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MORBIDITY AND MORTALITY WEEKLY REPORT

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## **Public Health Surveillance During the XVII Central American and Caribbean Games — Puerto Rico, November 1993**

To provide medical services at mass gatherings for scheduled special events (e.g., world fairs, music festivals, and athletic competitions such as the Olympics), organizers must have information to anticipate both routine and uncommon situations. In November 1993, approximately 9500 athletes and staff from 31 countries participated in the XVII Central American and Caribbean Games in San Juan, Puerto Rico. To monitor injury- and illness-related morbidity among participants, the schools of public health and medicine at the University of Puerto Rico and the Puerto Rico Olympic Committee established a public health surveillance system designed specifically for this event. This report summarizes selected results from the system, which underscore the usefulness of this approach in planning prevention, medical, and emergency services for similar events.

During the games, 4400 athletes competed in 28 sports at venues located in multiple sites around San Juan; the 5000 staff members included 500 trainers, judges, and delegates, and 4500 volunteers who were support personnel. The athletes lived at the Central American Village of the Caribbean at Camp Santiago in Salinas. Physicians provided medical care at the athletic village hospital, where an epidemiology unit conducted surveillance while the village was open. Staff in the epidemiology unit analyzed data daily and shared reports with games officials.

From November 14 through December 2, a total of 458 (58%) of 794 consultations at the hospital were for athletes, and 336 (42%) were for staff members. The largest numbers of patients were from Puerto Rico (249), Guatemala (49), and Jamaica (46). Most (444 [56%]) of the visits occurred during November 20–25, the peak of competition, when a daily average of 74 patients were evaluated. Among all 794 patients, the most common diagnosis was musculoskeletal injuries (302 [38%]). Among the 229 athletes treated for injuries, the most frequent injury-related diagnoses were concussion (38), sprain (27), strain (27), tendinitis (25), abrasion (15), and myositis (15). The sports accounting for the largest number of injuries were field hockey (25), softball (22), soccer (21), and tae kwon do (21). Other diagnoses among all of those treated included respiratory (180 [23%]), skin (85 [11%]), gastrointestinal (56 [7%]), genitourinary (25 [3%]), and other (146 [18%]) problems.

*Public Health Surveillance — Continued*

Of 180 patients with respiratory diagnoses, 71 (39%) were athletes whose most frequent diagnoses were upper respiratory tract infection (33) and pharyngitis (23). During the games, acute infectious conjunctivitis was diagnosed in 12 persons, including nine support staff and three athletes. Because of concern about the potential for spread, the nine support staff were provided treatment and asked to leave the games; the three athletes were treated and interviewed by epidemiologists to detect additional cases. Of the 15 cases of acute gastroenteritis, eight occurred in athletes, including three in members of one team. These three and their teammates were monitored by medical personnel for additional cases among teammates.

Of the 794 consultations, 727 (92%) persons received medication, the most common of which were nonsteroidal anti-inflammatory agents (199), analgesics (162), antihistamines (58), and antibiotics (52). A total of 128 procedures were performed, including 26 clinical laboratory tests, 70 radiographic studies, and 32 procedures requiring suturing and local wound care.

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**Editorial Note:** International sports events and other organized mass gatherings bring together large numbers of competitors and support staff from geographically widespread regions into sports venues and lodging facilities. Persons planning such events should recognize the data requirements of health-care and public health officials for providing necessary services during the events (1–3). The public health surveillance system established for the XVII Central American and Caribbean Games was simple and flexible and provided useful information on a timely basis (4). For example, information about patients treated at the hospital was used by the organizing committee's Division of Health Services for daily planning, and the system detected two conditions (conjunctivitis and gastroenteritis) with potential for spread.

Outbreaks of infectious diseases associated with competitive sports events may be transmitted by several modes, including person-to-person, common source, and airborne or droplet spread (5). Basic measures for preventing infectious diseases among athletes participating in such events include diagnosis and follow-up, prevention (e.g., vaccination), education about risk behaviors, and public health surveillance (e.g., prompt disease recognition and reporting). Health-care workers who provide medical care in these settings should recognize the potential risks for transmission of infectious diseases at three levels: the individual athlete, the team and support staff (as a group of individuals in close contact), and spectators or others exposed through viewing or related activities (5). In addition, members of these groups may be at risk for exposure to infectious diseases present among persons in the general community. Although the overall likelihood of transmission during competitive sports events is low, understanding of the levels for potential spread of infectious diseases facilitates rapid detection and intervention by medical and public health officials.

The surveillance system in San Juan focused on athletes but not spectators. At some competitions, particularly those extending over many days and held in

*Public Health Surveillance — Continued*

different locations, the provision of medical care for spectators may entail extensive coordination between public health officials and event organizers (2,6,7). Factors to be considered when planning such services include the type and length of event(s), physical facilities, availability of qualified on-site staff and other resources, weather and other environmental factors, local capacity for routine medical care, and relations among groups responsible for organizing the games.

The public health and safety needs for the 1996 Summer Olympics—scheduled for July 19–August 5 in Atlanta, Georgia—are complex and have required close cooperation among the Atlanta Committee for the Olympic Games (ACOG) and the local, state, and federal agencies responsible for these needs. To prepare medical and public health services for these events, ACOG and government agencies have reviewed the experiences of and information from prior events such as the XVII Central American and Caribbean Games, previous Olympics (2,8), and other large gatherings (9). ACOG has worked with the local community to plan medical services for the expected 11,000 athletes, 80,000 staff, and 2.2 million visitors during the 18-day event. These plans have been closely integrated with the operations of existing local, state, and federal public health officials; emergency-management services; environmental health services; and other relevant agencies. Concerns about heat-related morbidity, in particular, prompted extensive planning efforts by ACOG and public health officials to develop for and distribute to the public educational materials regarding prevention measures, and to ensure the availability of adequate water and shade structures both within and outside the Olympic venues.

To monitor the health and safety of athletes, staff, and spectators at the venues and Olympic Village, CDC, at the request of ACOG Medical Services, has coordinated the design and implementation of a surveillance system that will collect information daily from approximately 100 medical assistance sites at the venues. These data will be provided to ACOG, the International Olympic Committee, and state and federal officials. To monitor infectious diseases and other health events that may require intervention in the community, the Division of Public Health, Georgia Department of Human Resources, has enhanced the existing notifiable disease system, which is based on reports from physicians, infection-control practitioners, and statewide laboratories. During the Olympics, the state public health laboratory and a private laboratory will provide daily reports to the state epidemiologist of selected tests requiring immediate public health follow-up. In addition, active surveillance at eight sentinel hospital emergency departments (four hospitals in the metropolitan Atlanta area and one hospital each at venues in Athens, Columbus, Macon, and Savannah) will include reports of potential foodborne illnesses and other infectious diseases, injuries, and heat-related illnesses.

*References*

1. Thompson JM, Savoia G, Powell G, Challis EB, Law P. Level of medical care required for mass gatherings: the XV Winter Olympic Games in Calgary, Canada. *Ann Emerg Med* 1991;20:385–90.
2. Baker WM, Simone BM, Niemann JT, Daly A. Special event medical care: the 1984 Los Angeles Summer Olympics experience. *Ann Emerg Med* 1986;15:185–90.
3. Leonard RB, Petrilli R, Calabro JJ, Noji EK. Provision of emergency medical care for crowds [Monograph]. Dallas, Texas: American College of Emergency Physicians, 1990.
4. Klaucke DN, Buehler JW, Thacker SB, et al. Guidelines for evaluating surveillance systems. *MMWR* 1988;37(no. S-5).

*Public Health Surveillance — Continued*

5. Goodman RA, Thacker SB, Solomon SL, Osterholm MT, Hughes JM. Infectious diseases in competitive sports. *JAMA* 1994;271:862-7.
6. Weiss BP, Mascola L, Fannin SL. Public health at the 1984 Summer Olympics: the Los Angeles County experience. *Am J Public Health* 1988;78:686-8.
7. Gustafson TL, Booth AL, Fricker RS, et al. Disease surveillance and emergency services at the 1982 World's Fair. *Am J Public Health* 1987;77:861-3.
8. Plasencia i Taradach A, ed. Public health at the Olympic games of Barcelona '92 [Catalan and Spanish]. Barcelona, Spain: Area of Public Health, Municipal Institute of Health, 1994.
9. Hnatow DA, Gordon DJ. Medical planning for mass gatherings: a retrospective review of the San Antonio Papal Mass. *Prehospital and Disaster Medicine* 1991;6:443-50.

