Criminal history				
Never charged with crime	36	(52.2)	3.8	(1.7 – 8.6)
Charged with crime	11	(22.4)	Referent	—
Gang membership				
Not gang member	46	(53.5)	18.9	(4.3 – 83.3)
Gang member	2	(5.7)	Referent	—
Alcohol/drug use				
No known alcohol/drug use	34	(45.9)	1.6	(0.7 – 3.8)
Regular alcohol/drug use	11	(34.4)	Referent	—
Intoxicated at time of death				
Intoxicated	6	(66.7)	3.2	(0.8 – 13.6)
Not intoxicated	41	(38.3)	Referent	—

* Firearms used by perpetrators who committed a homicide and then killed themselves as part of a homicide-suicide event were included in analyses of firearms used by homicide perpetrators.
† Odds ratio.
§ Confidence interval.

preventing firearm homicides and suicides among children and youth (*5,6*). This might be because male parents, who are more likely to own firearms and know how they are stored than female parents, are less likely to bring their children to the pediatrician's office (*7,8*). Even when they are aware of a firearm in the home, parents with teenaged children are less likely to store firearms safely than parents with younger children, despite the fact that older children are at greater risk for firearm death (*9*).

The results of this study also indicate that it is not enough for parents to eliminate unsupervised access to firearms in their home; approximately 25% of the firearms used in school-associated homicides were obtained from friends or relatives. Parents should consider discussing access to firearms and safe-storage practices with their relatives and the parents of their children's friends (*4*).

The findings in this report are subject to at least four limitations. First, because events were identified from news media reports, any event not reported in the media was excluded. Second, this report includes events associated with schools; other homicide and suicide events involving school-aged perpetrators might have different firearm-acquisition patterns. Third, the results reported for homicide events might not reflect the true distribution of sources because the source of the firearms in approximately 25% of these events is unknown. Finally, among the student perpetrators who obtained their firearms from home or from friends or relatives, how the students gained access to these firearms is unknown.

The safe storage of firearms is critically important and should be continued. In addition to safe storage of firearms, changing the design of firearms might prevent firearm injuries among teenagers and younger children by making firearms more difficult to use unintentionally or intentionally if stolen or obtained illegally (*10*). Many safety features for firearms (e.g., grip safety mechanisms, loaded chamber indicators, and

magazine disconnect devices) are intended to reduce unintentional firearm injuries. Emerging technologies (e.g., personalization of handguns) are designed to prevent unauthorized users of any age from firing a firearm and might reduce access to firearms by adolescents (*10*). Although changing product design has benefitted child-poisoning prevention efforts and motor-vehicle safety programs, the impact of product-oriented approaches in reducing youth firearm violence is unknown and requires evaluation (*10*). However, the findings in this report can assist parents, school personnel, and the community at large in developing and implementing prevention strategies to decrease school-associated firearm injuries.

References

1. Kachur SP, Stennies GM, Powell KE, et al. School-associated violent deaths in the United States, 1992–1994. JAMA 1996;275:1729–33.
2. Anderson M, Kaufman J, Simon TR, et al. School-associated violent deaths in the United States, 1994–1999. JAMA 2001;286:2695–702.
3. Hardy MS. Behavior-oriented approaches to reducing youth gun violence. Future Child 2002;12:100–17.
4. American Academy of Pediatrics. Keep your family safe from firearm injury. Available at http://www.aap.org/advocacy/d1family.htm.
5. Oatis PJ, Fenn Buderer NM, Cummings P, Fleitz R. Pediatric practice based evaluation of the Steps to Prevent Firearm Injury Program. Inj Prev 1999;5:48–52.
6. Grossman DC, Cummings P, Koepsell TD, et al. Firearm safety counseling in primary care pediatrics: a randomized, controlled trial. Pediatrics 2000;106:22–6.
7. Nelson DE, Powell K, Johnson CJ, Mercy J, Grant-Worley JA. Household firearm storage practices: do responses differ by whether or not individuals ever use firearms? Am J Prev Med 1999;16:298–302.
8. Ludwig J, Cook PJ, Smith TW. The gender gap in reporting household gun ownership. Am J Public Health 1998;88:1715–8.
9. Schuster MA, Franke TM, Bastian AM, Sor S, Halfon N. Firearm storage patterns in U.S. homes with children. Am J Public Health 2000;90:588–94.
10. Teret SP, Culross PL. Product-oriented approaches to reducing youth gun violence. Future Child 2002;12:118–31.

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Progress Toward Poliomyelitis Eradication — India, 2002

Since the World Health Assembly resolved in May 1988 to eradicate poliomyelitis, the estimated global incidence of polio has decreased >99%, and three World Health Organization (WHO) regions (Americas, Western Pacific, and European) have been certified as polio-free (*1*). In 1995, India began accelerating polio eradication activities (*2–4*). By 2001, poliovirus circulation had been limited largely to the two northern states of Uttar Pradesh (UP) and Bihar, with 268 cases reported nationwide. However, in 2002, a major regional resurgence of polio occurred. As of January 25, 2003, a total of 1,556 cases were detected nationwide, of which 1,337 (86%) were in UP and Bihar. This report summarizes the

status of polio eradication activities in India during 2002, analyzes the factors contributing to the resurgence, and describes the actions being taken to reduce poliovirus transmission.

Acute Flaccid Paralysis Surveillance

Acute flaccid paralysis (AFP) surveillance in India is facilitated by 203 trained surveillance medical officers who assist local health authorities in defined areas. Since 2000, India has exceeded the WHO-established AFP surveillance quality targets (i.e., a nonpolio AFP rate ≥1 per 100,000 population aged <15 years and adequate stool specimens* taken from ≥80% of persons with AFP) (Table). However, during 2002, nonpolio AFP rates were <1 per 100,000 population in five small states (Andaman and Nicobar islands, Arunachal Pradesh, Manipur, Nagaland, and Sikkim), and stool specimen collection rates were inadequate (i.e., <80%) in seven states (Andaman and Nicobar islands, Arunachal Pradesh, Bihar, Chhattisgarh, Delhi, Rajasthan, and UP). The nonpolio enterovirus isolation rate (target: ≥10%), a marker of laboratory performance and the ability to keep stool specimens refrigerated or frozen from collection to arrival at the laboratory, ranged from 11% to 26% in all nine polio laboratories in the national network.

Wild Poliovirus Incidence

During 2002, a total of 1,556 wild poliovirus cases were reported in India, a substantial increase from the 268 cases reported in 2001 (Table). Of these 1,556 cases, 1,445 (93%) were wild poliovirus type 1 (P1), 108 (7%) were wild poliovirus type 3 (P3), and three (<1%) were mixtures of P1 and P3. UP accounted for 1,218 (79%) cases, with 119 (7%) in Bihar and the remainder in other states. Cases were reported from a total of 155 (27%) of 584 districts nationwide, compared with 63 (11%) districts in 2001 (Figure 1). Wild poliovirus was detected in 65 (96%) of 68 districts in UP and in 29 (78%) of 37 districts in Bihar. P3 circulation was confined mostly to western UP, and the majority of cases occurring in eastern and central UP and in other states were P1.

During 2001–2002, the number of circulating major genetic lineages of wild poliovirus remained constant for P1 (n = three) and for P3 (n = four). Further analysis demonstrated that all lineages circulating in India during 2002 were derived from strains that circulated in UP during 2000–2001.

Vaccination Coverage

During 2001, approximately 70% of infants aged <1 year received ≥3 doses of oral poliovirus vaccine (OPV) through routine nationwide vaccination (Ministry of Health and Family Welfare, unpublished data, 2002). Substantial variations were found in routine coverage with 3 doses of OPV by state, ranging from 21% in Bihar to 97% in Kerala; routine coverage in UP was estimated to be 41% (United Nations Children's Fund [UNICEF], unpublished data, 2001).

Since 1995, biannual national immunization days (NIDs)† that use fixed vaccination posts to administer OPV have been conducted to supplement routine vaccination. During 1999, supplementary immunization activities (SIAs) were intensified with the addition of house-to-house vaccination following an initial day of fixed-site activities. Two NIDs were conducted during December 2001 and January 2002, covering approximately 156 million and 163 million children aged <5 years, respectively. In addition, during September and November 2002, subnational immunization days (SNIDs)§ were implemented in UP, Bihar, Delhi, and Haryana and in selected areas of West Bengal, Jharkhand, Gujarat, Madhya Pradesh, and Maharashtra, covering approximately 61 million

*Two specimens collected ≥24 hours apart within 14 days of paralysis onset and shipped properly to the laboratory.

†Nationwide mass campaigns during a short period (days to weeks) in which 2 doses of OPV are administered to all children (usually aged <5 years), regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

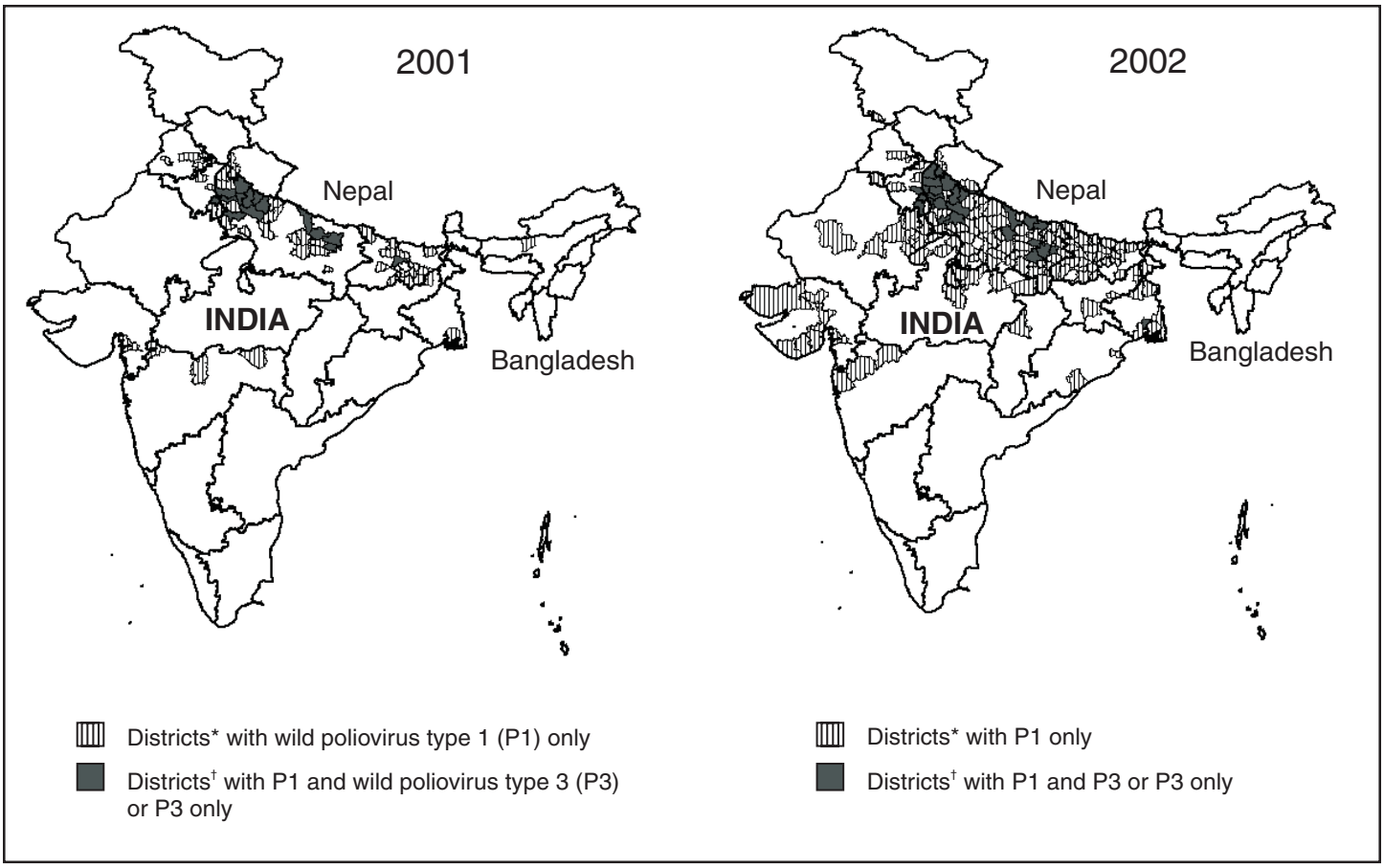
§Mass campaigns same as NIDs but limited to parts of a country.

