CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

April 19, 1996 / Vol. 45 / No. 15

MMWR™

MORBIDITY AND MORTALITY WEEKLY REPORT

Measles — United States, 1995

As of March 20, 1996, local and state health departments had reported a provisional total of 301 confirmed measles cases to CDC for 1995. This represents the lowest number of cases ever reported in 1 year since measles first became notifiable in 1912 and a 69% decrease from the 963 cases reported for 1994. This report summarizes the epidemiologic characteristics of measles cases reported in the United States in 1995, and documents important epidemiologic trends, including a shift in age distribution and the continued occurrence of international importations.

Age. Of the 285 measles patients for whom age was known, 109 (38%) were aged <5 years, including 39 (36%) aged <12 months and 34 (31%) aged 12–15 months. A total of 64 (22%) measles patients were aged 5–19 years, and 112 (39%) were aged ≥20 years. Of the 33 measles patients with internationally imported cases, eight (24%) were aged <5 years, 14 (42%) aged 5–19 years, and 11 (33%) aged ≥20 years.

Vaccination Status. Vaccination status was reported for 219 (73%) measles patients. Among the 96 (44%) who were not vaccinated, 56 (58%) were eligible to be vaccinated (i.e., aged >12 months and born after 1956). Vaccination status varied by age group: 29 (55%) patients aged 1–4 years were unvaccinated, compared with 12 (26%) aged 5–19 years and 28 (32%) aged ≥20 years. Of 62 measles patients for whom data were available about dates of vaccination, 55 (89%) had received at least one dose of measles-containing vaccine (MCV) on or after their first birthday and ≥14 days before onset of symptoms; seven (11%) were considered to be unvaccinated or inadequately vaccinated; three (5%) received their first dose of measles-containing vaccine (MCV) <14 days before onset of symptoms; and four (6%) had received one dose of MCV before their first birthday. Five (8%) cases were reported among persons who had received two doses of MCV after their first birthday.

Case Classification. Among the 301 reported cases, 268 (89%) were indigenous to the United States, including 259 cases (86%) acquired in the state reporting the case and nine (3%) resulting from spread from another state. International importations accounted for 33 cases (11%), and an additional 11 cases were epidemiologically linked to imported cases of measles. Importations originated from or occurred among persons who had traveled in Germany (10), Canada (three), Italy (three), Pakistan (three), China (two), France (two), Malaysia (two), Austria (one), Belgium (one), Costa Rica (one), Egypt (one), Japan (one), and the Philippines (one). For two of the imported

Measles — Continued

cases, the exact source was unknown because the patient had traveled in more than one country outside the United States during the exposure period.

Outbreaks. Nineteen outbreaks (i.e., clusters of three or more epidemiologically linked cases) were reported by 12 states in 1995 and accounted for 74% of all reported cases. Five of these outbreaks began in late 1994. The number of cases involved in outbreaks ranged from three to 73 (median: seven cases). The largest outbreak (73 cases) occurred in a community in Ventura County, California, and primarily involved adults. Two outbreaks (25 cases in New Mexico and 17 cases in Louisiana) occurred primarily among unvaccinated children in day-care settings, and a fourth outbreak (13 cases) occurred among students in a college in Washington. The outbreak that occurred latest in the year primarily involved adult members (nine cases in 1995, 18 in 1996) of a group in Minnesota that declines vaccination because of religious reasons.

CDC performed genomic sequencing of measles viruses isolated from five different outbreaks in 1995. None of the sequences were related to genotypes of viruses circulating during the measles resurgence in the United States during 1989–1991. The isolates from 1995 are genotypically similar to viruses recently isolated in Europe and Japan.

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Editorial Note: The number of reported measles cases in 1995 was a historic low. Since the resurgence of measles during 1989–1991, when incidence was highest among unvaccinated preschool-aged children (*1*), an increasing proportion of cases have been reported among older age groups. In 1995, 39% of cases occurred among persons aged ≥20 years, compared with 24% in 1994 (*2*). The low number of cases and shift in age distribution highlight the effectiveness and improved implementation of the recommendations of the Advisory Committee on Immunization Practices to provide the first dose of measles-mumps-rubella vaccine (MMR) at age 12–15 months and to give a second dose of MCV (preferably MMR) at age 4–6 years or 11–12 years (*3*).