### **Prevention of Perinatal Hepatitis B Through Enhanced Case Management — Connecticut, 1994-95, and United States, 1994**

Each year, an estimated 20,000 infants are born to women in the United States who are positive for hepatitis B surface antigen (HBsAg). These infants are at high risk for perinatal hepatitis B virus (HBV) infection and for chronic liver disease as adults. To identify newborns who require immunoprophylaxis to prevent perinatal HBV infection (1-4), all vaccine advisory groups have recommended routine HBsAg screening of all pregnant women during an early prenatal visit in each pregnancy. Federal funding to support perinatal hepatitis B-prevention programs became available in 1990, and by 1992, programs had been implemented in all 50 states and the District of Columbia. Specific objectives of these programs are to ensure that 1) all pregnant women are tested for HBsAg, and 2) infants born to HBsAg-positive women receive hepatitis B immune globulin (HBIG) and hepatitis B vaccine at birth, with follow-up doses of vaccine at ages 1 and 6 months (5). This report describes the case-management features of successful hepatitis B-prevention programs in Connecticut during 1994-95 and in the United States during 1994.

#### **Connecticut**

In 1992, the Connecticut Department of Public Health implemented a perinatal hepatitis B-prevention program and recommended that 1) HBsAg-positive women be contacted before delivery and educated about HBV infection, 2) the infant's pediatrician and delivery hospital be informed of the mother's HBsAg status, and 3) a tracking system be used to ensure the infant receives appropriate postexposure prophylaxis. Local health departments (LHDs) initially were responsible for providing management to mother/infant pairs.

Enhanced case management (ECM) was implemented in two counties in July 1994 and a third county in April 1995. In addition to use of the basic recommendations, the ECM program employed a full-time nurse (hired by the state) who worked on a flexible schedule to manage all mother/infant pairs in the three-county area and a computer-based tracking system to identify pending births to infected mothers and the need for follow-up vaccine doses for infants. To evaluate program effectiveness, outcomes in the ECM program were compared with the LHD programs for HBsAg-positive women identified during 1994-95.

*Prevention of Perinatal Hepatitis B — Continued*

During 1994–95, the ECM program identified 64 HBsAg-positive pregnant women and maintained contact with all of these women throughout their pregnancies. During this period, LHD programs identified 71 HBsAg-positive pregnant women and established and/or maintained contact with 58 (82%). The mothers in the LHD programs resided in 27 different local health jurisdictions. Three of these jurisdictions managed  $\geq 10$  mothers, and 18 each managed one.

Documented compliance with the recommendation to administer HBIG and the first dose of hepatitis B vaccine within 24 hours of birth was higher in the ECM group (100%) than in the LHD group (90%) (Table 1). In addition, the rate of completion of the three-dose series by 6–8 months after birth was higher in the ECM program (91%) than the LHD programs (48%). No infants were lost to follow-up in the ECM program; in comparison, seven (12%) infants in the LHD programs were lost to follow-up without documentation that the series was completed.

**United States**

In March 1996, CDC conducted a survey to assess the effectiveness of the 58 federally funded perinatal hepatitis B-prevention programs for infants born to HBsAg-positive women in the United States during 1994. Of 8252 infants born to HBsAg-positive women, 7362 (89%) received HBIG and the first dose of hepatitis B vaccine at birth, and 5042 (61%) completed prophylaxis by age 6–8 months.

As part of this survey, program coordinators completed a questionnaire about key programmatic elements; 48 (76%) of the 58 programs provided complete information. ECM techniques associated with an increased likelihood of vaccination of infants born to HBsAg-positive mothers (Table 1) included routine reminders to HBsAg-positive women that their status should be reported to the delivery hospital, reporting of the maternal HBsAg status on the newborn metabolic screening card or birth certificate, routine reminders to the prenatal-care providers that the mother's HBsAg status should be reported to the delivery hospital, and use of a computer-based tracking system for HBsAg-positive pregnant women and their infants.

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**Editorial Note:** Administration of appropriate immunoprophylaxis is approximately 90% effective in preventing perinatal HBV transmission (6). Because infants who are incompletely vaccinated with hepatitis B vaccine are at increased risk for perinatal HBV infection and less likely to be protected against infection compared with completely vaccinated children, timely provision of HBIG and the appropriate doses of vaccine is essential to prevention (7).

The findings in this report indicate that, compared with all U.S. infants born to HBsAg-positive women, a substantially higher proportion of such infants in the ECM program in Connecticut received HBIG and were completely vaccinated with hepatitis B vaccine by age 6–8 months. One potential explanation for the increase in Connecticut was the use of comprehensive case-management techniques, including employment of staff specifically for the program, use of a computer-based tracking system, and use of reminder letters. Similar techniques improved case management in the national survey. In addition, reporting of maternal HBsAg status on newborn metabolic screening cards or birth certificates may help to ensure infants are vaccinated in the hospital and entered into tracking and recall systems at the state health department.

**TABLE 1. Number and percentage of infants who were born to HBsAg\*-positive women and received hepatitis B immune globulin (HBIG) and the vaccine series for hepatitis B, by program and characteristics — Connecticut, 1994–95, and United States, 1994**

Program/Characteristic	No. infants born to HBsAg-positive women	Infants who received HBIG and hepatitis B vaccine at birth			Infants who received third dose of hepatitis B vaccine 6–8 months after birth		
		No.	(%)	p value	No.	(%)	p value
<b>Connecticut</b>							
Use enhanced case-management (ECM) techniques							
Yes (ECM program)	64	64	(100)	0.01†	58	(91)	<0.01
No (local health department program§)	58	52	( 90)		28	(48)	
<b>United States¶</b>							
Provide reminders to HBsAg-positive women to report their status to delivery hospital							
Yes	6717	5978	( 89)	0.16	4500	(67)	<0.01
No	949	835	( 88)		522	(55)	
Report maternal HBsAg status on newborn metabolic screening card or birth certificate**							
Yes	4995	4545	( 91)	<0.01	3347	(67)	
No	2617	2224	( 85)		1649	(63)	
Provide reminders to prenatal-care providers to report mother's HBsAg status to delivery hospital							
Yes	6786	6107	( 90)	<0.01	4547	(67)	<0.01
No	880	713	( 81)		493	(56)	
Have computerized system to track HBsAg-positive pregnant women and their infants							
Yes	6778	6168	( 91)	<0.01	4541	(67)	<0.01
No	888	693	( 78)		471	(53)	

\* Hepatitis B surface antigen.

† Fisher exact two-tailed test.

§ Documented compliance with the recommendation to administer HBIG and hepatitis B vaccine was verified with a chart review.

¶ Only 48 of the 58 programs in the United States reported complete data. Data from these programs were obtained from both active and passive surveillance systems.

\*\* Excludes data for 54 infants for whom data were unknown.

*Prevention of Perinatal Hepatitis B — Continued*

Perinatal hepatitis B-prevention programs without intensive case management have been only moderately successful in ensuring that children of HBsAg-positive mothers are identified and complete the vaccine series by age 6–8 months. For example, in 1988, an evaluation of patients served by a large municipal hospital indicated that only 65% of infants at risk for perinatal HBV infection had received both HBIG and hepatitis B vaccine within 7 days after delivery (8). In addition, among 832 infants identified by a neonatal hepatitis B surveillance and vaccination program in New York City in 1988, only 59% had received HBIG and completed the vaccine series by age 18 months (9).

Although this report did not include cost analysis, previous studies associate substantial cost savings with prevention of perinatal HBV transmission (10). For example, the estimated lifetime medical costs for one patient with cirrhosis of the liver (without transplantation) is \$87,000; however, the costs associated with the techniques employed by the ECM program were not estimated. In addition, the integration of perinatal HBV-prevention programs with existing and new perinatal screening programs (e.g., maternal screening for human immunodeficiency virus and group B streptococcal infections) may improve overall cost effectiveness of these programs and facilitate comprehensive case management for other diseases that affect newborns.

A national health objective for the year 2000 is to reduce by approximately 80% the number of perinatal HBV infections in the United States (objective 20.3). Based on the national survey described in this report, only half of all births to HBsAg-positive mothers in the United States are reported to a perinatal hepatitis B-prevention program and entered into a tracking system. Based on recent studies, widespread use of comprehensive case-management techniques similar to those used by newborn metabolic screening programs are needed to achieve the year 2000 objective.