TABLE. Number of reported cases of acute flaccid paralysis (AFP), nonpolio AFP rates, adequate stool specimens, and confirmed poliomyelitis cases, by location — India, 2002*

Location	No. AFP cases reported		Nonpolio AFP rate†		% of persons with AFP with adequate specimens§		No. laboratory-confirmed wild poliovirus cases	
	2001	2002	2001	2002	2001	2002	2001	2002
India	7,470	9,674	1.8	1.8	84	82	268	1,556
Uttar Pradesh (UP)	1,858	3,502	2.2	2.6	80	79	216	1,218
Western UP	*1,038*	*1,729*	*2.8*	*2.8*	*76*	*77*	*189*	*647*
Eastern/Central UP	*820*	*1,773*	*1.9*	*2.4*	*84*	*83*	*27*	*571*
Bihar	710	867	2.0	1.8	81	76	27	119

*As of January 25, 2003.
†Per 100,000 population aged <15 years.
§Two stool specimens collected ≥24 hours apart within 14 days of paralysis onset and shipped properly to the laboratory.

FIGURE 1. Districts with wild poliovirus, by type — India, 2001–2002



* Number of districts with P1 only was 48 in 2001 and 128 in 2002.
† Number of districts with P1 and P3 was 12 in 2001 and 27 in 2002; number of districts with P3 only was three in 2001 and none in 2002.

and 60 million children aged <5 years, respectively. The number of large-scale NIDs/SNIDs conducted in India decreased from six during the 1999–2000 low poliovirus transmission season (winter months) to four during the 2000–2001 low season and three during the 2001–2002 low season (Figure 2).

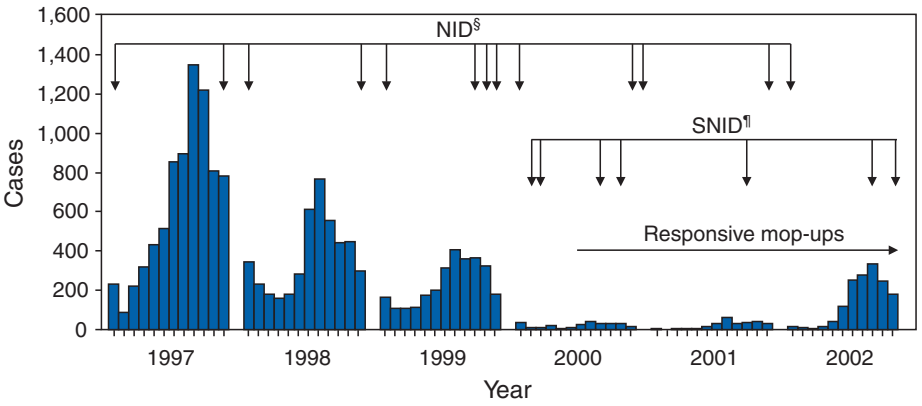
During 2002, a total of 62 mop-up vaccination campaigns were conducted in specific areas in response to the detection of wild poliovirus, covering approximately 38 million children aged <5 years. During March and April 2002, two additional large rounds of house-to-house vaccination were conducted in high-risk areas of three states, covering approximately 8 million and 9 million children aged <5 years, respectively.

Vaccination coverage data from AFP cases that were not caused by poliovirus suggest a deterioration in OPV coverage in the general population of the majority of states with increased polio incidence in 2002, particularly in UP. In western UP, the proportion of patients aged <5 years with nonpolio AFP who had ≤3 OPV doses (routine or supplemental) was 13% in 2000 and 10% in 2001, but increased to 19% in 2002. In eastern and central UP, the proportion of nonpolio AFP patients aged <5 years with ≤3 OPV doses increased from 9% in 2001 to 33% in 2002.

Reported by: *Ministry of Health and Family Welfare; National Polio Surveillance Project; Vaccines and Biologicals Dept, World Health Organization, Regional Office for South-East Asia, New Delhi, India. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Global Immunization Div, National Immunization Program, CDC.*

Editorial Note: India, the only remaining country in the South-East Asia Region with ongoing indigenous wild poliovirus transmission, reported a major resurgence of polio in 2002. Surveillance data indicate that UP is the primary area in India with continuing poliovirus transmission. The main reason for continued transmission is insufficient OPV coverage through routine vaccination and SIAs.

FIGURE 2. Number of cases* of poliomyelitis, by month and year — India, January 1997–November 2002†



* Adjusted for surveillance sensitivity of 10% before June 1997; per nonpolio AFP rate after June 1997.
† As of January 25, 2003.
§ National immunization day.
¶ Subnational immunization day.

The decline in OPV coverage in critical areas during 2002 had at least four primary causes. First, during 1999–2002, the number of NIDs/SNIDs decreased. Second, no NIDs or SNIDs were conducted during January–September 2002, an interval that permitted the accumulation of a large susceptible cohort of newborns. Third, the geographic extent of SIA implementation decreased. Although some smaller-scale SIAs ("responsive mopping-up" activities) were conducted in selected districts where cases occurred during early 2002, the majority of districts in eastern and central UP were not targeted, leaving this area at high risk. Finally, a substantial number of children were missed during SIA rounds. SIA monitoring data in western UP during June–August 2002 indicated that house-to-house teams failed to vaccinate children in ≤15% of houses in some districts. This suggests that hundreds of thousands of children were missed in areas where high population density, a very large birth cohort, and poor sanitation favor poliovirus transmission. One major factor contributing to poor SIA quality in UP was inadequate engagement and involvement of the general community, particularly members of minority groups.

Additional SIAs are planned for 2003, and major steps to improve SIA quality are underway. During January and February 2003, India had two NID rounds, targeting 164 million children in each. Four SNID rounds are planned in April, June, September, and November, targeting approximately 95 million children in four high-risk northern states (i.e., UP, Bihar, Haryana, and Delhi). These SNID rounds will be followed by two NID rounds in January and February 2004. Monitoring of SIA quality is being enhanced through new vaccinator data collection forms and standardized independent observer checklists that identify general programmatic areas of weakness and specific districts and blocks that show deficiencies in SIA quality. AFP surveillance reviews are being planned. Finally, the state government, WHO, and UNICEF are providing increased support through additional personnel and funding.

The 2002 outbreak in India represented a setback for the national and global polio initiative. However, appropriate steps are being taken to improve monitoring and SIA quality and to correct identified problems. In addition, the natural immunity from the outbreak will provide an opportunity to maximize the impact of SIAs in 2003. Finally, the outbreak alerted health authorities to the importance of avoiding complacency. To eradicate polio in India, national and state governments and major international partners must work together effectively. Conducting high-quality SIAs in a timely manner is essential in the final phase of the polio eradication campaign.

References

1. CDC. Progress toward global eradication of poliomyelitis, 2001. MMWR 2002;51:253–6.
2. CDC. Progress toward poliomyelitis eradication—India, 1998. MMWR 1998;47:778–81.
3. CDC. Progress toward poliomyelitis eradication—South-East Asia, January 2000–June 2001. MMWR 2001;50:738–42,751.
4. CDC. Progress toward poliomyelitis eradication—India, Bangladesh, and Nepal, January 2001–June 2002. MMWR 2002;51:831–3.

Vaccination Coverage Among Children Enrolled in Head Start Programs, Licensed Child Care Facilities, and Entering School — United States, 2000–01 School Year

The implementation of state and local requirements for vaccination before entry to Head Start programs, licensed child care facilities, and school has resulted in high vaccination levels among preschool and school children (*1,2*). One of the national health objectives for 2010 is to maintain ≥95% vaccination coverage among children attending licensed child care centers and kindergarten through postsecondary school (objective 12-23) (*3*). National estimates of vaccination coverage among children in Head Start programs, licensed child

care facilities, and those entering school have been published each year since 1997 on the basis of reports from federally funded immunization programs (IPs) in the 50 states, five cities, eight territories, and the District of Columbia (*4*). This report summarizes data reported by states, cities, and the District of Columbia for the 2000–01 school year. Although vaccination coverage for 2000–01 appears similar to that for previous years (*4*), the number of programs reporting and the completeness of the reports are lower than in previous years and do not permit precise estimation of coverage at the national level. IPs use school data to identify undervaccinated children enrolled in Head Start programs, licensed child care facilities, and those entering school; evaluate the success of prevention programs targeting these children; and document the proportion of children whose parents claim exemptions from one or more vaccines. Plans are ongoing to assist IPs in applying successful strategies for collecting, reporting, and increasing the precision of coverage estimates for these populations.

Methods of assessing vaccination coverage differ among the 56 IPs, in part because state and local laws determine which vaccines and doses are required and because sampling and data abstraction methods vary. IPs used a standard one-page form to report the proportion (2.9 to 100% for Head Start and child care, 0.9 to 100% for kindergarten and first grade) of eligible children included in the assessment and coverage for each required vaccine.

Head Start Programs

Of the 56 IPs, 23 states, New York City, and Chicago (44.6%) reported vaccination coverage for children enrolled in Head Start programs (Table 1). All 25 programs reported coverage for ≥3 doses of poliovirus vaccine; 17 (30.4%) reported coverage for 3 doses of hepatitis B (HepB) vaccine; 16 (28.6%) reported coverage for 4 doses of diphtheria and tetanus toxoids and pertussis (DTaP) vaccine, 1 dose of measles, mumps, and rubella (MMR) vaccine, and 1 dose of *Haemophilus influenzae* type B (Hib) vaccine; and nine (16.1%) reported coverage for 3 doses of DTaP and for ≥3 doses of Hib. Of all 108 estimates of vaccination coverage reported for the Head Start group, 86 (79.6%) were ≥95%.

Licensed Child Care Facilities

Of the 56 IPs, 23 states, New York City, and Chicago (44.6%) submitted vaccination coverage levels for children enrolled in licensed child care (Table 2). All 25 programs reported coverage for ≥3 doses of poliovirus vaccine; 19 (33.9%) reported for 3 doses of HepB, 18 (32.1%) for 1 dose of MMR, 15 (26.8%) for 4 doses of DTaP, 14 (25.0%) for 1 dose of Hib, 10 (17.9%) for ≥3 doses of Hib, and nine (16.1%) for 3 doses of DTaP. Of all estimates of vaccination coverage for the child care age group (n = 110), 60 (54.5%) were ≥95%.