During April 1994–March 1995, coverage with MCV was 89% among children aged 19–35 months (*4*). In addition, an estimated 33%–50% of school-aged children had received a second dose of MMR; as the recommendation for the second dose is more widely implemented, the proportion of cases among school-aged children should decline further. Improved implementation of prematriculation vaccination requirements among students in college and other post-high school educational institutions will increase levels of immunity to measles among young adults.

International importations continue to contribute to the transmission of measles in the United States. Although none of the large outbreaks reported during 1995 were epidemiologically linked to importations, genomic sequencing of isolates from some outbreaks indicates that the strains currently circulating in the United States are similar to viruses recently identified in Europe and Japan. This finding is further evidence that indigenous measles transmission was interrupted in the United States in late 1993 (*5*). The importation of only three cases from Canada and one from Central America during 1995 is consistent with low levels of current measles activity throughout the Western Hemisphere (*6*).

Measles — Continued

Although indigenous transmission of measles is at a historic low, sustained efforts are necessary to further reduce the number of cases. These levels must include assuring uniformly high levels of vaccination coverage among preschool-aged children, particularly in medically underserved urban areas, and improving the sensitivity of surveillance by conducting active case detection at sentinel sites in areas at high risk for measles transmission and measles importation. Recent advances in molecular epidemiology have enabled rapid identification of the source of wild-type measles virus, underscoring the importance of collecting virus isolates from as many cases as possible to improve characterization of patterns of transmission and determine international sources for measles infections in the United States. The continued importations of cases from other countries underscore the needs to support elimination of measles in the Western Hemisphere and to improve global efforts to control measles.

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Fatalities Associated with Improper Hitching to Farm Tractors — New York, 1991–1995

Approximately half of all injury-related fatalities in the agricultural industry are associated with farm tractors (*1*). Since April 1991, the New York State Department of Health's Occupational Health Nurses in Agricultural Communities (OHNAC) program* has investigated 27 incidents of sudden rear rollover of farm tractors (i.e., incidents in which the tractor flips backward, rotating around its rear axle [Figure 1]); these incidents resulted in 15 fatalities. This report describes four of these incidents, summarizes the characteristics of the 16 incidents that involved improper hitching, and outlines strategies for reducing the risk for their occurrence.

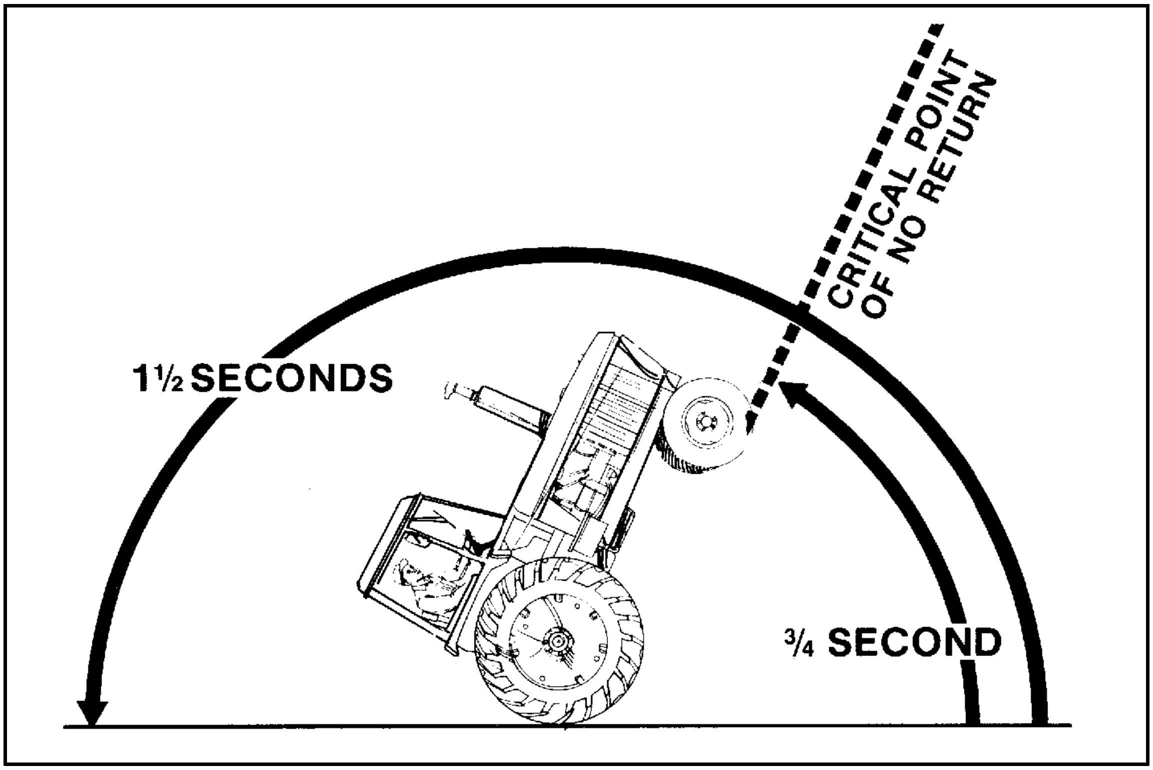
On notification of tractor-associated rear rollovers†, a nurse from an OHNAC regional office and, when possible, an agricultural engineer (supported by the Northeast Center of Agricultural and Occupational Health, Cooperstown, New York) travel to the site of the incident. Both obtain information from witnesses and emergency medical technicians who attended the victim.