*References*

1. CDC. Protection against viral hepatitis: recommendations of the Immunization Practices Advisory Committee (ACIP). *MMWR* 1990;39(no. RR-2).
2. Committee on Obstetrics: Maternal and Fetal Medicine. Guidelines for hepatitis B virus screening and vaccination during pregnancy. Washington, DC: American College of Obstetrics and Gynecology, 1990.
3. American Academy of Pediatrics. 1994 Red book: report of the Committee on Infectious Diseases. 23rd ed. Elk Grove Village, Illinois: American Academy of Pediatrics, 1994:224–38.
4. American Academy of Family Physicians. Recommendations for hepatitis B preexposure vaccination and postexposure prophylaxis. Kansas City, Missouri: American Academy of Family Physicians, August 1992. (Reprint no. 529).
5. CDC. Hepatitis surveillance report no. 56. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, 1995.
6. Stevens CE, Taylor PE, Tong MJ, et al. Yeast-recombinant hepatitis B vaccine: efficacy with hepatitis B immune globulin in prevention of perinatal hepatitis B virus transmission. *JAMA* 1987;257:2612–6.
7. Kohn MA, Farley TA, Scott C. The need for more aggressive follow-up of children born to hepatitis B surface antigen positive mothers: lessons learned from the Louisiana Perinatal Hepatitis B Immunization Program. *Pediatr Infect Dis J* 1996;15:535–40.
8. Birnbaum JM, Bromberg K. Evaluation of prophylaxis against hepatitis B in a large municipal hospital. *Am J Infect Control* 1992;20:172–6.
9. Henning KJ, Pollack DM, Friedman SM. A neonatal hepatitis B surveillance and vaccination program: New York City, 1987 to 1988. *Am J Public Health* 1992;82:885–8.
10. Margolis HS, Coleman PJ, Brown RE, et al. Prevention of hepatitis B virus transmission by immunization: an economic analysis of current recommendations. *JAMA* 1995;274:1201–8.

## Cigarette Smoking Among Adults — United States, 1994

Reducing the prevalence of cigarette smoking among adults to no more than 15% is one of the national health objectives for the year 2000 (objective 3.4) (1). To assess progress toward meeting this objective, CDC analyzed self-reported information about cigarette smoking among U.S. adults contained in the Year 2000 Objectives Supplement of the 1994 National Health Interview Survey (NHIS-2000). This report summarizes the findings of this analysis, which indicate that, in 1994, 25.5% (48.0 million) of adults were current smokers and that the overall prevalence of current smoking and estimates for sociodemographic subgroups were unchanged from 1993 to 1994.

The 1994 NHIS-2000 was administered to a nationally representative sample (n=19,738) of the U.S. noninstitutionalized civilian population aged  $\geq 18$  years; 79.5% responded. Participants were asked "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Current smokers were persons who reported having smoked  $\geq 100$  cigarettes in their lifetime and who smoked every day or some days at the time of interview. Former smokers were those who had smoked  $\geq 100$  cigarettes in their lifetime but who did not smoke currently. Interest in quitting smoking was determined by asking current smokers "Would you like to completely quit smoking cigarettes?" Quit attempt was determined by asking current every-day smokers "During the past 12 months, have you stopped smoking for one day or longer?" Data were adjusted for non-response and weighted to provide national estimates. Confidence intervals (CIs) were calculated using SUDAAN.

In 1994, an estimated 48.0 million adults (25.5% [95% CI= $\pm 0.7\%$ ]), including 25.3 million men and 22.7 million women, were current smokers (Table 1): 21.0% (95% CI= $\pm 0.7\%$ ) were every-day smokers, and 4.6% (95% CI= $\pm 0.4\%$ ) were some-day smokers. Current every-day smokers in 1994 constituted 82.1% (95% CI= $\pm 1.3\%$ ) of current smokers, similar to that for 1993 (81.8% [95% CI= $\pm 1.2\%$ ]) (CDC, unpublished data, 1996). Men were significantly more likely to be current smokers (28.2% [95% CI= $\pm 1.1\%$ ]) than were women (23.1% [95% CI= $\pm 0.9\%$ ]). Racial/ethnic group-specific prevalence was highest for American Indians/Alaskan Natives (42.2% [95% CI= $\pm 9.4\%$ ]) and lowest for Asians/Pacific Islanders (13.9% [95% CI= $\pm 3.5\%$ ]). With the exception of persons with 0–8 years of education, smoking prevalence varied inversely with level of education and was highest among persons with 9–11 years of education (38.2% [95% CI= $\pm 2.5\%$ ]). Smoking prevalence was higher among persons living below the poverty level\* (34.7% [95% CI= $\pm 2.3\%$ ]) than among those living at or above the poverty level (24.1% [95% CI= $\pm 0.8\%$ ]).

In 1994, an estimated 46.0 million adults (24.5% [95% CI= $\pm 0.7\%$ ]) were former smokers, including 26.0 million men and 20.0 million women. An estimated 33.2 million (69.3% [95% CI= $\pm 1.6\%$ ]) current smokers wanted to quit smoking completely, and 18.1 million (46.4% [95% CI= $\pm 1.9\%$ ]) current every-day smokers had stopped smoking for at least 1 day during the preceding 12 months.

\*Poverty statistics are based on definitions originated by the Social Security Administration in 1964 (which were subsequently modified by federal interagency committees in 1969 and 1980) and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.



*Cigarette Smoking — Continued***TABLE 1. Percentage of persons aged  $\geq 18$  years who were current cigarette smokers\*, by selected characteristics — Year 2000 Objectives Supplement of the National Health Interview Survey, United States, 1994**

Characteristic	Men (n=8,303)		Women (n=11,435)		Total (n=19,738)	
	%	(95% CI) <sup>†</sup>	%	(95% CI)	%	(95% CI)
<b>Race/Ethnicity<sup>§</sup></b>						
White	28.0	( $\pm 1.2$ )	24.7	( $\pm 1.1$ )	26.3	( $\pm 0.9$ )
Black	33.9	( $\pm 4.0$ )	21.8	( $\pm 2.2$ )	27.2	( $\pm 2.3$ )
Hispanic	24.3	( $\pm 4.1$ )	15.2	( $\pm 2.8$ )	19.5	( $\pm 2.5$ )
American Indian/ Alaskan Native <sup>¶</sup>	53.7	( $\pm 16.9$ )	33.1	( $\pm 10.8$ )	42.2	( $\pm 9.4$ )
Asian/Pacific Islander	20.4	( $\pm 6.1$ )	7.5	( $\pm 3.5$ )	13.9	( $\pm 3.5$ )
<b>Education (yrs)**</b>						
$\leq 8$	30.4	( $\pm 4.1$ )	17.8	( $\pm 2.8$ )	23.7	( $\pm 2.4$ )
9–11	45.8	( $\pm 3.9$ )	32.1	( $\pm 3.0$ )	38.2	( $\pm 2.5$ )
12	33.2	( $\pm 2.1$ )	27.3	( $\pm 1.6$ )	29.8	( $\pm 1.3$ )
13–15	28.4	( $\pm 2.5$ )	23.3	( $\pm 2.1$ )	25.7	( $\pm 1.6$ )
$\geq 16$	13.8	( $\pm 1.7$ )	10.4	( $\pm 1.4$ )	12.3	( $\pm 1.1$ )
<b>Age (yrs)</b>						
18–24	29.8	( $\pm 3.3$ )	25.2	( $\pm 2.8$ )	27.5	( $\pm 2.2$ )
25–44	32.3	( $\pm 1.7$ )	27.8	( $\pm 1.4$ )	30.0	( $\pm 1.1$ )
45–64	28.3	( $\pm 2.1$ )	22.8	( $\pm 1.9$ )	25.5	( $\pm 1.4$ )
$\geq 65$	13.2	( $\pm 1.9$ )	11.1	( $\pm 1.3$ )	12.0	( $\pm 1.1$ )
<b>Poverty status<sup>††</sup></b>						
At/Above	26.6	( $\pm 1.1$ )	21.6	( $\pm 1.0$ )	24.1	( $\pm 0.8$ )
Below	41.9	( $\pm 4.1$ )	30.2	( $\pm 2.6$ )	34.7	( $\pm 2.3$ )
Unknown	31.8	( $\pm 4.2$ )	26.8	( $\pm 3.4$ )	28.8	( $\pm 2.7$ )
<b>Total</b>	<b>28.2</b>	<b>(<math>\pm 1.1</math>)</b>	<b>23.1</b>	<b>(<math>\pm 0.9</math>)</b>	<b>25.5</b>	<b>(<math>\pm 0.7</math>)</b>

\*Persons who reported having smoked  $\geq 100$  cigarettes and who reported now smoking every day or some days. Excludes 171 respondents for whom smoking status was unknown.