Kindergarten/First Grade

Of the 56 IPs, 36 states and New York City (66.1%) submitted vaccination coverage levels for children enrolled in kindergarten and/or first grade (Table 3). The number of programs reporting coverage varied by vaccine. All 37 programs reported coverage for ≥3 doses of poliovirus vaccine, 27 (48.2%) programs reported for 4 doses of DTaP and for 3 doses of HepB, 22 (39.3%) programs for 2 doses of MMR, 10 (17.9%) programs for 3 doses of DTaP, and six (10.7%) programs for 1 dose of MMR. Of all estimates of vaccination coverage reported for the kindergarten/first grade age group (n = 129), 99 (76.7%) were ≥95%.

Reported by: *L Barker, Data Management Div; M McCauley, Office of the Director, National Immunization Program; TL Fairley, PhD, EIS Officer, CDC.*

Editorial Note: Reported vaccination coverage for the 2000–01 school year for children in Head Start programs, licensed child care facilities, and those entering kindergarten and/or first grade appears similar to that reported in previous years. However, the number of programs reporting and the completeness of the reports are lower than in the past and do not permit coverage to be estimated reliably at the national level. For the 1999–2000 school year, eight territories were considered among the IPs. For the 2000–01 school year, no territories reported, resulting in a smaller number of IPs. In addition, some IPs that reported previously chose not to report for some facility types for the 2000–01 school year. These decreases in reporting and completeness from previous years might be attributed to a diversion of resources to other vaccination activities at both state and national levels.

The findings in this report are subject to at least three limitations. First, approximately 40% of the states and cities did not submit 2000–01 vaccination coverage estimates. Second, variation in sampling methodology among IPs might limit the generalizability and comparability of these data (*4*). Finally, children attending private schools were not surveyed by all of the programs.

Conducting regular assessments of vaccination coverage in group settings such as child care facilities and school are key in monitoring the impact of state requirements on vaccination coverage among U.S. children. These data are the only measure of vaccination coverage available for this population and the only data for measuring the 2010 national health objective. To assist state and local IPs in collecting and reporting coverage data for children in child care facilities and

TABLE 1. Estimated vaccination coverage among children attending Head Start programs, by immunization program and vaccine — United States, 2000–01 school year

Immunization program	Age*	Population surveyed (%)†	≥3 Polio§ (%)	3 DTP/DTaP/DT¶ (%)	4 DTP/DTaP/DT (%)	1 MMR** (%)	1 Hib†† (%)	≥3 Hib (%)	3 HepB§§ (%)
Alabama	1–59 mos	90.3	—	—	—	—	—	—	—
Alaska		—	—	—	—	—	—	—	—
Arizona	2–5 yrs	84.7	98.6	—	96.9	99.2	—	99.2	96.6
Arkansas¶¶		46.0	98.0	96.0	—	—	97.0	—	—
California	2–5 yrs	99.8	99.1	—	97.5	99.1	98.4	—	97.5
Colorado	0–5 yrs	—	—	—	—	—	—	—	—
Connecticut		—	—	—	—	—	—	—	—
Delaware		—	—	—	—	—	—	—	—
District of Columbia		—	—	—	—	—	—	—	—
Florida	19 mos–5 yrs	7.8	97.8	—	97.8	98.8	98.5	—	—
Georgia		—	—	—	—	—	—	—	—
Hawaii		100.0	99.9	—	99.8	100.0	99.9	—	99.8
Houston		—	—	—	—	—	—	—	—
Idaho		—	—	—	—	—	—	—	—
Illinois¶¶***	2–6 yrs	43.1	90.1	—	89.0	—	84.8	—	88.3
Chicago	*2–6 yrs*	*43.6*	*97.2*	—	*97.4*	*98.5*	—	*85.7*	*92.7*
Indiana¶¶	≥15 mos	—	96.8	93.9	—	—	90.2	—	85.3
Iowa¶¶		—	97.0	95.0	—	—	97.0	—	—
Kansas		—	—	—	—	—	—	—	—
Kentucky¶¶†††		—	97.0	96.0	—	—	98.0	—	97.0
Louisiana¶¶	by 24 mos	100.0	90.0	94.0	—	—	99.4	—	—
Maine		—	—	—	—	—	—	—	—
Maryland		—	—	—	—	—	—	—	—
Massachusetts	>2 yrs	99.3	99.6	—	99.5	99.7	—	97.2	99.1
Michigan		—	—	—	—	—	—	—	—
Minnesota		—	99.7	—	99.6	98.8	98.8	—	—
Mississippi	All ages	2.9	99.6	—	99.1	99.9	99.9	—	—
Missouri		—	—	—	—	—	—	—	—
Montana		—	—	—	—	—	—	—	—
Nebraska		—	—	—	—	—	—	—	—
Nevada		—	—	—	—	—	—	—	—
New Hampshire		—	—	—	—	—	—	—	—
New Jersey		—	—	—	—	—	—	—	—
New Mexico		—	—	—	—	—	—	—	—
New York City¶¶		100.0	99.4	99.5	—	—	—	99.3	95.6
New York state¶¶§§§		100.0	97.8	98.4	—	—	—	98.1	96.6
North Carolina		—	—	—	—	—	—	—	—
North Dakota		—	—	—	—	—	—	—	—
Ohio	20 mos–5 yrs	99.5	96.2	—	93.2	98.1	—	95.5	95.6
Oklahoma		—	—	—	—	—	—	—	—
Oregon	2 mos–5 yrs	97.7	98.0	98.4	—	98.2	97.8	—	97.5
Pennsylvania		—	—	—	—	—	—	—	—
Philadelphia		—	—	—	—	—	—	—	—
Rhode Island	19–59 mos	93.5	97.5	—	95.0	99.4	—	92.1	94.6
San Antonio		—	—	—	—	—	—	—	—
South Carolina	19 mos–5 yrs	5.6	99.0	—	99.0	98.0	99.0	—	99.0
South Dakota		—	—	—	—	—	—	—	—
Tennessee		—	—	—	—	—	—	—	—
Texas		—	—	—	—	—	—	—	—
Utah	3–4 yrs	100.0	98.5	—	97.6	99.0	98.6	—	—
Vermont	All ages	100.0	89.2	—	88.3	91.1	87.1	—	—
Virginia	All ages	26.5	89.0	—	75.0	87.0	—	87.0	90.0
Washington¶¶†††		98.0	98.0	96.5	—	—	98.0	—	96.0
West Virginia		—	—	—	—	—	—	—	—
Wisconsin	2–4 yrs	11.2	96.8	—	95.5	97.4	—	96.9	95.6
Wyoming		—	—	—	—	—	—	—	—

* Coverage estimates are from state and local immunization programs that reported data for children in Head Start programs.
† The proportion of eligible children included in the assessment survey.
§ At least 3 doses of poliovirus vaccine.
¶ Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or tetanus toxoids.
** Measles, mumps, and rubella vaccine.
†† Age-appropriate doses of *Haemophilus influenzae* type B vaccine.
§§ Three doses of hepatitis B vaccine.
¶¶ One dose of measles vaccine, 1 dose of mumps vaccine, and 1 dose of rubella vaccine. Each antigen reported separately.
*** Includes Chicago.
††† Number of doses of vaccines were not specified. Doses assumed to be consistent with previous reports that specified ≥3 doses of poliovirus vaccine, ≥3 doses of DTP/DTaP/DT, and 1 dose of each of the separate antigen measles, mumps, and rubella vaccine.
§§§ Excludes New York City.

TABLE 2. Estimated vaccination coverage among children enrolled in licensed child care facilities, by immunization program and vaccine — United States, 2000–01 school year

Immunization program	Age*	Population surveyed (%)†	≥3 Polio§ (%)	3 DTP/DTaP/DT¶ (%)	4 DTP/DTaP/DT (%)	1 MMR** (%)	1 Hib†† (%)	≥3 Hib (%)	3 HepB§§ (%)
Alabama		—	—	—	—	—	—	—	—
Alaska		—	—	—	—	—	—	—	—
Arizona	2–5 yrs	71.1	96.9	—	94.5	96.9	—	94.5	95.7
Arkansas¶¶		90.7	99.0	99.0	—	—	—	—	—
California	2–5 yrs	98.9	97.5	—	95.7	97.5	97.3	—	96.1
Colorado	0–5 yrs	—	—	—	—	—	—	—	—
Connecticut		—	—	—	—	—	—	—	—
Delaware		—	—	—	—	—	—	—	—
District of Columbia		—	—	—	—	—	—	—	—
Florida	19 mos–5 yrs	2.5	95.2	—	95.3	96.4	95.1	—	—
Georgia		—	—	—	—	—	—	—	—
Hawaii		99.7	99.9	—	99.7	99.9	99.8	—	99.8
Houston		—	—	—	—	—	—	—	—
Idaho***	4 mos–5 yrs	—	95.0	93.6	—	88.8	93.0	—	93.6
Illinois¶¶†††	2–6 yrs	40.0	93.5	—	93.9	—	91.5	—	91.0
Chicago	*2–6 yrs*	*49.0*	*91.5*	—	*94.0*	*93.6*	—	*85.3*	*87.1*
Indiana¶¶	≥15 mos	—	88.4	86.3	—	—	55.7	—	53.6
Iowa		—	91.0	89.0	—	—	91.0	—	—
Kansas		—	—	—	—	—	—	—	—
Kentucky***	≥19 mos	—	86.2	94.0	—	94.0	95.0	—	92.0
Louisiana¶¶	by 24 mos	—	—	—	—	—	—	—	—
Maine		—	—	—	—	—	—	—	—
Maryland		—	—	—	—	—	—	—	—
Massachusetts	≥2 yrs	90.8	97.6	—	97.2	97.9	—	96.9	96.9
Michigan		—	—	—	—	—	—	—	—
Minnesota		—	98.3	—	97.8	95.6	96.1	—	—
Mississippi	All ages	3.3	96.1	—	92.5	93.4	93.4	—	—
Missouri		—	—	—	—	—	—	—	—
Montana		—	—	—	—	—	—	—	—
Nebraska		—	—	—	—	—	—	—	—
Nevada		—	—	—	—	—	—	—	—
New Hampshire		—	—	—	—	—	—	—	—
New Jersey		—	—	—	—	—	—	—	—
New Mexico		—	—	—	—	—	—	—	—
New York City¶¶		100.0	97.0	97.6	—	—	—	96.7	95.2
New York state¶¶§§§		100.0	93.9	96.0	—	—	—	95.3	92.7
North Carolina		—	—	—	—	—	—	—	—
North Dakota		—	—	—	—	—	—	—	—
Ohio	20 mos–5 yrs	70.2	97.0	—	96.3	97.5	—	96.6	94.4
Oklahoma		—	—	—	—	—	—	—	—
Oregon	2 mos–5 yrs	87.9	93.7	95.2	—	93.1	93.5	—	92.3
Pennsylvania		—	—	—	—	—	—	—	—
Philadelphia		—	—	—	—	—	—	—	—
Rhode Island	19–59 mos	—	97.2	—	95.7	97.9	—	96.7	97.4
San Antonio		—	—	—	—	—	—	—	—
South Carolina	19 mos–5 yrs	6.3	95.0	—	93.0	95.0	95.0	—	95.0
South Dakota		—	—	—	—	—	—	—	—
Tennessee		—	—	—	—	—	—	—	—
Texas		—	—	—	—	—	—	—	—
Utah¶¶	birth–5 yrs	91.2	98.6	—	97.8	98.9	—	98.6	—
Vermont	≥19 mos	—	90.6	—	87.3	90.0	84.4	—	84.0
Virginia	19–35 mos	3.0	90.0	—	81.0	87.0	—	90.0	90.0
Washington¶¶***		83.0	96.3	94.3	—	—	96.0	—	96.0
West Virginia		—	—	—	—	—	—	—	—
Wisconsin	2–4 yrs	37.9	85.1	—	87.1	87.2	—	89.2	89.6
Wyoming		—	—	—	—	—	—	—	—

* Coverage estimates are from state and local immunization programs that reported data for children enrolled in licensed child care facilities only.
† The proportion of eligible children included in the assessment survey.
§ At least 3 doses of poliovirus vaccine.
¶ Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or tetanus toxoids.
** Measles, mumps, and rubella vaccine.
†† Age-appropriate doses of *Haemophilus influenzae* type B vaccine.
§§ Three doses of hepatitis B vaccine.
¶¶ One dose of measles vaccine, 1 dose of mumps vaccine, and 1 dose of rubella vaccine. Each antigen reported separately.
*** Number of doses of vaccines were not specified. Doses assumed to be consistent with previous reports that specified ≥3 doses of poliovirus vaccine, ≥3 doses of DTP/DTaP/DT, and 1 dose each of the separate antigen measles, mumps, and rubella vaccine.
††† Includes Chicago.
§§§ Excludes New York City.