*OHNAC, a project supported by CDC's National Institute for Occupational Safety and Health, is based in 10 states and conducts community-based surveillance and intervention efforts to prevent serious farming-related illnesses and injuries.

†In New York, information about incidents was obtained from health-care providers, local extension agents, and the news media.

Improper Hitching to Farm Tractors — Continued

FIGURE 1. Timing of events during rear rollovers of farm tractors*



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Case Reports

Case 1. On September 3, 1991, a 71-year-old male part-time farmer was fatally injured when his 1950-model tractor overturned to the rear while pulling a downed tree. He suffered multiple trauma with a fractured neck and jaw. The tow chain used to pull the tree had been hitched above the drawbar[§] of the tractor. The tractor was not equipped with a rollover protective structure (ROPS).

Case 2. On December 3, 1991, a 33-year-old male farm worker died as a result of multiple head and torso injuries sustained during a rear rollover of the 1958-model tractor he was using to pull a pickup truck filled with wood. The tow chain had been hitched high on the back of the tractor. The tractor did not have a ROPS.

Case 3. On January 3, 1994, a 42-year-old female farmer died from chest trauma when a 1970-model tractor she was using to pull a loaded pickup truck out of snow overturned to the rear. The tow chain had been attached at the top link connection of the tractor's three-point hitch[¶]. The tractor did not have a ROPS.

[§]A drawbar is a solid metal bar that is attached under the tractor frame 14–17 inches above ground and that projects behind the rear wheels for towing.

[¶]A three-point hitch is used for attaching and towing farm implements; it is located above the drawbar and consists of two adjustable lower attachment points and a centered upper attachment point.

Case 4. On October 29, 1994, a 13-year-old boy sustained fatal massive head trauma when the 1953-model tractor he was using overturned to the rear while pulling a felled 18-inch-diameter tree that was still partially attached at the stump. The tow chain had been hooked directly around the rear axle. The tractor did not have a ROPS.

Results of Epidemiologic Investigations

In 16 (59%) of the 27 reported incidents, improper hitching of equipment or material for towing was believed to be the primary cause of the rollover; 10 (63%) of these 16 rollovers resulted in fatalities. The remaining 11 rollovers were associated with various factors, including ensnaring the towed item on a stump, imbalance resulting from pulling an excessively heavy load, or ascending a steep incline in forward gear rather than backing up the hill; five of these incidents resulted in fatalities.

In each of the 16 rear rollovers attributed to improper hitching, attachment of the tow chain to a point above the drawbar was the principal cause of the rollover. Six incidents occurred while the operators were pulling logs, four while removing stumps, and six while pulling vehicles or implements. Only one of these 16 tractors had been equipped with a ROPS; the operator of this tractor had not been wearing a safety belt and had sustained fractures of the clavicle and humerus after being thrown from the tractor.

Of the 16 injured persons, 13 were male. One was aged 13 years; three, 20–40 years; seven, 40–60 years; and five, >70 years. All 10 persons with fatal injuries had sustained massive chest and/or head injuries; in comparison, five (83%) of the six persons with nonfatal injuries had sustained pelvic and/or limb injuries. Of the six persons with nonfatal injuries, two were able to return to work within 2 weeks of injury; both had been protected from crushing, one by a ROPS and one when, by chance, the towed vehicle supported the overturned tractor. One person was able to return to part-time work after 5 months, and three were unable to work 11–15 months after their injuries.