<sup>†</sup>Confidence interval.

<sup>§</sup>Excludes 251 respondents in unknown, multiple, and other racial categories.

<sup>¶</sup>Estimates should be interpreted with caution because of the small sample sizes.

\*\*Persons aged  $\geq 25$  years. Excludes 118 persons with unknown years of education.

<sup>††</sup>Poverty statistics are based on definitions developed by the Social Security Administration in 1964 (which were subsequently modified by federal interagency committees in 1969 and 1980) and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.

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**Editorial Note:** The findings in this report indicate that the overall prevalence of current cigarette smoking among U.S. adults in 1994 was unchanged compared with that in 1993 (2) and suggest a plateau in the prevalence (2,3); in addition, estimated prevalences were unchanged for sociodemographic subgroups, for current and every-day smokers, and for former smokers. From 1981 to 1993, average per capita consumption of cigarettes declined by 108.2 cigarettes annually (3836 cigarettes per adult to 2538); in comparison, the annual decline was only 11.5 cigarettes from 1993 to 1995 (2515 per adult) (3,4). The plateau in prevalence and consumption corresponded with a 10.4% decrease in the real price per pack of cigarettes during 1992–1994 after annual increases of an average of 4% since 1984 (5). This decrease in the real price of

*Cigarette Smoking — Continued*

cigarettes was because of increased market shares for discount brands and price decreases in premium brands. In addition, during this period, domestic cigarette marketing expenditures increased at more than four times the rate of inflation, with the largest increases in expenditures for coupons and other items that make cigarettes more affordable (6).

Racial/ethnic variations in smoking prevalence probably reflect the differences in education level (7), income, employment status, and cultural factors. For example, in many Asian cultures, smoking by women is unacceptable (8). To further assess these differences, CDC has funded 11 academic institutions to collaborate in examining variations in smoking behavior among racial, ethnic, and sex groups. These studies include focus groups of teenagers to determine differences among groups in the functional values, parenting styles, and social norms associated with tobacco use.

To achieve national health objectives for decreased prevalence of smoking, efforts must be intensified to discourage the initiation of smoking among youth and to encourage smokers to quit. Specific prevention strategies include reducing both the access to and the appeal of tobacco products for minors, educational efforts encouraging cessation, improved access to cessation services for smokers interested in quitting, and implementation of other strategies (e.g., mass media campaigns) (9). The document *Smoking Cessation: Clinical Practice Guideline* recently released by the Agency for Health Care Policy and Research (10) should be widely disseminated and its recommendations fully implemented by all health-care professionals; in addition, all health insurance plans are encouraged to offer treatment for nicotine addiction as a covered benefit (1).

*References*

1. Public Health Service. Healthy people 2000: midcourse review and 1995 revisions. Washington, DC: US Department of Health and Human Services, Public Health Service, 1995.
2. CDC. Cigarette smoking among adults—United States, 1993. *MMWR* 1994;43:925–30.
3. Giovino GA, Schooley MW, Zhu BP, et al. Trends and recent patterns in selected tobacco-use behaviors—United States, 1900–1993. *MMWR* 1994;43(no. SS-3).
4. US Department of Agriculture. Tobacco: situation and outlook report. Washington, DC: US Department of Agriculture, Economic Research Service, April 1996.
5. The Tobacco Institute. The tax burden on tobacco. Washington, DC: The Tobacco Institute, 1995.
6. US Federal Trade Commission. Federal Trade Commission report to Congress for 1993: pursuant to the Federal Cigarette Labeling and Advertising Act. Washington, DC: US Federal Trade Commission, 1995.
7. Escobedo LG, Zhu BP, Giovino GA, Eriksen MP. Educational attainment and racial differences in cigarette smoking. *J Natl Cancer Inst* 1995;87:1552–3.
8. Chollat-Traquet C. Women and tobacco. Geneva, Switzerland: World Health Organization, 1992.
9. US Department of Health and Human Services. Reducing the health consequences of smoking: 25 years of progress—a report of the Surgeon General. Washington, DC: US Department of Health and Human Services, Public Health Service, CDC, 1989; DHHS publication no. (CDC)89-8411.
10. US Department of Health and Human Services. Smoking cessation: clinical practice guideline [no. 18]. Washington, DC: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, 1996; DHHS publication no. (AHCPR)96-0692.

## Notice to Readers

### **Publication of Surgeon General's Report On Physical Activity and Health**

*Physical Activity and Health: A Report of the Surgeon General* was released on July 11, 1996, by the Public Health Service, U.S. Department of Health and Human Services (1). This report assesses the role of physical activity in preventing disease and concludes that regular physical activity reduces the risk for developing or dying from coronary heart disease, noninsulin-dependent diabetes, hypertension, and colon cancer; reduces symptoms of anxiety and depression; contributes to the development and maintenance of healthier bones, muscles, and joints; and helps control weight. Physical activity also may help older adults maintain the ability to live independently and help prevent falling and fractures.

The Surgeon General's report emphasizes two important findings. First, demonstrated health benefits occur at a "moderate" level of activity—a level sufficient to expend about 150 calories of energy per day, or 1000 calories per week (e.g., walking briskly for 30 minutes each day). Second, although physical activity does not need to be vigorous to provide health benefits, the amount of health benefit is directly related to the amount of regular physical activity. These conclusions suggest a flexible approach to increasing physical activity. Because a moderate amount of physical activity can be achieved in many ways and must be sustained throughout life to produce benefits, persons unable or unwilling to adhere to a structured exercise program can incorporate into their daily lives physical activity appropriate to their personal preferences and life circumstances. Examples of moderate activity include playing volleyball for 45 minutes, raking leaves for 30 minutes, swimming laps for 20 minutes, playing basketball for 15–20 minutes, or running 1.5 miles in 15 minutes. These examples illustrate the balance between duration and intensity, with less strenuous activities requiring a longer duration to achieve the same caloric expenditure. Moderate amounts of activity will improve health for most of the U.S. population, who currently do not achieve the recommended amount of physical activity (including the 25% of U.S. adults who are not physically active). Those who currently achieve moderate amounts of physical activity on a regular basis can obtain further benefits by increasing the duration, intensity, or frequency of activity.

Although the study of methods to increase physical activity is in its early stages, some efforts have demonstrated promising results, most prominently in innovative physical education programs in schools. Other examples of effective approaches include counseling of patients by their physicians and, in some worksites, promoting physical activity among employees.

This first Surgeon General's report on physical activity and health was prepared by CDC in conjunction with academic experts in exercise science, physiology, epidemiology, public health, and the behavioral sciences. The President's Council on Physical Fitness and Sports joined CDC as a collaborating partner representing the Office of the Surgeon General. The National Institutes of Health and the Office of Public Health and Science assisted in planning the report, with consultation provided by the American College of Sports Medicine, the American Heart Association, and the American Alliance for Health, Physical Education, Recreation, and Dance. The

*Notice to Readers — Continued*

executive summary for the report and an order form for the full report are available from CDC, telephone toll free (888) 232-4674 ([888] CDC-4NRG), and from the Internet at <http://www.cdc.gov>.

*Reference*

1. US Department of Health and Human Services. Physical activity and health: a report of the Surgeon General. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, 1996.

### Quarterly Immunization Table

To track progress toward achieving the goals of the Childhood Immunization Initiative (CII), CDC publishes quarterly a tabular summary of the number of cases of all diseases preventable by routine childhood vaccination reported during the previous quarter and year-to-date (provisional data). In addition, the table compares provisional data with final data for the previous year and highlights the number of reported cases among children aged <5 years, who are the primary focus of CII. Data in the table are reported through the National Electronic Telecommunications System for Surveillance (NETSS).

#### Number of reported cases of diseases preventable by routine childhood vaccination — United States, April–June 1996 and 1995–1996\*

Disease	No. cases, April–June 1996	Total cases January–June		No. cases among children aged <5 years†	
		1995	1996	1995	1996
Congenital rubella syndrome	0	5	1	5	1
Diphtheria	0	0	1	0	0
<i>Haemophilus influenzae</i> §	279	668	623	175	142
Hepatitis B¶	2410	4917	4468	39	27
Measles	192	231	259	86	45
Mumps	176	498	325	100	68
Pertussis	893	1415	1527	810	742
Poliomyelitis, paralytic**	0	2	0	2	0
Rubella	55	83	94	10	10
Tetanus	7	11	10	1	0

\* Data for 1995 and 1996 are provisional.