TABLE 3. Estimated vaccination coverage among children enrolled in kindergarten (k) and first grade, by immunization program and vaccine — United States, 2000–01 school year

Immunization program	Grade*	Population surveyed (%)†	≥3 Polio§ (%)	3 DTP/DTaP/DT¶ (%)	≥4 DTP/DTaP/DT (%)	1 MMR** (%)	2 MMR (%)	3 HepB†† (%)
Alabama		—	—	—	—	—	—	—
Alaska		—	—	—	—	—	—	—
Arizona	k	98.0	97.8	—	96.8	—	95.1	94.8
Arkansas§§	k	90.7	99.0	99.0	—	—	—	—
California	k	99.1	96.9	—	96.3	—	96.3	97.3
Chicago		—	—	—	—	—	—	—
Colorado¶¶***	k	76.8	82.2	—	82.2	—	82.2	82.2
Connecticut		—	—	—	—	—	—	—
Delaware	k	100.0	91.5	—	94.9	—	96.3	94.1
District of Columbia		—	—	—	—	—	—	—
Florida	k	100.0	94.7	—	94.7	94.7	—	94.7
Georgia	k–1	100.0	94.2	—	94.2	—	94.2	—
Hawaii¶¶***	k	99.6	99.2	—	99.3	—	99.0	99.3
Houston		—	—	—	—	—	—	—
Idaho	k	95.4	97.8	—	96.5	98.3	—	96.8
Illinois	k	—	—	—	—	—	—	—
Indiana	k	—	97.2	—	96.4	—	97.1	95.2
Iowa§§	k	100.0	92.0	85.0	—	—	—	—
Kansas	k–1	12.0	95.0	—	95.0	—	95.0	—
Kentucky	k	—	95.0	95.0	—	95.0	—	91.0
Louisiana	k	100.0	97.0	—	99.0	—	99.0	—
Maine	k	—	89.0	—	89.0	—	87.0	—
Maryland		—	—	—	—	—	—	—
Massachusetts	k	98.7	98.3	—	98.2	—	95.0	97.3
Michigan	k	92.5	98.8	—	97.8	—	97.4	93.7
Minnesota¶¶***†††	k	—	95.9	—	95.5	—	98.0	92.8
Mississippi	1	100.0	99.4	—	99.4	99.4	—	—
Missouri		—	—	—	—	—	—	—
Montana	k–1	98.5	99.9	—	99.9	—	69.5	70.6
Nebraska	k	100.0	98.9	98.4	—	—	96.8	95.6
Nevada§§	1	100.0	97.6	97.8	—	—	—	—
New Hampshire		—	—	—	—	—	—	—
New Jersey		—	—	—	—	—	—	—
New Mexico¶¶	k–1	91.0	96.0	—	96.0	—	96.0	—
New York City†††	k	100.0	98.1	98.2	—	—	—	96.6
New York state†††§§§	k	100.0	98.3	98.3	—	—	—	97.4
North Carolina***	k	98.3	99.3	—	99.1	—	99.2	99.2
North Dakota ¶¶***†††	k–1	96.4	95.6	—	95.3	—	95.3	95.1
Ohio	k	100.0	95.7	—	95.2	—	95.8	95.1
Oklahoma		—	—	—	—	—	—	—
Oregon¶¶	k–1	99.2	97.2	—	96.4	97.8	—	96.3
Pennsylvania†††¶¶¶	k	100.0	99.0	—	99.0	—	—	91.0
Philadelphia		—	—	—	—	—	—	—
Rhode Island	k	98.8	96.3	—	95.7	—	95.1	98.0
San Antonio		—	—	—	—	—	—	—
South Carolina	k	9.4	99.9	—	99.3	—	99.3	99.6
South Dakota***		—	—	—	—	—	—	—
Tennessee		—	—	—	—	—	—	—
Texas		—	—	—	—	—	—	—
Utah ¶¶***†††	k	99.8	98.6	—	97.8	—	—	97.5
Vermont****	k	98.0	96.2	97.3	—	—	—	—
Virginia	k	5.5	92.0	—	77.0	86.0	—	85.0
Washington§§	k–1	100.0	93.6	93.6	—	—	—	94.4
West Virginia		—	—	—	—	—	—	—
Wisconsin	k	0.9	97.6	97.3	—	—	88.2	92.8
Wyoming		—	—	—	—	—	—	—

* Coverage estimates are from state and local immunization programs that reported data for children entering kindergarten and/or first grade only.
† The proportion of eligible children included in the assessment survey.
§ At least 3 doses of poliovirus vaccine.
¶ Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids and acellular pertussis vaccine, or tetanus toxoids.
** Measles, mumps, and rubella vaccine.
†† Three doses of hepatitis B vaccine.
§§ One dose of measles vaccine, 1 dose of mumps vaccine, and 1 dose of rubella vaccine. Each antigen reported separately.
¶¶ At least 4 doses of poliovirus vaccine.
*** At least 5 doses of DTP, DTaP, or DT.
††† Two doses of measles vaccine and 1 dose of mumps and rubella vaccines. Each antigen reported separately.
§§§ Excludes New York City.
¶¶¶ Includes Philadelphia.
**** Two doses of measles vaccine and 1 dose of rubella vaccine.

those entering school, CDC is developing a new reporting system that will improve data quality and facilitate the reporting process by automating many of the calculation/data management tasks that IPs have previously performed manually. This automated system will decrease substantially the amount of personnel time devoted to producing annual reports. In addition, CDC has instituted a reminder system to alert IPs when reports are not submitted in a timely manner. These two approaches should facilitate participation from all IPs.

References

1. Orenstein WA, Bernier RH. Surveillance—information for action. Pediatr Clin North Am 1990;37:709–34.
2. Orenstein WA, Hinman AR. The immunization system in the United States—role of school immunization laws. Vaccine 1999;17:S19–S24.
3. U.S. Department of Health and Human Services. Healthy people 2010 (conference ed, 2 vols.). Washington, DC: U.S. Department of Health and Human Services, 2000.
4. Jiles RB, Fuchs C, Klevens RM. Vaccination coverage among children enrolled in Head Start programs or day care facilities or entering school. In: CDC surveillance summaries (September 22). MMWR 2000;49 (No. SS-9).

Smallpox Vaccine Adverse Events Among Civilians — United States, February 25–March 3, 2003

During the civilian smallpox vaccination program, CDC, the Food and Drug Administration, and state health departments are conducting surveillance for vaccine-associated adverse events. In the first stage of the program, active surveillance is being conducted for potentially life-threatening, moderate-to-severe, and other serious adverse events and for vaccinia transmission to contacts of vaccinees (*1*) (Table). Nonserious events are reported through passive surveillance and are expected to be underreported. This report summarizes smallpox vaccine adverse events reported among civilians vaccinated as of February 28, 2003, and among contacts of vaccinees, received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of March 3.

Potentially life-threatening and moderate-to-serious events are classified on the basis of evidence in support of the reported diagnoses. For probable cases, other causes are excluded, and supportive information is available. Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis. CDC and state and local health departments also receive reports of other events that are associated temporally with smallpox vaccination. Reported adverse events are not necessarily associated with vaccination, and some or all of these events might be coincidental.

During January 24–February 28, smallpox vaccine was administered to 12,690 civilian health-care and public health workers in 45 jurisdictions. No potentially life-threatening adverse events of a type known previously to be caused by smallpox vaccination have been reported as of March 3.

Two moderate-to-severe adverse events were reported (Table). Both were probable cases of ocular vaccinia, and both were traced to contact with military personnel who received smallpox vaccine.

A woman aged 26 years slept in the same bed several times a week over a 3-week period with a military vaccinee beginning shortly after he received smallpox vaccine; he was reported often not to have kept his vaccination site covered. The woman became ill with swelling, pain, and discharge from the right eye, which progressed over the course of 1 week to swelling of the entire right side of the face, difficulty opening and impaired vision in the right eye, and increased exudate, despite treatment with antibacterial eyedrops. On February 22, she was hospitalized. Ophthalmologic examination revealed severe right scleral injection and chemosis, a small pustule at the right palpebral lower lid margin, and tender right preauricular and submandibular adenopathy but found no evidence of keratitis, iritis, or periocular lesions. Orbital computerized tomography scan was consistent with preseptal cellulitis without infection of the globe. The patient's preseptal cellulitis improved within 24 hours after treatment with intravenous antibiotics, and she was discharged on February 25. The following day, the patient was readmitted with persistent right blepharoconjunctivitis. Preliminary viral cultures of conjunctival fluid revealed cytopathic effect consistent with viral infection, and a direct fluorescent antibody test was positive for vaccinia. The patient improved within 24 hours after treatment with trifluridine eyedrops and a single dose of intravenous vaccinia immune globulin. She was discharged on February 28. The viral culture material and a swab sample from the patient's eye were sent to CDC and tested positive for vaccinia DNA by real-time polymerase chain reaction (PCR).

On February 14, a woman aged 18 years with no history of smallpox vaccination handled the bandage of a military vaccinee. The woman had a pustular skin lesion (size: 1.5 cm) with a small satellite lesion on her right forearm 3 days after this contact and a second pustular lesion on the back of her upper right arm 5 days after contact, followed by irritation and swelling in her right eye 8 days after contact. The patient first sought medical attention 11 days after the contact and had a skin condition and bacterial conjunctivitis diagnosed, which were treated with an oral antibiotic; 14 days after

TABLE. Number of cases* of adverse events after smallpox vaccination among civilians, by type — United States, January 24–March 3, 2003

Adverse events	No. new cases (February 25–March 3) Suspected	Probable	Total no. cases (January 24–March 3) Suspected	Probable
Potentially life-threatening events				
Eczema vaccinatum	—†	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	—	—
Fetal vaccinia	—	—	—	—
Post-vaccinial encephalitis or encephalomyelitis	—	—	—	—
Progressive vaccinia	—	—	—	—
Moderate-to-severe events				
Generalized vaccinia	—	—	**1**	—
Inadvertent inoculation, non-ocular	—	—	—	—
Ocular vaccinia	—	2§	—	**2**
Pyogenic infection of vaccination site	—	—	—	—
Other events of concern	**No. new cases**		**Total no. cases**	
Other serious adverse events¶	3		**4**	
Other nonserious adverse events**	21		**46**	
Vaccinia immune globulin release	1		**1**	
Vaccinia transmission to contacts	0††		**0**	

* Under investigation or completed as of March 3, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† No cases reported.
§ Both patients were contacts of military vaccinees.
¶ Events that result in hospitalization, permanent disability, life-threatening illness, or death; these events are associated temporally with smallpox vaccination but are not necessarily associated causally with vaccination.
** Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgia and chills, and nausea); additional events are associated temporally with smallpox vaccination but are not necessarily associated causally with vaccination.
†† No cases of transmission from civilian vaccinees have been reported. Two cases of transmission from military personnel to civilian contacts have been reported.

contact, she was noted to have two small pustular lesions on her right eyelid and had blepharoconjunctivitis diagnosed. She had marked improvement within 24 hours after initiating treatment with trifluridine eye drops. Specimens taken from eye and skin lesions demonstrated vaccinia virus based on PCR.