Environmental circumstances that may have contributed to eight incidents included muddy conditions (three incidents); wet ground (two); and snow-covered, hilly, or uneven terrain (one each). Two injuries occurred during January–March, five during April–June, four during July–September, and five during October–December.

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Editorial Note: Rear rollovers of tractors are sudden events: following onset of rotation, the tractor may reach the point of no recovery in a period of 0.75 seconds (Figure 1) (*3*)—a duration often shorter than that required by the operator to react and attempt to correct the rearward rotation (*4*). In this report, more than half (16 [59%]) of the reported rear rollovers involved improper hitching of a load.

A rollover will occur when a tractor's center of gravity shifts beyond the rear stability baseline (the line connecting the rear-tire contact points) (*4*). For example, when a tractor is used to tow a heavy load, the rear tires may be pressed against the ground with increased force. An excessive load that is correctly attached to a drawbar set at the recommended height will cause slipping of the rear wheels or stalling of the tractor's engine before a rollover is induced (*2*). However, when a load is hitched high on the tractor or attached directly to the rear axle, less power is required to lift the front

Improper Hitching to Farm Tractors — Continued

end of the tractor than to move the load or slip the wheels, which may result in a rollover through rearward rotation.

Although the association between rear rollovers and improper hitching has been recognized since the 1920s (*5*), severe injuries continue to occur because of the use of incorrect hitching techniques. The use of ROPS, in conjunction with safety belts, is an engineering strategy that protects tractor operators during rollovers (*6*). With the exception of use in special situations (e.g., limited vertical clearances), all employee-operated tractors manufactured after October 25, 1976, are required by the Occupational Safety and Health Administration (OSHA) to be equipped with ROPS (*7*)**. However, of the approximately 4.5 million tractors used in production agriculture in 1992, only an estimated 1.3 million (29%) were equipped with ROPS (*8*). For some farm operators, retrofitting a tractor with a ROPS may be a substantial expense (*9*): in 1993, costs for retrofits ranged from $250 to $2200 (*8*).

Public health officials and the news media can assist in dissemination of information to tractor operators on strategies to minimize the risk for rear rollover. In addition to installation of a ROPS and use of safety belts, careful selection of the hitching point is critical. For proper hitching to a tractor, the drawbar on a tractor should not be altered by raising or shortening it, and the load should never be attached directly to the axle (*2*); a two- or three-point hitch should never be used as a single-point hitch instead of the drawbar (*10*); and loads that attach by a single point should attach only to the drawbar. Other strategies for preventing injuries from rear rollovers include 1) ensuring operator familiarity with the safe use of the equipment; 2) selecting a strong tow chain with a length sufficient to allow adequate stopping distance between the towed object and the towing vehicle to avoid collision and potential rollover; 3) using front-end weights, which counteract lifting of the tractor front end; 4) using a slow, steady pull; 5) maintaining a clear work area to allow sufficient room for maneuvering; and 6) operating the tractor slowly and deliberately. Farm tractors are not designed for logging and other nonfarming activities; therefore, it is particularly important to observe these prevention strategies during such activities. Finally, when a tractor is used to free and tow a stuck vehicle, the operator should hitch the vehicles front-to-front and drive the towing tractor in reverse, which minimizes the risk for rollover by transmitting all the engine power of the towing vehicle through the chain to the other vehicle.

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**This OSHA regulation is not actively enforced on farms that employ <11 employees, and family farms without other employees are exempt from OSHA regulation; combined, these categories represent most U.S. farms. However, in accordance with a voluntary agreement by tractor manufacturers, virtually all new farm tractors sold after 1985 have come equipped with ROPS.

Improper Hitching to Farm Tractors — Continued

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Helmet Use Among Adolescent Motorcycle and Moped Riders — Rome, Italy, 1994

In Italy, motor-vehicle crashes are the leading cause of death among persons aged 15–20 years, and motorcycles account for a substantial proportion of traffic-related fatalities: in 1993, of the 6349 traffic-related deaths reported in Italy, 1342 (21.1%) occurred among motorcycle and moped users, and 261 (19.4%) of these deaths were among persons aged 15–20 years. Because of the risks for head injury and death, in 1986 a national law was enacted requiring operators of motorcycles or mopeds to use helmets under specified conditions. To assess compliance with this law and factors associated with helmet use among adolescents in a metropolitan area, in October 1994 the National Institute for Health conducted a survey of a sample of high school students in Rome. This report presents findings of this survey, which indicate that helmet use was low, particularly among moped users and among passengers.