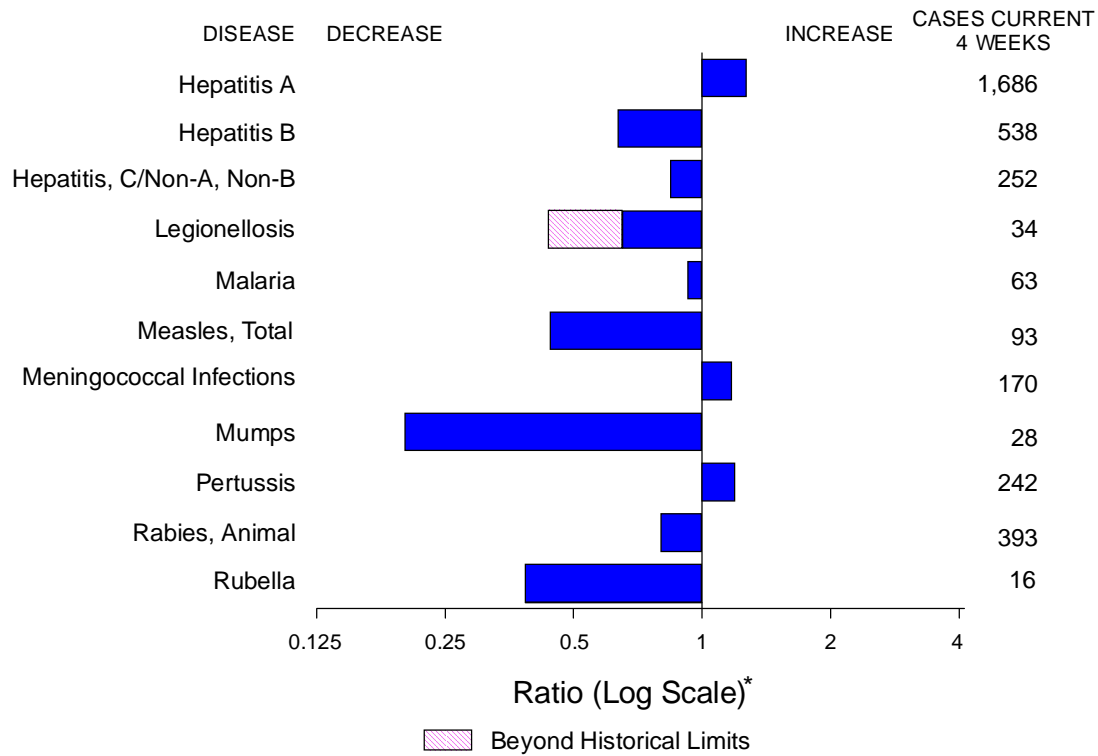
† For 1995 and 1996, age data were available for ≥93% cases, except for 1996 age data for measles, which were available for 81% of cases.

§ Invasive disease; *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System. Of 142 cases among children aged <5 years, serotype was reported for 32 cases, and of those, nine were type b, the only serotype of *H. influenzae* preventable by vaccination.

¶ Because most hepatitis B virus infections among infants and children aged <5 years are asymptomatic (although likely to become chronic), acute disease surveillance does not reflect the incidence of this problem in this age group or the effectiveness of hepatitis B vaccination in infants.

\*\* Three suspected cases with onset in 1996 have been reported to date. Two cases with onset in 1995 have been confirmed; these cases were vaccine-associated. An additional six suspected cases are under investigation for 1995. Five cases with onset in 1994 were confirmed; all were vaccine-associated.

**FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending July 6, 1996, with historical data — United States**



\*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 — cases of selected notifiable diseases, United States, cumulative, week ending July 6, 1996 (27th Week)**

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric*§	138
Brucellosis	40	Plague	-
Cholera	2	Poliomyelitis, paralytic¶	-
Congenital rubella syndrome	1	Psittacosis	17
Cryptosporidiosis*	806	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	194
Encephalitis: California*	-	Streptococcal toxic-shock syndrome*	10
eastern equine*	1	Syphilis, congenital**	-
St. Louis*	-	Tetanus	10
western equine*	-	Toxic-shock syndrome	69
Hansen Disease	52	Trichinosis	12
Hantavirus pulmonary syndrome*†	8	Typhoid fever	166

-: no reported cases  
 \*Not notifiable in all states.  
 † Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).  
 § Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (NCHSTP), last update June 25, 1996.  
 ¶ Three suspected cases of polio with onset in 1996 has been reported to date.  
 \*\* Updated quarterly from reports to the Division of STD Prevention, NCHSTP. First quarter 1996 is not yet available.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending July 6, 1996, and July 8, 1995 (27th Week)

Reporting Area	AIDS*		Chlamydia	Escherichia coli O157:H7		Gonorrhea		Hepatitis C/NA,NB		Legionellosis	
	Cum. 1996	Cum. 1995		NETSS†	PHLIS‡	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
			Cum. 1996	Cum. 1996							
UNITED STATES	34,213	35,320	144,334	657	285	136,474	197,159	1,838	2,045	355	604
NEW ENGLAND	1,391	1,762	8,652	83	21	3,702	2,367	58	61	18	13
Maine	22	72	-	3	-	21	40	-	-	1	4
N.H.	42	53	372	8	5	71	63	3	10	-	1
Vt.	10	13	-	8	6	30	25	24	6	2	-
Mass.	648	793	3,390	29	10	1,109	1,382	28	44	9	7
R.I.	94	134	1,042	5	-	267	257	3	1	6	1
Conn.	575	697	3,848	30	-	2,204	600	-	-	N	N
MID. ATLANTIC	9,450	9,096	19,957	59	26	15,133	22,968	182	212	72	86
Upstate N.Y.	1,164	1,118	N	41	12	3,043	4,650	156	106	20	25
N.Y. City	5,299	4,481	8,875	-	-	4,635	9,227	1	1	-	2
N.J.	1,796	2,208	2,166	18	5	2,388	2,068	-	87	7	17
Pa.	1,191	1,289	8,916	N	9	5,067	7,023	25	18	45	42
E.N. CENTRAL	2,777	2,871	20,208	188	75	21,790	30,635	248	165	104	187
Ohio	622	609	10,507	51	19	7,663	12,717	10	5	48	87
Ind.	393	257	5,143	25	14	3,482	4,533	7	1	25	43
Ill.	1,202	1,271	298	73	16	8,632	10,016	43	49	2	20
Mich.	407	562	-	39	26	U	U	188	110	23	21
Wis.	153	172	4,260	N	-	2,013	3,369	-	-	6	16
W.N. CENTRAL	820	844	12,417	110	65	6,123	10,061	66	34	22	45
Minn.	157	203	-	23	38	U	1,410	-	2	1	-
Iowa	57	44	1,951	24	11	504	716	33	5	4	14
Mo.	402	339	6,583	21	-	4,213	5,892	20	11	6	13
N. Dak.	8	4	2	8	6	1	16	-	3	-	2
S. Dak.	8	9	689	4	-	95	103	-	1	2	-
Nebr.	55	71	878	8	2	159	530	3	9	7	11
Kans.	133	174	2,314	22	8	1,151	1,394	10	3	2	5
S. ATLANTIC	8,571	9,004	27,692	37	9	50,528	55,515	123	130	59	99
Del.	167	163	-	-	1	742	1,047	1	-	3	1
Md.	1,026	1,297	3,190	N	1	6,571	6,510	-	6	9	17
D.C.	591	576	N	-	-	2,275	2,372	-	-	3	4
Va.	546	640	5,554	N	2	4,797	5,600	8	5	12	7
W. Va.	64	43	-	N	-	242	429	7	26	1	3
N.C.	464	491	-	9	2	9,531	12,306	27	27	5	20
S.C.	443	450	-	6	3	5,693	6,148	15	12	4	19
Ga.	1,288	1,094	6,327	8	-	10,926	10,449	-	15	1	14
Fla.	3,982	4,250	12,621	11	-	9,751	10,654	65	39	21	14
E.S. CENTRAL	1,136	1,105	15,254	21	13	16,083	28,505	360	611	27	32
Ky.	174	156	3,447	2	1	2,097	2,324	18	18	3	6
Tenn.	444	435	6,675	9	12	5,722	6,959	293	591	11	13
Ala.	325	296	4,317	5	-	6,712	16,508	2	2	2	4
Miss.	193	218	U	5	-	1,552	2,714	47	-	11	9
W.S. CENTRAL	3,320	3,104	6,749	26	4	9,980	28,024	234	135	2	12
Ark.	145	136	-	7	2	2,179	2,713	2	3	-	5
La.	787	496	3,630	4	2	3,988	6,217	101	87	-	2
Okla.	138	155	3,119	2	-	1,985	2,769	66	25	2	3
Tex.	2,250	2,317	-	13	-	1,828	16,325	65	20	-	2
MOUNTAIN	984	1,120	5,286	52	23	3,645	4,614	344	253	22	70
Mont.	14	9	-	5	-	13	39	10	9	1	4
Idaho	23	26	794	14	4	55	69	84	33	-	2
Wyo.	3	7	329	-	2	13	25	103	109	3	6
Colo.	301	373	-	17	5	911	1,536	29	35	6	27
N. Mex.	56	107	-	2	-	444	528	35	32	1	4
Ariz.	287	298	3,072	N	9	1,933	1,605	38	18	7	6
Utah	104	69	254	10	-	49	113	38	8	2	7
Nev.	196	231	837	4	3	227	699	7	9	2	14
PACIFIC	5,764	6,414	28,119	81	49	9,490	14,470	223	444	29	60
Wash.	383	490	4,904	18	5	1,079	1,295	34	116	2	7
Oreg.	266	223	2,804	27	18	259	202	4	31	-	-
Calif.	5,013	5,514	19,251	33	21	7,752	12,288	84	287	27	48
Alaska	14	46	535	3	-	227	368	2	1	-	-
Hawaii	88	141	625	N	5	173	317	99	9	-	5
Guam	4	-	114	N	-	26	65	1	4	-	1
P.R.	1,057	1,489	N	13	U	149	310	66	112	-	-
V.I.	14	21	N	N	U	-	23	-	-	-	-
Amer. Samoa	-	-	N	N	U	-	13	-	-	-	-
C.N.M.I.	-	-	N	N	U	11	27	-	5	-	-