Three other serious adverse events were reported (Table). One case involved headache and dizziness; although headache has been reported after smallpox vaccination, the casual role of smallpox vaccine in this case is unknown. The other two events (cholecystitis and hypertension) are not known to be associated causally with smallpox vaccination.

A woman aged 38 years had headache and dizziness 5 days after smallpox vaccination; 6 days later, after the symptoms had increased in intensity, she was admitted to a hospital for evaluation. A neurologist observed no change in mental status or other neurologic deficits; an MRI brain scan showed no abnormalities. The patient's symptoms improved, and she was discharged 2 days later.

A man aged 46 years with a history of hypertension was hospitalized 1 day after vaccination with hypertension (blood pressure: approximately 230/120) and severe headache. The patient was treated with antihypertensive medications and was discharged after 1 day.

A woman aged 51 years had onset of chest discomfort, shortness of breath, and nausea 2 days after vaccination. The patient had cholelithiasis with ductal blockage diagnosed and had a cholecystectomy; she was discharged after 3 days.

Among the 46 vaccinees with reported other nonserious adverse events during January 24–March 3 (Table), the most common signs and symptoms were fever (n = 11), pruritus (n = 11), rash (n = 10), and pain (n = seven). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

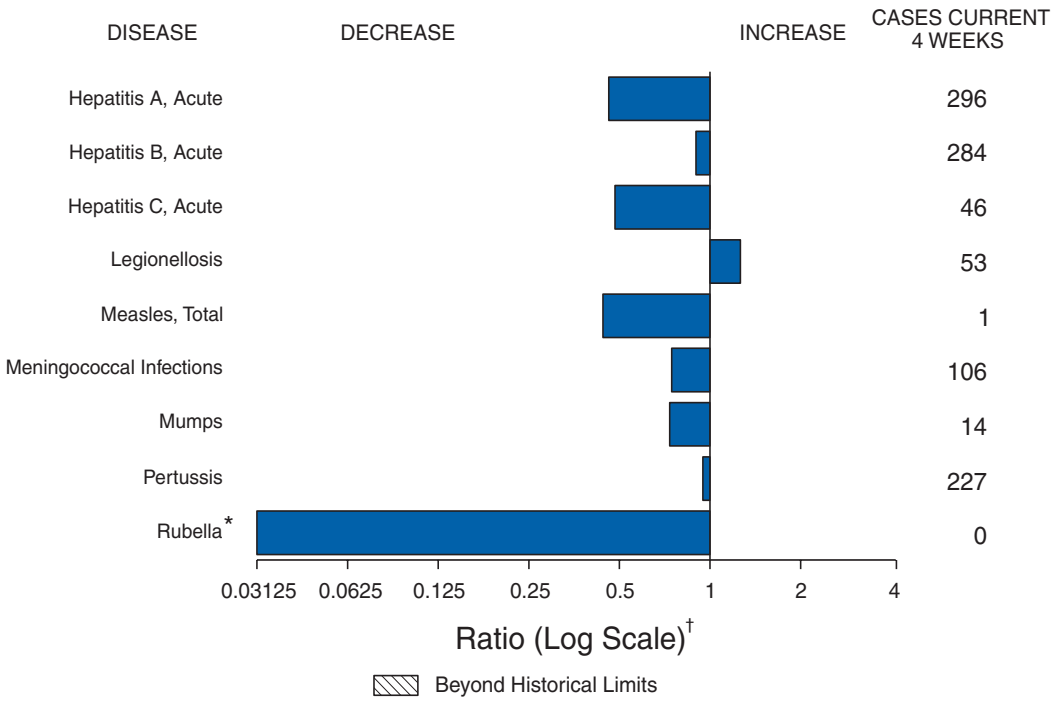
Surveillance for adverse events during the civilian smallpox vaccination program is ongoing; regular surveillance reports will be published in *MMWR*.

Reported by: *Smallpox Vaccine Adverse Events coordinators. National Center for Infectious Diseases; National Immunization Program, CDC.*

Editorial Note: This report highlights the importance of proper vaccination site care in preventing contact transmission of vaccinia virus and the need for vacinees and unvaccinated persons who have contact with vaccinees to protect against contact transmission (*2*). Vaccinees who do not work in healthcare settings should cover the vaccination site with a gauze bandage that is secured by first-aid adhesive tape and should change the bandage frequently (i.e., every 1–3 days). Vaccinees should keep the vaccination site dry, cover it with a waterproof bandage during bathing, and change back to a gauze bandage after bathing. Gauze bandages should be changed whenever they become wet. As an added precaution, vaccinees should wear a long-sleeved shirt that covers the vaccination site, particularly in situations involving close physical contact. Vaccinees should practice consistent hand hygiene by washing thoroughly with antimicrobial soap and water or with an approved alcohol-based hand-rub (i.e., one that contains ≥60% alcohol) after any contact with the vaccination site or

(Continued on page 191)

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending March 1, 2003, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 9 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 March 1, 2003 (9th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy)†	4	5
Botulism:	-	-	Hantavirus pulmonary syndrome†	3	-
foodborne	1	4	Hemolytic uremic syndrome, postdiarrheal†	13	15
infant	8	12	HIV infection, pediatric†§	26	30
other (wound & unspecified)	3	4	Measles, total	2¶	5**
Brucellosis†	8	15	Mumps	29	42
Chancroid	6	6	Plague	-	-
Cholera	-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	5	19	Psittacosis†	2	10
Diphtheria	-	-	Q fever†	6	5
Ehrlichiosis:	-	-	Rabies, human	1	-
human granulocytic (HGE)†	6	8	Rubella	-	1
human monocytic (HME)†	5	2	Rubella, congenital	-	1
other and unspecified	-	-	Streptococcal toxic-shock syndrome†	21	18
Encephalitis/Meningitis:	-	-	Tetanus	1	1
California serogroup viral†	-	-	Toxic-shock syndrome	10	20
eastern equine†	-	-	Trichinosis	1	2
Powassan†	-	-	Tularemia†	3	4
St. Louis†	-	-	Yellow fever	-	-
western equine†	-	-			

-: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update January 26, 2003.
¶ Of two cases reported, one was indigenous and one was imported from another country.
** Of five cases reported, four were indigenous and one was imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	4,637	5,874	105,335	132,165	577	628	162	350	-	-
NEW ENGLAND	129	205	3,614	4,509	-	-	15	11	-	-
Maine	-	1	163	230	N	N	1	-	-	-
N.H.	3	4	219	273	-	-	-	2	-	-
Vt.	5	4	166	128	-	-	1	-	-	-
Mass.	49	132	1,315	1,748	-	-	8	5	-	-
R.I.	16	21	468	451	-	-	3	3	-	-
Conn.	56	43	1,283	1,679	N	N	2	1	-	-
MID. ATLANTIC	1,387	1,368	6,841	14,137	-	-	12	26	-	-
Upstate N.Y.	158	79	2,392	1,526	N	N	8	5	-	-
N.Y. City	739	856	761	4,962	-	-	2	13	-	-
N.J.	137	253	1,675	2,428	-	-	1	3	-	-
Pa.	353	180	2,013	5,221	N	N	1	5	-	-
E.N. CENTRAL	516	665	19,440	24,263	1	4	32	115	-	-
Ohio	80	153	6,346	6,597	-	-	9	30	-	-
Ind.	79	84	2,655	2,781	N	N	3	9	-	-
Ill.	207	333	3,747	6,783	-	-	4	23	-	-
Mich.	135	66	4,649	5,193	1	4	12	20	-	-
Wis.	15	29	2,043	2,909	-	-	4	33	-	-
W.N. CENTRAL	57	93	6,464	7,254	-	-	17	26	-	-
Minn.	8	19	1,241	1,805	N	N	6	8	-	-
Iowa	17	22	568	585	N	N	5	2	-	-
Mo.	24	34	2,342	2,446	-	-	2	7	-	-
N. Dak.	-	-	85	201	N	N	-	2	-	-
S. Dak.	1	1	418	340	-	-	4	2	-	-
Nebr.	-	13	583	590	-	-	-	3	-	-
Kans.	7	4	1,227	1,287	N	N	-	2	-	-
S. ATLANTIC	865	1,966	23,791	24,366	-	-	41	78	-	-
Del.	21	45	517	470	N	N	1	-	-	-
Md.	46	250	2,738	2,478	-	-	6	2	-	-
D.C.	163	87	569	597	-	-	-	1	-	-
Va.	154	156	2,465	2,695	-	-	2	1	-	-
W. Va.	1	11	422	420	N	N	-	-	-	-
N.C.	59	134	4,186	3,644	N	N	4	9	-	-
S.C.	47	137	1,939	2,366	-	-	1	1	-	-
Ga.	218	472	4,976	4,851	-	-	20	41	-	-
Fla.	156	674	5,979	6,845	N	N	7	23	-	-
E.S. CENTRAL	74	258	8,821	9,226	-	-	11	14	-	-
Ky.	8	31	1,530	1,532	N	N	-	1	-	-
Tenn.	37	115	2,779	2,984	N	N	4	2	-	-
Ala.	12	57	2,408	2,861	-	-	6	10	-	-
Miss.	17	55	2,104	1,849	N	N	1	1	-	-
W.S. CENTRAL	664	724	15,041	18,366	-	-	2	8	-	-
Ark.	14	35	1,022	1,206	-	-	1	2	-	-
La.	18	181	2,413	3,059	N	N	-	1	-	-
Okla.	15	33	1,055	1,548	N	N	1	1	-	-
Tex.	617	475	10,551	12,553	-	-	-	4	-	-
MOUNTAIN	207	193	6,358	8,188	487	429	17	14	-	-
Mont.	6	4	356	438	N	N	1	-	-	-
Idaho	-	4	407	409	N	N	5	4	-	-
Wyo.	1	1	189	140	-	-	-	-	-	-
Colo.	21	34	1,259	2,356	N	N	3	3	-	-
N. Mex.	13	7	250	1,282	-	1	-	-	-	-
Ariz.	111	78	2,543	2,463	480	420	2	4	-	-
Utah	29	13	443	101	1	2	4	2	-	-
Nev.	26	52	911	999	6	6	2	1	-	-
PACIFIC	738	402	14,965	21,856	89	195	15	58	-	-
Wash.	53	82	2,424	2,374	N	N	-	10	-	-
Oreg.	41	90	1,048	1,073	-	-	3	7	-	-
Calif.	635	217	10,163	17,158	89	195	12	41	-	-
Alaska	6	2	562	552	-	-	-	-	-	-
Hawaii	3	11	768	699	-	-	-	-	-	-
Guam	1	-	-	-	-	-	-	-	-	-
P.R.	58	165	113	5	N	N	N	N	-	-
V.I.	1	46	-	36	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	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 2002 and 2003 are provisional and cumulative (year-to-date).

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update January 26, 2003.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	137	199	8	8	8	1	1,822	2,279	43,757	58,570
NEW ENGLAND	10	11	-	1	-	-	108	266	951	1,414
Maine	-	-	-	-	-	-	15	26	6	13
N.H.	2	1	-	-	-	-	11	10	18	18
Vt.	-	-	-	-	-	-	9	20	15	21
Mass.	4	5	-	1	-	-	64	143	325	627
R.I.	-	2	-	-	-	-	9	18	164	159
Conn.	4	3	-	-	-	-	-	49	423	576
MID. ATLANTIC	7	15	-	-	2	-	254	428	2,997	6,564
Upstate N.Y.	4	10	-	-	2	-	94	114	1,018	845
N.Y. City	-	1	-	-	-	-	135	150	345	2,123
N.J.	3	4	-	-	-	-	18	79	927	1,346
Pa.	N	N	-	-	-	-	7	85	707	2,250
E.N. CENTRAL	35	67	1	-	3	-	318	507	9,692	12,381
Ohio	13	13	1	-	3	-	145	137	3,972	3,685
Ind.	3	5	-	-	-	-	-	-	1,040	1,269
Ill.	5	21	-	-	-	-	52	157	1,661	3,838
Mich.	9	11	-	-	-	-	105	131	2,262	2,586
Wis.	5	17	-	-	-	-	16	82	757	1,003
W.N. CENTRAL	21	30	2	3	2	-	198	224	2,395	3,072
Minn.	9	7	2	3	-	-	52	67	356	545
Iowa	1	7	-	-	-	-	35	43	113	155
Mo.	3	7	N	N	N	N	46	61	1,272	1,497
N. Dak.	1	-	-	-	1	-	7	3	2	11
S. Dak.	2	1	-	-	-	-	7	9	19	39
Nebr.	4	5	-	-	-	-	29	19	162	232
Kans.	1	3	-	-	1	-	22	22	471	593
S. ATLANTIC	21	25	1	2	-	-	357	429	12,500	14,491
Del.	-	1	-	-	-	-	8	10	237	298
Md.	-	-	-	-	-	-	20	19	1,419	1,398
D.C.	-	-	-	-	-	-	-	10	448	497
Va.	2	2	-	-	-	-	29	16	1,226	1,649
W. Va.	-	-	-	-	-	-	4	3	143	168
N.C.	5	4	-	-	-	-	N	N	2,429	2,597
S.C.	-	-	-	-	-	-	4	3	1,152	1,373
Ga.	6	17	-	1	-	-	166	110	2,621	2,747
Fla.	8	1	1	1	-	-	126	258	2,825	3,764
E.S. CENTRAL	8	3	-	-	-	-	46	42	4,525	5,317
Ky.	1	-	-	-	-	-	N	N	649	608
Tenn.	4	3	-	-	-	-	18	14	1,292	1,733
Ala.	3	-	-	-	-	-	28	28	1,541	1,870
Miss.	-	-	-	-	-	-	-	-	1,043	1,106
W.S. CENTRAL	1	3	-	-	-	1	29	15	6,435	8,457
Ark.	1	-	-	-	-	-	19	15	618	784
La.	-	-	-	-	-	-	-	-	1,580	2,020
Okla.	-	-	-	-	-	-	10	-	427	655
Tex.	-	3	-	-	-	1	-	-	3,810	4,998
MOUNTAIN	17	15	3	1	1	-	207	204	1,508	1,961
Mont.	-	2	-	-	-	-	4	8	26	26
Idaho	2	1	2	-	-	-	20	4	14	17
Wyo.	-	-	-	1	-	-	3	1	10	10
Colo.	4	2	-	-	1	-	61	72	357	690
N. Mex.	-	2	1	-	-	-	8	19	52	248
Ariz.	8	3	N	N	N	N	47	42	737	655
Utah	3	3	-	-	-	-	47	31	44	7
Nev.	-	2	-	-	-	-	17	27	268	308
PACIFIC	17	30	1	1	-	-	305	164	2,754	4,913
Wash.	8	4	-	-	-	-	25	32	455	535
Oreg.	1	7	1	1	-	-	54	90	152	159
Calif.	6	18	-	-	-	-	199	-	1,905	4,002
Alaska	-	-	-	-	-	-	12	16	87	119
Hawaii	2	1	-	-	-	-	15	26	155	98
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	1	-	11	3
V.I.	-	-	-	-	-	-	-	-	-	15
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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th 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. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	212	324	2	3	27	60	6	2	687	1,671
NEW ENGLAND	18	31	-	-	1	5	1	-	22	78
Maine	-	1	-	-	-	-	-	-	1	3
N.H.	4	3	-	-	-	-	-	-	2	3
Vt.	4	2	-	-	-	-	-	-	1	-
Mass.	8	16	-	-	1	3	1	-	15	41
R.I.	-	-	-	-	-	-	-	-	1	4
Conn.	2	9	-	-	-	2	-	-	2	27
MID. ATLANTIC	21	52	-	1	2	6	1	-	67	159
Upstate N.Y.	11	23	-	1	1	3	1	-	16	25
N.Y. City	6	13	-	-	1	2	-	-	50	54
N.J.	4	13	-	-	-	1	-	-	1	38
Pa.	-	3	-	-	-	-	-	-	-	42
E.N. CENTRAL	19	53	1	-	4	7	-	-	87	206
Ohio	11	23	-	-	3	3	-	-	26	48
Ind.	4	6	-	-	1	1	-	-	3	7
Ill.	-	23	-	-	-	3	-	-	23	82
Mich.	4	1	1	-	-	-	-	-	32	42
Wis.	-	-	-	-	-	-	-	-	3	27
W.N. CENTRAL	17	9	-	-	2	1	2	1	32	64
Minn.	7	6	-	-	2	1	-	-	4	4
Iowa	-	1	-	-	-	-	-	-	11	13
Mo.	6	2	-	-	-	-	2	1	5	13
N. Dak.	-	-	-	-	-	-	-	-	1	-
S. Dak.	1	-	-	-	-	-	-	-	-	2
Nebr.	-	-	-	-	-	-	-	-	4	4
Kans.	3	-	-	-	-	-	-	-	7	28
S. ATLANTIC	49	73	-	-	4	16	-	-	238	415
Del.	-	-	-	-	-	-	-	-	1	3
Md.	12	16	-	-	1	-	-	-	34	68
D.C.	-	-	-	-	-	-	-	-	-	20
Va.	2	4	-	-	-	1	-	-	2	5
W. Va.	1	-	-	-	-	-	-	-	4	3
N.C.	3	9	-	-	-	1	-	-	9	64
S.C.	1	1	-	-	-	-	-	-	6	10
Ga.	12	27	-	-	2	10	-	-	108	54
Fla.	18	16	-	-	1	4	-	-	74	188
E.S. CENTRAL	23	14	-	1	3	3	-	-	26	69
Ky.	2	1	-	-	-	-	-	-	5	12
Tenn.	10	4	-	-	2	1	-	-	13	31
Ala.	11	5	-	1	1	2	-	-	7	6
Miss.	-	4	-	-	-	-	-	-	1	20
W.S. CENTRAL	13	15	-	1	1	4	-	-	19	152
Ark.	1	1	-	-	-	-	-	-	-	9
La.	3	1	-	-	-	-	-	-	5	4
Okla.	9	12	-	-	1	4	-	-	3	9
Tex.	-	1	-	1	-	-	-	-	11	130
MOUNTAIN	37	40	1	-	7	8	1	-	51	139
Mont.	-	-	-	-	-	-	-	-	-	4
Idaho	-	-	-	-	-	-	-	-	-	7
Wyo.	-	1	-	-	-	-	-	-	-	2
Colo.	7	8	-	-	1	1	-	-	5	20
N. Mex.	3	8	-	-	1	3	-	-	1	4
Ariz.	21	17	1	-	3	3	-	-	31	78
Utah	4	4	-	-	2	-	-	-	5	10
Nev.	2	2	-	-	-	1	1	-	9	14
PACIFIC	15	37	-	-	3	10	1	1	145	389
Wash.	2	-	-	-	1	-	1	-	5	10
Oreg.	10	21	-	-	2	3	-	-	18	25
Calif.	-	8	-	-	-	6	-	1	119	352
Alaska	-	1	-	-	-	1	-	-	1	2
Hawaii	3	7	-	-	-	-	-	-	2	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	Hepatitis (viral, acute), by type: B Cum. 2003	Hepatitis (viral, acute), by type: B Cum. 2002	Hepatitis (viral, acute), by type: C Cum. 2003	Hepatitis (viral, acute), by type: C Cum. 2002	Legionellosis Cum. 2003	Legionellosis Cum. 2002	Listeriosis Cum. 2003	Listeriosis Cum. 2002	Lyme disease Cum. 2003	Lyme disease Cum. 2002
UNITED STATES	768	948	159	294	117	123	47	61	433	714
NEW ENGLAND	30	35	-	8	7	5	4	8	6	67
Maine	-	-	-	-	-	-	-	1	-	-
N.H.	1	3	-	-	-	1	1	2	-	9
Vt.	1	2	-	4	1	-	-	-	3	1
Mass.	26	26	-	4	2	2	2	3	1	54
R.I.	-	-	-	-	1	-	-	-	2	3
Conn.	2	4	-	-	3	2	1	2	-	-
MID. ATLANTIC	131	192	4	15	9	23	8	6	338	514
Upstate N.Y.	8	7	4	8	7	5	2	3	296	299
N.Y. City	44	101	-	-	2	-	3	1	-	6
N.J.	76	55	-	3	-	8	2	-	40	121
Pa.	3	29	-	4	-	10	1	2	2	88
E.N. CENTRAL	63	74	22	20	32	45	5	11	6	22
Ohio	28	15	4	-	19	25	2	6	4	4
Ind.	-	4	-	-	-	3	1	-	2	2
Ill.	-	3	2	4	-	-	-	1	-	-
Mich.	35	46	16	16	13	13	2	1	-	-
Wis.	-	6	-	-	-	4	-	3	U	16
W.N. CENTRAL	41	37	35	116	3	6	2	2	13	8
Minn.	2	1	-	-	-	1	1	-	12	2
Iowa	3	6	-	1	1	-	-	-	1	3
Mo.	26	17	32	112	1	2	-	1	-	3
N. Dak.	-	-	-	-	-	-	-	1	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	8	6	3	3	-	3	1	-	-	-
Kans.	2	7	-	-	1	-	-	-	-	-
S. ATLANTIC	284	277	30	16	46	16	13	7	50	71
Del.	1	2	-	3	-	3	-	-	-	10
Md.	16	29	3	2	12	6	2	1	37	50
D.C.	-	2	-	-	-	-	-	-	-	3
Va.	6	19	-	-	3	1	-	-	-	-
W. Va.	1	5	-	-	N	N	-	-	-	-
N.C.	18	36	2	3	5	3	1	1	6	4
S.C.	-	3	-	1	-	-	1	2	-	1
Ga.	159	97	3	1	5	3	4	2	1	-
Fla.	83	84	22	6	21	-	5	1	6	3
E.S. CENTRAL	34	65	14	32	1	4	4	3	1	3
Ky.	8	7	2	1	-	2	-	-	-	1
Tenn.	7	27	-	5	1	-	-	2	1	-
Ala.	12	15	2	2	-	2	3	1	-	-
Miss.	7	16	10	24	-	-	1	-	-	2
W.S. CENTRAL	15	54	36	66	3	3	1	6	2	11
Ark.	-	26	-	4	-	-	-	-	-	-
La.	15	4	10	2	-	-	-	-	2	1
Okla.	-	1	-	-	2	-	1	1	-	-
Tex.	-	23	26	60	1	3	-	5	-	10
MOUNTAIN	88	71	9	5	10	6	9	4	3	2
Mont.	3	-	-	-	-	1	1	-	-	-
Idaho	-	-	-	-	1	-	-	-	1	-
Wyo.	1	3	-	2	1	-	-	-	-	-
Colo.	12	12	6	1	2	2	5	1	-	-
N. Mex.	3	14	-	-	-	1	-	-	-	1
Ariz.	52	32	2	-	3	-	3	3	-	1
Utah	5	4	-	-	2	2	-	-	1	-
Nev.	12	6	1	2	1	-	-	-	1	-
PACIFIC	82	143	9	16	6	15	1	14	14	16
Wash.	7	5	1	2	1	-	-	-	-	-
Oreg.	23	27	3	6	N	N	-	1	4	1
Calif.	49	108	5	8	5	15	1	13	10	15
Alaska	2	2	-	-	-	-	-	-	-	-
Hawaii	1	1	-	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	102	170	231	347	565	922	500	849	29	44
NEW ENGLAND	5	13	12	27	122	163	61	88	1	-
Maine	1	1	1	2	-	3	4	5	-	-
N.H.	1	4	-	2	4	1	3	1	-	-
Vt.	-	-	-	3	16	24	3	20	-	-
Mass.	3	5	9	17	102	130	27	27	1	-
R.I.	-	-	-	2	-	-	1	6	-	-
Conn.	-	3	2	1	-	5	23	29	-	-
MID. ATLANTIC	15	32	11	37	45	48	47	104	-	4
Upstate N.Y.	7	6	4	11	43	38	45	69	-	-
N.Y. City	6	13	5	7	-	5	-	4	-	-
N.J.	2	9	1	7	2	-	-	18	-	-
Pa.	-	4	1	12	-	5	2	13	-	4
E.N. CENTRAL	9	25	36	50	68	122	4	2	1	2
Ohio	5	7	18	22	55	74	-	1	1	2
Ind.	-	-	4	7	3	8	2	1	-	-
Ill.	1	9	-	6	-	12	-	-	-	-
Mich.	3	5	11	9	9	11	2	-	-	-
Wis.	-	4	3	6	1	17	-	-	-	-
W.N. CENTRAL	4	16	18	24	37	77	68	46	2	2
Minn.	2	5	3	4	19	10	6	5	-	-
Iowa	2	2	4	5	4	26	7	4	1	-
Mo.	-	4	9	9	8	23	-	1	1	2
N. Dak.	-	-	-	-	-	-	12	-	-	-
S. Dak.	-	-	-	2	1	4	6	16	-	-
Nebr.	-	2	1	2	-	2	-	-	-	-
Kans.	-	3	1	2	5	12	37	20	-	-
S. ATLANTIC	39	39	53	47	70	52	273	271	22	33
Del.	-	-	4	1	-	1	-	3	-	-
Md.	16	17	4	1	13	10	2	58	4	6
D.C.	-	2	-	-	-	-	-	-	-	-
Va.	3	-	2	3	1	15	74	70	-	1
W. Va.	2	-	1	-	-	-	9	21	-	-
N.C.	4	5	5	7	34	9	96	76	18	23
S.C.	-	2	-	7	-	15	13	8	-	3
Ga.	4	12	7	7	14	1	63	19	-	-
Fla.	10	1	30	21	8	1	16	16	-	-
E.S. CENTRAL	5	4	12	16	16	35	5	111	1	2
Ky.	1	-	-	3	3	8	3	3	-	-
Tenn.	2	1	3	4	3	18	-	108	1	2
Ala.	2	1	4	8	8	2	2	-	-	-
Miss.	-	2	5	1	2	7	-	-	-	-
W.S. CENTRAL	3	2	27	50	-	183	14	172	-	1
Ark.	-	-	1	5	-	119	-	-	-	-
La.	1	2	10	4	-	1	-	-	-	-
Okla.	-	-	3	6	-	4	14	17	-	-
Tex.	2	-	13	35	-	59	-	155	-	1
MOUNTAIN	4	6	12	28	130	106	12	22	1	-
Mont.	-	-	-	-	-	2	1	-	-	-
Idaho	-	-	-	-	2	7	-	-	-	-
Wyo.	-	-	-	-	-	2	-	1	-	-
Colo.	3	2	4	8	65	62	-	-	-	-
N. Mex.	-	-	2	-	13	16	-	-	-	-
Ariz.	1	1	4	10	35	9	11	21	1	-
Utah	-	2	-	1	9	6	-	-	-	-
Nev.	-	1	2	9	6	2	-	-	-	-
PACIFIC	18	33	50	68	77	136	16	33	1	-
Wash.	4	1	6	10	28	25	-	-	-	-
Oreg.	5	-	12	14	43	11	-	-	-	-
Calif.	9	29	31	41	6	95	15	17	1	-
Alaska	-	1	-	1	-	1	1	16	-	-
Hawaii	-	2	1	2	-	4	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	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 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	Salmonellosis		Shigellosis		*Streptococcal* disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	3,148	4,664	2,426	2,316	724	798	381	338	66	30
NEW ENGLAND	137	220	46	41	39	40	2	1	-	1
Maine	7	33	2	2	3	6	-	-	-	-
N.H.	7	7	-	2	4	10	-	-	N	N
Vt.	3	9	-	-	2	1	2	1	-	1
Mass.	90	123	30	33	30	23	N	N	N	N
R.I.	6	5	2	-	-	-	-	-	-	-
Conn.	24	43	12	4	-	-	-	-	-	-
MID. ATLANTIC	187	512	100	120	75	130	10	20	14	8
Upstate N.Y.	59	94	35	13	61	55	10	20	14	8
N.Y. City	102	156	41	61	9	31	U	U	U	U
N.J.	16	172	15	30	1	39	N	N	N	N
Pa.	10	90	9	16	4	5	-	-	-	-
E.N. CENTRAL	479	809	168	324	190	200	82	26	34	15
Ohio	192	229	48	163	73	34	72	-	32	-
Ind.	27	39	9	9	7	7	10	24	2	4
Ill.	149	355	67	99	31	73	-	2	-	-
Mich.	80	103	34	31	78	56	N	N	N	N
Wis.	31	83	10	22	1	30	N	N	-	11
W.N. CENTRAL	219	333	133	230	65	33	58	68	8	5
Minn.	64	59	11	19	24	-	-	21	8	4
Iowa	52	45	4	14	-	-	N	N	N	N
Mo.	52	153	38	30	14	16	3	1	-	1
N. Dak.	4	5	-	-	3	-	2	-	-	-
S. Dak.	11	15	8	94	7	1	-	1	-	-
Nebr.	14	17	60	52	10	6	10	13	N	N
Kans.	22	39	12	21	7	10	43	32	N	N
S. ATLANTIC	1,051	1,262	1,261	870	127	142	194	171	2	1
Del.	2	10	59	2	2	-	-	3	N	N
Md.	102	82	115	83	50	14	-	-	-	-
D.C.	-	13	-	6	-	2	-	3	-	1
Va.	62	82	40	188	1	10	N	N	N	N
W. Va.	3	6	-	2	1	-	10	4	2	-
N.C.	196	162	143	47	20	34	N	N	U	U
S.C.	39	62	14	9	1	7	9	33	N	N
Ga.	279	311	484	332	16	49	54	85	N	N
Fla.	368	534	406	201	36	26	121	43	N	N
E.S. CENTRAL	250	236	136	154	23	24	17	34	-	-
Ky.	45	27	23	34	5	3	1	3	N	N
Tenn.	79	71	38	13	18	21	16	31	N	N
Ala.	86	76	57	42	-	-	-	-	N	N
Miss.	40	62	18	65	-	-	-	-	-	-
W.S. CENTRAL	110	284	224	160	29	55	13	6	8	-
Ark.	37	48	4	23	1	-	1	2	-	-
La.	20	32	22	15	-	-	12	4	6	-
Okla.	31	41	101	34	16	11	N	N	2	-
Tex.	22	163	97	88	12	44	N	N	-	-
MOUNTAIN	273	285	184	80	129	58	5	12	-	-
Mont.	14	3	-	-	-	-	-	-	-	-
Idaho	11	14	1	2	4	1	N	N	N	N
Wyo.	3	8	1	1	-	1	1	6	-	-
Colo.	83	79	27	18	44	25	-	-	-	-
N. Mex.	18	40	26	10	25	28	4	6	-	-
Ariz.	108	82	119	35	52	-	-	-	N	N
Utah	21	22	4	7	4	3	-	-	-	-
Nev.	15	37	6	7	-	-	-	-	-	-
PACIFIC	442	723	174	337	47	116	-	-	-	-
Wash.	47	22	16	5	-	16	-	-	N	N
Oreg.	40	50	10	26	N	N	N	N	N	N
Calif.	315	602	139	294	32	83	N	N	N	N
Alaska	17	13	2	1	-	-	-	-	N	N
Hawaii	23	36	7	11	15	17	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	1	-	-	-	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 1, 2003, and March 2, 2002 (9th Week)*