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

\*Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, last update June 25, 1996.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

**TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending July 6, 1996, and July 8, 1995 (27th Week)**

Reporting Area	Lyme Disease		Malaria		Meningococcal Disease		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	2,278	3,200	537	567	1,953	1,849	5,399	8,479	8,747	9,745	2,791	3,823
NEW ENGLAND	338	483	24	22	82	92	78	97	212	223	309	843
Maine	6	3	3	2	11	6	-	2	4	-	-	-
N.H.	7	15	1	1	3	16	1	1	8	8	39	96
Vt.	2	5	2	-	3	6	-	-	1	2	91	112
Mass.	54	25	7	7	30	31	39	37	99	122	55	297
R.I.	51	88	3	2	7	3	1	1	23	22	26	153
Conn.	218	347	8	10	28	30	37	56	77	69	98	185
MID. ATLANTIC	1,656	2,149	127	145	172	242	229	457	1,557	2,171	424	1,094
Upstate N.Y.	906	1,080	36	26	52	65	36	45	187	247	241	635
N.Y. City	160	181	55	73	25	29	68	200	833	1,264	-	-
N.J.	90	416	28	33	45	62	73	99	365	356	75	203
Pa.	500	472	8	13	50	86	52	113	172	304	108	256
E.N. CENTRAL	28	129	46	84	255	276	727	1,303	1,023	982	33	22
Ohio	22	11	7	5	97	79	263	461	157	149	4	2
Ind.	6	7	7	11	38	39	124	152	98	84	1	3
Ill.	-	10	8	48	67	75	244	579	562	533	5	5
Mich.	-	1	16	12	29	51	U	U	156	186	12	11
Wis.	U	100	8	8	24	32	96	111	50	30	11	1
W.N. CENTRAL	38	48	12	13	145	107	194	432	222	308	276	190
Minn.	3	-	3	3	15	16	27	26	46	71	15	11
Iowa	8	6	2	2	29	19	11	27	34	40	142	65
Mo.	7	22	5	4	64	43	146	363	89	113	13	19
N. Dak.	-	-	-	-	2	1	-	-	3	1	31	18
S. Dak.	-	-	-	1	6	5	-	-	13	13	59	51
Nebr.	-	4	-	3	12	8	6	7	13	17	3	1
Kans.	20	16	2	-	17	15	4	9	24	53	13	25
S. ATLANTIC	119	261	121	111	428	295	1,963	2,140	1,446	1,526	1,369	1,127
Del.	19	30	2	1	2	4	19	8	20	28	38	65
Md.	49	164	28	27	41	27	300	215	158	205	330	228
D.C.	1	1	5	9	7	2	92	62	73	56	7	10
Va.	7	18	16	22	35	34	234	322	149	136	289	220
W. Va.	4	13	1	1	10	5	1	8	27	49	53	57
N.C.	27	22	10	8	49	49	550	599	249	192	356	242
S.C.	2	8	4	-	40	38	224	329	40	174	38	74
Ga.	-	5	8	12	94	59	333	396	345	16	156	156
Fla.	10	-	47	31	150	77	210	201	385	670	102	75
E.S. CENTRAL	32	29	14	11	110	113	1,364	1,925	708	701	99	138
Ky.	10	6	2	1	19	30	70	102	129	150	26	11
Tenn.	11	15	6	4	12	34	503	432	222	226	34	52
Ala.	1	1	3	5	40	26	281	624	234	200	37	72
Miss.	10	7	3	1	39	23	510	767	123	125	2	3
W.S. CENTRAL	25	51	12	13	230	221	561	1,675	993	1,300	34	136
Ark.	11	4	-	2	27	22	105	261	102	106	11	29
La.	1	2	2	1	41	32	298	563	U	116	13	22
Okla.	3	19	-	-	20	23	84	96	34	-	10	21
Tex.	10	26	10	10	142	144	74	755	798	1,078	-	64
MOUNTAIN	4	3	29	35	115	138	64	127	299	306	66	72
Mont.	-	-	3	2	4	2	-	3	14	3	10	25
Idaho	1	-	-	1	16	5	1	-	4	6	-	-
Wyo.	2	2	2	-	3	5	2	-	3	1	16	19
Colo.	-	-	14	17	20	37	21	71	44	25	18	-
N. Mex.	-	-	1	3	20	26	-	5	45	42	1	3
Ariz.	-	-	3	6	32	42	37	20	114	148	16	19
Utah	1	-	4	4	11	9	-	4	34	19	2	5
Nev.	-	1	2	2	9	12	3	24	41	62	3	1
PACIFIC	38	47	152	133	416	365	219	323	2,287	2,228	181	201
Wash.	3	4	10	11	59	59	3	9	117	137	-	4
Oreg.	7	6	11	8	74	69	5	6	47	23	-	1
Calif.	27	37	125	105	277	230	211	307	2,003	1,932	173	189
Alaska	-	-	2	1	4	5	-	1	37	44	8	7
Hawaii	1	-	4	8	2	2	-	-	83	92	-	-
Guam	-	-	-	1	1	2	3	3	35	66	-	-
P.R.	-	-	-	1	4	13	77	154	63	85	28	29
V.I.	-	-	-	-	-	-	-	2	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	3	-	-
C.N.M.I.	-	-	-	1	-	-	1	1	-	23	-	-

N: Not notifiable

U: Unavailable

-: no reported cases

**TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending July 6, 1996, and July 8, 1995 (27th Week)**

Reporting Area	<i>H. influenzae</i> , invasive		Hepatitis (viral), by type				Measles (Rubeola)			
	Cum. 1996*	Cum. 1995	A		B		Indigenous		Imported†	
			Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
UNITED STATES	643	689	13,488	13,996	4,587	5,102	17	256	-	20
NEW ENGLAND	15	38	160	125	93	117	-	7	-	2
Maine	2	3	12	16	2	6	-	-	-	-
N.H.	7	7	8	7	7	12	-	-	-	-
Vt.	-	1	3	4	5	2	-	1	-	-
Mass.	5	8	80	48	26	39	-	5	-	2
R.I.	1	3	7	16	6	8	-	-	-	-
Conn.	-	16	50	34	47	50	-	1	-	-
MID. ATLANTIC	97	89	757	898	665	717	1	14	-	5
Upstate N.Y.	30	21	209	199	182	179	-	-	-	-
N.Y. City	16	22	313	443	313	235	-	5	-	3
N.J.	32	12	133	127	98	179	-	-	-	-
Pa.	19	34	102	129	72	124	1	9	-	2
E.N. CENTRAL	98	125	1,121	1,723	478	578	-	6	-	3
Ohio	56	62	470	982	64	66	-	2	-	-
Ind.	7	17	160	80	85	115	-	-	-	-
Ill.	24	29	209	345	106	153	-	2	-	1
Mich.	6	15	198	201	193	202	-	1	-	2
Wis.	5	2	84	115	30	42	-	1	-	-
W.N. CENTRAL	22	38	1,077	896	216	329	-	16	-	1
Minn.	10	14	50	88	19	26	-	13	-	1
Iowa	5	1	216	54	44	25	-	-	-	-
Mo.	4	16	501	635	119	237	-	2	-	-
N. Dak.	-	-	28	13	-	3	-	-	-	-
S. Dak.	1	1	37	21	-	2	-	-	-	-
Nebr.	1	3	127	21	11	16	-	-	-	-
Kans.	1	3	118	64	23	20	-	1	-	-
S. ATLANTIC	150	156	608	591	732	698	-	3	-	3
Del.	1	-	6	8	3	6	-	1	-	-
Md.	37	48	108	100	164	135	-	2	-	-
D.C.	5	-	18	10	27	12	-	-	-	-
Va.	4	18	83	96	80	47	-	-	-	2
W. Va.	4	6	12	11	14	29	-	-	-	-
N.C.	18	20	68	61	182	153	-	-	-	-
S.C.	3	-	30	21	43	28	-	-	-	-
Ga.	65	37	41	50	7	62	-	-	-	1
Fla.	13	27	242	234	212	226	-	-	-	-
E.S. CENTRAL	16	5	824	807	389	496	-	-	-	-
Ky.	4	1	16	30	32	48	-	-	-	-
Tenn.	6	-	568	678	240	382	-	-	-	-
Ala.	5	4	101	49	27	66	-	-	-	-
Miss.	1	-	139	50	90	-	-	-	-	-
W.S. CENTRAL	28	35	2,671	1,530	575	558	-	1	-	2
Ark.	-	5	265	154	41	26	-	-	-	-
La.	2	1	83	46	58	98	-	-	-	-
Okla.	24	17	1,077	370	58	82	-	-	-	-
Tex.	2	12	1,246	960	418	352	-	1	-	2
MOUNTAIN	68	75	2,175	2,147	556	439	15	81	-	1
Mont.	-	-	67	52	6	14	-	-	-	-
Idaho	1	2	136	208	62	49	-	1	-	-
Wyo.	33	4	21	69	19	13	U	-	U	-
Colo.	6	9	211	262	67	67	-	5	-	1
N. Mex.	8	11	245	418	178	174	U	4	U	-
Ariz.	9	18	873	604	141	60	-	8	-	-
Utah	6	9	501	451	61	41	15	58	-	-
Nev.	5	22	121	83	22	21	-	5	-	-
PACIFIC	149	128	4,095	5,279	883	1,170	1	128	-	3
Wash.	2	5	287	384	56	92	-	45	-	-
Oreg.	21	18	534	1,342	37	77	-	2	-	-
Calif.	123	102	3,202	3,431	779	983	1	17	-	2
Alaska	1	-	27	23	5	7	-	63	-	-
Hawaii	2	3	45	99	6	11	U	1	U	1
Guam	-	-	2	3	-	4	U	-	U	-
P.R.	1	2	44	49	155	282	1	7	-	-
V.I.	-	-	-	-	-	2	U	-	U	-
Amer. Samoa	-	-	-	5	-	-	U	-	U	-
C.N.M.I.	10	10	1	18	5	7	U	-	U	-

N: Not notifiable      U: Unavailable      -: no reported cases

\*Of 147 cases among children aged <5 years, serotype was reported for 33 and of those, 10 were type b.

†For imported measles, cases include only those resulting from importation from other countries.



**TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending July 6, 1996, and July 8, 1995 (27th Week)**

Reporting Area	Measles (Rubeola), cont'd.		Mumps			Pertussis			Rubella		
	Total		1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
	Cum. 1996	Cum. 1995									
UNITED STATES	276	232	5	333	509	35	1,601	1,497	-	98	86
NEW ENGLAND	9	5	-	-	10	-	323	243	-	11	31
Maine	-	-	-	-	4	-	8	20	-	-	1
N.H.	-	-	-	-	1	-	20	23	-	-	1
Vt.	1	-	-	-	-	-	7	24	-	2	-
Mass.	7	2	-	-	2	-	285	166	-	7	6
R.I.	-	2	-	-	-	-	-	-	-	-	-
Conn.	1	1	-	-	3	-	3	10	-	2	23
MID. ATLANTIC	19	5	-	49	76	3	119	132	-	4	9
Upstate N.Y.	-	-	-	13	17	1	65	63	-	3	2
N.Y. City	8	-	-	13	8	-	17	27	-	1	6
N.J.	-	5	-	-	12	-	-	6	-	-	1
Pa.	11	-	-	23	39	2	37	36	-	-	-
E.N. CENTRAL	9	13	1	66	83	7	175	201	-	3	2
Ohio	2	1	-	27	26	6	82	52	-	-	-
Ind.	-	-	-	5	5	-	15	18	-	-	-
Ill.	3	1	1	18	24	1	59	32	-	1	-
Mich.	3	5	-	15	28	-	14	32	-	2	2
Wis.	1	6	-	1	-	-	5	67	-	-	-
W.N. CENTRAL	17	1	-	4	31	1	69	85	-	1	-
Minn.	14	-	-	1	2	-	42	27	-	-	-
Iowa	-	-	-	-	8	-	2	3	-	1	-
Mo.	2	1	-	1	17	-	16	26	-	-	-
N. Dak.	-	-	-	2	-	1	1	6	-	-	-
S. Dak.	-	-	-	-	-	-	2	7	-	-	-
Nebr.	-	-	-	-	4	-	2	5	-	-	-
Kans.	1	-	-	-	-	-	4	11	-	-	-
S. ATLANTIC	6	3	3	48	77	7	178	111	-	23	18
Del.	1	-	-	-	-	-	9	6	-	-	-
Md.	2	-	1	14	24	2	61	16	-	-	1
D.C.	-	-	-	-	-	-	-	3	-	1	-
Va.	2	-	1	5	14	-	21	8	-	2	-
W. Va.	-	-	-	-	-	-	2	-	-	-	-
N.C.	-	-	1	11	16	-	36	55	-	9	-
S.C.	-	-	-	5	7	1	11	13	-	1	-
Ga.	1	2	-	2	4	-	9	4	-	-	-
Fla.	-	1	-	11	12	4	29	6	-	10	17
E.S. CENTRAL	-	-	-	16	7	-	47	42	-	2	-
Ky.	-	-	-	-	-	-	24	8	-	-	-
Tenn.	-	-	-	2	-	-	14	7	-	-	-
Ala.	-	-	-	3	4	-	4	27	-	2	-
Miss.	-	-	-	11	3	-	5	-	N	N	N
W.S. CENTRAL	3	19	-	14	36	5	47	90	-	2	3
Ark.	-	2	-	-	5	-	3	14	-	-	-
La.	-	17	-	10	8	-	4	7	-	1	-
Okla.	-	-	-	-	-	-	5	16	-	-	-
Tex.	3	-	-	4	23	5	35	53	-	1	3
MOUNTAIN	82	66	-	20	23	1	173	320	-	6	4
Mont.	-	-	-	-	1	-	6	3	-	-	-
Idaho	1	-	-	-	2	-	69	78	-	2	-
Wyo.	-	-	U	-	-	U	1	1	U	-	-
Colo.	6	26	-	2	-	-	27	53	-	2	-
N. Mex.	4	29	N	N	N	U	31	47	U	-	-
Ariz.	8	10	-	1	2	-	11	114	-	1	3
Utah	58	-	-	2	10	1	7	13	-	-	1
Nev.	5	1	-	15	8	-	21	11	-	1	-
PACIFIC	131	120	1	116	166	11	470	273	-	46	19
Wash.	45	17	-	17	10	10	199	44	-	1	-
Oreg.	2	1	N	N	N	-	27	20	-	1	1
Calif.	19	100	1	82	140	1	233	182	-	41	15
Alaska	63	-	-	2	12	-	2	-	-	-	-
Hawaii	2	2	U	15	4	U	9	27	U	3	3
Guam	-	-	U	3	3	U	-	2	U	-	1
P.R.	7	2	-	1	2	-	1	1	-	-	-
V.I.	-	-	U	-	2	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

N: Not notifiable

U: Unavailable

-: no reported cases

TABLE IV. Deaths in 121 U.S. cities,\* week ending  
July 6, 1996 (27th Week)