Reporting area	Syphilis: Primary & secondary Cum. 2003	Syphilis: Primary & secondary Cum. 2002	Syphilis: Congenital Cum. 2003	Syphilis: Congenital Cum. 2002	Tuberculosis Cum. 2003	Tuberculosis Cum. 2002	Typhoid fever Cum. 2003	Typhoid fever Cum. 2002	Varicella (Chickenpox) Cum. 2003
UNITED STATES	902	972	35	71	827	1,478	20	46	2,052
NEW ENGLAND	27	12	-	-	18	45	1	4	419
Maine	-	-	-	-	-	2	-	-	216
N.H.	1	-	-	-	1	1	-	-	-
Vt.	-	-	-	-	-	-	-	-	156
Mass.	21	6	-	-	8	9	-	3	47
R.I.	5	2	-	-	3	12	-	-	-
Conn.	-	4	-	-	6	21	1	1	-
MID. ATLANTIC	95	90	7	10	192	251	2	8	-
Upstate N.Y.	3	4	5	1	19	28	1	-	N
N.Y. City	65	47	1	3	161	132	1	4	-
N.J.	26	22	1	6	-	56	-	4	-
Pa.	1	17	-	-	12	35	-	-	-
E.N. CENTRAL	121	190	9	9	130	143	2	7	1,179
Ohio	33	27	1	-	20	19	-	2	310
Ind.	4	10	3	-	22	17	1	1	-
Ill.	18	61	4	8	65	69	-	1	-
Mich.	64	86	1	1	20	30	1	2	853
Wis.	2	6	-	-	3	8	-	1	16
W.N. CENTRAL	20	15	-	-	57	77	-	2	5
Minn.	6	5	-	-	23	32	-	1	N
Iowa	1	-	-	-	6	-	-	-	-
Mo.	6	5	-	-	8	28	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	5
S. Dak.	-	-	-	-	8	5	-	-	-
Nebr.	-	2	-	-	2	1	-	-	-
Kans.	7	3	-	-	10	11	-	-	-
S. ATLANTIC	265	230	4	17	101	269	4	10	434
Del.	1	3	-	-	-	-	-	-	1
Md.	43	18	-	2	17	19	1	1	-
D.C.	7	7	-	-	-	-	-	-	-
Va.	12	7	1	-	21	26	-	-	80
W. Va.	-	-	-	-	2	5	-	-	348
N.C.	27	64	-	5	22	34	1	-	N
S.C.	21	21	1	2	17	18	-	-	5
Ga.	54	32	-	4	22	32	-	5	-
Fla.	100	78	2	4	-	135	2	4	-
E.S. CENTRAL	64	108	4	6	89	95	-	-	-
Ky.	12	9	-	2	7	15	-	-	N
Tenn.	28	46	4	2	29	49	-	-	N
Ala.	22	34	-	-	45	24	-	-	-
Miss.	2	19	-	2	8	7	-	-	-
W.S. CENTRAL	112	131	2	18	19	258	-	3	1
Ark.	9	6	-	-	9	4	-	-	-
La.	12	24	-	-	-	-	-	-	1
Okla.	8	11	-	-	10	3	-	-	N
Tex.	83	90	2	18	-	251	-	3	-
MOUNTAIN	38	50	7	4	31	37	2	2	14
Mont.	-	-	-	-	-	-	-	-	N
Idaho	-	1	-	-	-	-	-	-	N
Wyo.	-	-	-	-	1	1	-	-	2
Colo.	3	3	1	1	11	8	2	1	-
N. Mex.	3	5	-	-	-	7	-	-	-
Ariz.	29	41	6	3	18	12	-	-	-
Utah	1	-	-	-	1	5	-	1	12
Nev.	2	-	-	-	-	4	-	-	-
PACIFIC	160	146	2	7	190	303	9	10	-
Wash.	10	8	-	-	34	26	-	-	-
Oreg.	10	4	-	-	9	14	2	2	-
Calif.	136	133	2	7	121	229	7	8	-
Alaska	-	-	-	-	9	15	-	-	-
Hawaii	4	1	-	-	17	19	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	17	-	1	-	-	-	-	-	3
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending March 1, 2003 (9th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	673	484	117	35	12	21	74
Boston, Mass.	160	105	35	10	4	6	20
Bridgeport, Conn.	71	56	10	4	-	1	8
Cambridge, Mass.	28	24	4	-	-	-	3
Fall River, Mass.	26	21	1	3	1	-	3
Hartford, Conn.	52	27	17	4	4	-	5
Lowell, Mass.	24	21	3	-	-	-	1
Lynn, Mass.	12	9	2	1	-	-	-
New Bedford, Mass.	36	31	2	3	-	-	7
New Haven, Conn.	42	26	12	1	1	2	6
Providence, R.I.	64	47	6	-	-	11	1
Somerville, Mass.	7	4	3	-	-	-	-
Springfield, Mass.	45	37	5	2	1	-	4
Waterbury, Conn.	27	21	4	2	-	-	4
Worcester, Mass.	79	55	13	5	1	1	12
MID. ATLANTIC	2,325	1,652	451	145	46	28	156
Albany, N.Y.	44	35	6	-	2	1	3
Allentown, Pa.	27	22	3	2	-	-	2
Buffalo, N.Y.	97	71	17	8	-	1	8
Camden, N.J.	33	21	9	3	-	-	6
Elizabeth, N.J.	19	13	5	1	-	-	1
Erie, Pa.	62	52	8	2	-	-	4
Jersey City, N.J.	48	31	10	6	-	1	-
New York City, N.Y.	1,160	822	229	75	20	13	63
Newark, N.J.	74	29	28	11	2	2	6
Paterson, N.J.	34	14	12	5	2	1	3
Philadelphia, Pa.	299	190	65	24	13	7	13
Pittsburgh, Pa.§	31	21	10	-	-	-	-
Reading, Pa.	16	12	3	-	1	-	2
Rochester, N.Y.	133	112	14	5	2	-	18
Schenectady, N.Y.	22	19	2	1	-	-	4
Scranton, Pa.	37	33	3	-	1	-	1
Syracuse, N.Y.	114	92	19	1	-	2	17
Trenton, N.J.	34	25	6	1	2	-	2
Utica, N.Y.	18	18	-	-	-	-	1
Yonkers, N.Y.	23	20	2	-	1	-	2
E.N. CENTRAL	2,146	1,475	445	128	36	56	150
Akron, Ohio	82	57	12	8	-	-	9
Canton, Ohio	41	30	10	-	-	1	12
Chicago, Ill.	356	213	84	25	16	17	19
Cincinnati, Ohio	72	47	16	7	-	2	8
Cleveland, Ohio	154	93	37	12	2	10	9
Columbus, Ohio	259	185	54	15	3	2	14
Dayton, Ohio	122	89	23	7	2	1	8
Detroit, Mich.	185	109	48	21	3	4	11
Evansville, Ind.	55	42	11	1	-	1	2
Fort Wayne, Ind.	50	40	7	1	-	2	3
Gary, Ind.	29	21	6	2	-	-	2
Grand Rapids, Mich.	60	50	8	1	1	-	8
Indianapolis, Ind.	199	146	35	10	2	6	12
Lansing, Mich.	58	41	15	2	-	-	5
Milwaukee, Wis.	128	93	24	8	2	1	10
Peoria, Ill.	53	40	8	2	1	2	2
Rockford, Ill.	63	45	14	1	1	2	7
South Bend, Ind.	U	U	U	U	U	U	U
Toledo, Ohio	103	76	20	3	2	2	7
Youngstown, Ohio	77	58	13	2	1	3	2
W.N. CENTRAL	577	421	90	28	13	25	55
Des Moines, Iowa	78	59	17	-	1	1	12
Duluth, Minn.	38	30	7	1	-	-	4
Kansas City, Kans.	22	9	5	3	2	3	1
Kansas City, Mo.	73	58	6	5	1	3	6
Lincoln, Nebr.	45	43	1	1	-	-	4
Minneapolis, Minn.	82	54	13	4	3	8	7
Omaha, Nebr.	91	70	13	5	1	2	10
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	50	37	9	-	-	4	3
Wichita, Kans.	98	61	19	9	5	4	8
S. ATLANTIC	1,200	778	270	92	37	22	97
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	186	109	44	21	9	3	17
Charlotte, N.C.	133	94	27	5	2	5	12
Jacksonville, Fla.	168	109	40	11	5	3	6
Miami, Fla.	90	51	27	6	3	3	5
Norfolk, Va.	39	23	9	5	2	-	5
Richmond, Va.	72	41	10	12	5	4	6
Savannah, Ga.	68	50	15	1	-	2	10
St. Petersburg, Fla.	69	51	12	4	2	-	6
Tampa, Fla.	222	159	41	17	3	2	19
Washington, D.C.	131	78	38	8	6	-	7
Wilmington, Del.	22	13	7	2	-	-	4
E.S. CENTRAL	1,093	772	201	79	14	26	87
Birmingham, Ala.	192	143	31	13	3	1	19
Chattanooga, Tenn.	68	53	6	4	3	2	3
Knoxville, Tenn.	100	63	23	13	-	1	3
Lexington, Ky.	56	41	9	6	-	-	7
Memphis, Tenn.	304	211	60	17	5	11	28
Mobile, Ala.	101	73	16	10	-	2	5
Montgomery, Ala.	77	56	17	3	1	-	10
Nashville, Tenn.	195	132	39	13	2	9	12
W.S. CENTRAL	1,449	923	303	110	73	40	113
Austin, Tex.	49	36	9	3	-	1	4
Baton Rouge, La.	54	32	9	11	2	-	-
Corpus Christi, Tex.	64	41	15	2	3	3	1
Dallas, Tex.	165	96	42	15	8	4	17
El Paso, Tex.	84	52	22	8	2	-	5
Ft. Worth, Tex.	100	74	17	5	3	1	14
Houston, Tex.	499	294	97	41	45	22	37
Little Rock, Ark.	49	31	15	1	1	1	1
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	268	187	52	17	6	6	23
Shreveport, La.	U	U	U	U	U	U	U
Tulsa, Okla.	117	80	25	7	3	2	11
MOUNTAIN	953	653	194	71	16	19	69
Albuquerque, N.M.	142	101	28	10	2	1	15
Boise, Idaho	42	29	11	1	-	1	1
Colo. Springs, Colo.	62	40	13	3	2	4	4
Denver, Colo.	113	69	24	13	2	5	4
Las Vegas, Nev.	227	150	53	15	5	4	13
Ogden, Utah	33	23	7	1	1	1	5
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	32	25	4	3	-	-	1
Salt Lake City, Utah	126	87	23	12	3	1	10
Tucson, Ariz.	176	129	31	13	1	2	16
PACIFIC	1,611	1,158	305	89	38	20	176
Berkeley, Calif.	13	10	1	1	-	1	1
Fresno, Calif.	146	107	29	4	5	1	20
Glendale, Calif.	20	17	2	1	-	-	-
Honolulu, Hawaii	97	69	20	5	2	1	12
Long Beach, Calif.	107	73	21	7	4	2	21
Los Angeles, Calif.	361	264	61	24	8	4	26
Pasadena, Calif.	23	17	6	-	-	-	3
Portland, Oreg.	185	129	36	11	5	3	17
Sacramento, Calif.	260	181	57	13	7	2	37
San Diego, Calif.	U	U	U	U	U	U	U
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	179	130	30	13	3	3	21
Santa Cruz, Calif.	31	27	3	1	-	-	3
Seattle, Wash.	125	84	32	4	3	2	10
Spokane, Wash.	64	50	7	5	1	1	5
Tacoma, Wash.	U	U	U	U	U	U	U
TOTAL	12,027¶	8,316	2,376	777	285	257	977