Reporting Area	All Causes, By Age (Years)						P&J <sup>†</sup> Total	Reporting Area	All Causes, By Age (Years)						P&J <sup>†</sup> Total
	All Ages	>65	45-64	25-44	1-24	<1			All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	527	361	89	53	13	11	14	S. ATLANTIC	1,011	588	220	131	45	25	50
Boston, Mass.	111	69	24	14	2	2	1	Atlanta, Ga.	43	20	11	8	3	1	-
Bridgeport, Conn.	37	25	5	6	-	1	1	Baltimore, Md.	182	98	34	38	10	2	12
Cambridge, Mass.	8	6	2	-	-	-	-	Charlotte, N.C.	44	27	12	4	1	-	5
Fall River, Mass.	19	15	2	1	-	1	-	Jacksonville, Fla.	100	62	24	4	6	3	2
Hartford, Conn.	44	28	10	4	1	1	-	Miami, Fla.	120	71	27	12	3	6	-
Lowell, Mass.	26	21	5	-	-	-	2	Norfolk, Va.	40	25	3	5	5	2	5
Lynn, Mass.	13	12	-	1	-	-	-	Richmond, Va.	44	25	11	4	-	4	3
New Bedford, Mass.	25	21	4	-	-	-	1	Savannah, Ga.	51	33	10	7	1	-	7
New Haven, Conn.	54	34	6	10	3	1	1	St. Petersburg, Fla.	31	21	4	1	2	3	2
Providence, R.I.	49	35	8	3	1	2	-	Tampa, Fla.	123	83	24	12	4	-	10
Somerville, Mass.	5	3	1	1	-	-	-	Washington, D.C.	216	110	60	32	10	4	4
Springfield, Mass.	46	29	11	4	1	1	3	Wilmington, Del.	17	13	-	4	-	-	-
Waterbury, Conn.	30	22	3	4	1	-	1	E.S. CENTRAL	566	360	124	49	14	19	42
Worcester, Mass.	60	41	8	5	4	2	4	Birmingham, Ala.	U	U	U	U	U	U	U
MID. ATLANTIC	2,218	1,462	402	248	66	39	104	Chattanooga, Tenn.	67	49	14	3	-	1	3
Albany, N.Y.	33	23	5	3	1	1	2	Knoxville, Tenn.	82	44	24	9	2	3	9
Allentown, Pa.	22	10	7	4	1	-	-	Lexington, Ky.	58	41	11	3	-	3	4
Buffalo, N.Y.	101	71	15	10	2	3	9	Memphis, Tenn.	178	118	33	19	5	3	18
Camden, N.J.	36	19	6	7	3	1	2	Mobile, Ala.	47	33	10	2	-	2	-
Elizabeth, N.J.	16	12	1	2	-	1	-	Montgomery, Ala.	41	25	9	5	1	1	1
Erie, Pa.‡	40	24	12	3	1	-	1	Nashville, Tenn.	93	50	23	8	6	6	7
Jersey City, N.J.	43	26	8	7	1	1	1	W.S. CENTRAL	1,102	669	239	105	63	26	45
New York City, N.Y.	1,188	763	224	149	31	21	44	Austin, Tex.	51	27	13	9	1	1	-
Newark, N.J.	72	29	19	13	8	2	3	Baton Rouge, La.	40	29	4	5	2	-	-
Paterson, N.J.	16	9	4	2	1	-	-	Corpus Christi, Tex.	49	29	12	5	2	1	2
Philadelphia, Pa.	300	215	50	24	6	5	18	Dallas, Tex.	153	78	40	21	10	4	3
Pittsburgh, Pa.‡	50	38	9	2	1	-	3	El Paso, Tex.	65	42	13	6	2	2	7
Reading, Pa.	2	2	-	-	-	-	-	Ft. Worth, Tex.	80	55	13	3	7	2	4
Rochester, N.Y.	111	87	12	8	2	2	5	Houston, Tex.	254	137	75	23	17	2	17
Schenectady, N.Y.	39	30	5	1	3	-	3	Little Rock, Ark.	61	32	13	5	2	9	1
Scranton, Pa.‡	21	15	6	-	-	-	1	New Orleans, La.	92	64	14	7	6	1	-
Syracuse, N.Y.	72	51	11	6	2	2	5	San Antonio, Tex.	163	108	27	16	9	3	7
Trenton, N.J.	17	7	4	3	3	-	3	Shreveport, La.	39	30	5	1	3	-	3
Utica, N.Y.	12	9	1	2	-	-	-	Tulsa, Okla.	55	38	10	4	2	1	1
Yonkers, N.Y.	27	22	3	2	-	-	4	MOUNTAIN	725	483	145	55	23	19	38
E.N. CENTRAL	1,836	1,180	400	141	60	54	113	Albuquerque, N.M.	73	49	13	9	1	1	1
Akron, Ohio	35	25	7	1	2	-	-	Colo. Springs, Colo.	35	17	12	4	1	1	4
Canton, Ohio	41	27	12	2	-	-	3	Denver, Colo.	104	66	23	9	5	1	8
Chicago, Ill.	463	254	111	54	29	14	32	Las Vegas, Nev.	133	93	32	5	1	2	4
Cincinnati, Ohio	109	79	21	5	-	4	9	Ogden, Utah	23	15	4	1	1	2	-
Cleveland, Ohio	116	77	22	10	1	6	3	Phoenix, Ariz.	123	80	20	11	5	7	10
Columbus, Ohio	185	110	46	17	4	8	11	Pueblo, Colo.	24	18	4	2	-	-	-
Dayton, Ohio	97	72	14	6	1	4	3	Salt Lake City, Utah	90	62	17	3	4	4	3
Detroit, Mich.	178	96	54	19	5	4	9	Tucson, Ariz.	120	83	20	11	5	1	8
Evansville, Ind.	46	31	7	3	3	2	1	PACIFIC	1,394	967	225	126	42	32	94
Fort Wayne, Ind.	53	40	9	1	3	-	2	Berkeley, Calif.	19	13	5	-	1	-	-
Gary, Ind.	12	8	4	-	-	-	-	Fresno, Calif.	55	34	13	3	2	3	2
Grand Rapids, Mich.	45	38	4	1	1	1	8	Glendale, Calif.	20	17	2	1	-	-	5
Indianapolis, Ind.	129	84	32	9	3	1	4	Honolulu, Hawaii	82	62	13	3	3	1	10
Madison, Wis.	U	U	U	U	U	U	U	Long Beach, Calif.	54	38	8	5	3	-	7
Milwaukee, Wis.	89	55	22	4	2	6	10	Los Angeles, Calif.	394	255	64	45	17	13	15
Peoria, Ill.	35	28	6	-	-	1	7	Pasadena, Calif.	20	17	1	1	-	1	1
Rockford, Ill.	38	26	9	2	1	-	5	Portland, Ore.	89	63	16	9	1	-	5
South Bend, Ind.	32	25	3	2	-	2	1	Sacramento, Calif.	139	99	26	8	1	5	15
Toledo, Ohio	77	59	9	4	4	1	5	San Diego, Calif.	97	63	18	8	3	4	10
Youngstown, Ohio	56	46	8	1	1	-	-	San Francisco, Calif.	U	U	U	U	U	U	U
W.N. CENTRAL	643	471	88	42	18	17	34	San Jose, Calif.	143	99	20	19	4	-	11
Des Moines, Iowa	57	41	12	2	1	1	4	Santa Cruz, Calif.	40	35	2	3	-	-	2
Duluth, Minn.	19	17	1	1	-	-	2	Seattle, Wash.	111	80	18	10	3	-	1
Kansas City, Kans.	29	21	3	4	1	-	2	Spokane, Wash.	46	32	8	3	1	2	4
Kansas City, Mo.	105	75	11	8	2	2	10	Tacoma, Wash.	85	60	11	8	3	3	6
Lincoln, Nebr.	30	22	6	1	1	-	1	TOTAL	10,022 <sup>§</sup>	6,541	1,932	950	344	242	534
Minneapolis, Minn.	151	108	21	11	4	7	6								
Omaha, Nebr.	73	55	11	2	3	2	3								
St. Louis, Mo.	78	54	10	7	3	4	2								
St. Paul, Minn.	57	49	5	2	1	-	2								
Wichita, Kans.	44	29	8	4	2	1	2								

U: Unavailable - : no reported cases

\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

<sup>†</sup>Pneumonia and influenza.

<sup>§</sup>Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

<sup>¶</sup>Total includes unknown ages.

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