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.

(Continued from page 181)

with materials that have come into contact with the site, including bandages, clothing, towels, and sheets. Contaminated bandages and scabs from the vaccination site should be placed in a sealed plastic bag and discarded. Vaccinees should keep a separate laundry hamper for clothing, towels, sheets, and other items that might have come in direct contact with the vaccination site or with drainage from the site; these items should be washed by using hot water with detergent and/or bleach.

Contacts of vaccinees should not touch the vaccine site or any materials that might be contaminated with vaccine virus, including bandages, clothing, towels, or sheets. Contacts who touch any potentially contaminated materials inadvertently should wash their hands immediately. Vaccinated persons and their contacts who share a bed should be certain that the vaccination site is covered with a bandage and shirt sleeve.

References

1. CDC. Smallpox Vaccine Adverse Events Monitoring and Response System for the first stage of the smallpox vaccination program. MMWR 2002;52:88–9.
2. CDC. Recommendations for using smallpox vaccine in a pre-event vaccination program: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52:(dispatch).

Erratum: Vol. 52, No. 4

In the *MMWR* QuickGuide section titled "Recommended Childhood and Adolescent Immunization Schedule—United States, 2003," an error occurred in Table 1. In the "Dose one to dose two" column for Hib (6 wks), the second recommendation should read "8 wks (as final dose): if 1st dose given at age 12–14 months."

Erratum: Vol. 52, No. 8

In the article, "Pregnancy in Perinatally HIV-Infected Adolescents and Young Adults—Puerto Rico, 2002," an error occurred in the second paragraph on page 150. The second sentence should read, "Three case-patients dropped out of school before pregnancy and five had friends who became pregnant before they did, compared with one control who dropped out of school and two who had pregnant friends (Table)."

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