In Italy, motor-powered cycles are classified by engine size. Motorcycles with engines 50–125 cc may be operated by persons aged ≥16 years; persons must be aged ≥18 years to operate motorcycles with engines >125 cc. For both, drivers' education and a license are required. Mopeds (vehicles with engines ≤50 cc)—which are designed for use in urban areas and are smaller than motorcycles—may be operated by anyone aged ≥14 years; neither a license nor drivers' training is required. Carrying passengers on mopeds is prohibited regardless of the age of the driver. A 1986 law mandated helmet use for all moped drivers aged <18 years; for those aged ≥18 years, helmet use is required only when mopeds are operated outside urban centers. The 1986 law also mandated helmet use by both drivers and passengers of motorcycles, regardless of the operator's age and location of motorcycle use.

The survey was conducted in October 1994 at six public schools located in central Rome, representing the three types of high schools in Italy (classical, scientific, and technical). All students in the first, third, and fifth years (mean ages: 14, 16, and 18 years, respectively) who were present on the day of the survey were asked to complete an anonymous self-administered questionnaire regarding sociodemographic characteristics, motorcycle and/or moped use and use of helmets during the previous year, and attitudes about helmet use.

Helmet Use by Adolescents — Continued

Of the 1690 students present on the day of the survey, 1673 (99.0%) students (mean age: 16.4 years; range: 13–23 years) completed the questionnaire. More than half (988 [59.1%]) reported having been a passenger on (565 [57.2%]) or driven (423 [42.8%]) either a moped or motorcycle during the previous year. Males and females were equally likely to use motor-powered cycles, although males were more than twice as likely as females to be drivers (34.9% versus 16.4%). Nearly one fourth (23.1%) of respondents reported daily use of at least 1 hour of either motorcycles or mopeds. Most (897 [90.8%]) motor-powered cycle users were moped riders, of whom 396 (44.1%) were drivers and 501 (55.9%) were passengers.

Of the moped and motorcycle users, 494 (50.0%) reported helmet use (sometimes or always wore a helmet when riding). Of those reporting helmet use, more than two thirds (71.2%) reported sometimes using helmets, and 28.8% reported always using helmets. Helmet use was greater among drivers (59.8%) than passengers (42.7%; $p<0.01$) (Table 1) and was greater among motorcycle users than moped users (82.9% versus 48.6%; $p<0.01$). Among those using mopeds and who where aged <18 years (i.e., mandated to use helmets), 54.9% reported using helmets sometimes or always; among those aged ≥18 years (i.e., required to use helmets only when traveling outside city limits), 24.6% reported using helmets sometimes or always ($p<0.01$).

TABLE 1. Helmet use* among high school students, by vehicle ridden — Rome, Italy, 1994

User characteristics	Moped†			Motorcycles§			Total¶		
	No. riders	Used helmet No.	Used helmet (%)	No. riders	Used helmet No.	Used helmet (%)	No. riders	Used helmet No.	Used helmet (%)
User/Age**									
Drivers									
<18 years	251	191	(76.1)	8	8	(100.0)	**261**	**201**	**(77.0)**
≥18 years	139††	38	(27.3)	17	13	(76.5)	**156**	**51**	**(32.7)**
Total	**396**	**231**	**(58.3)**	**25**	**21**	**(84.0)**	**423**	**253**	**(59.8)**
Passengers									
<18 years	276	124	(44.9)	35	28	(80.0)	**396**	**195**	**(49.2)**
≥18 years	125††	27	(21.6)	15	12	(80.0)	**163**	**44**	**(27.0)**
Total	**406**	**159**	**(39.2)**	**51**	**42**	**(82.4)**	**565**	**241**	**(42.7)**
Overall									
<18 years	527	315	(59.8)	43	36	(83.7)	**657**	**296**	**(45.1)**
≥18 years	264††	65	(24.6)	32	26	(81.3)	**319**	**95**	**(29.8)**
Total	**802**	**390**	**(48.6)**	**76**	**63**	**(82.9)**	**988**	**494**	**(50.0)**
Used helmet during most recent trip	**802**	**162**	**(20.2)**	**76**	**49**	**(64.5)**	**988**	**229**	**(23.2)**
Used helmet correctly§§	**802**	**109**	**(13.6)**	**76**	**43**	**(56.6)**	**988**	**171**	**(17.3)**

*Reported always or sometimes wearing a helmet.
†Engine size ≤50 cc.
§Engine size >50 cc.
¶Includes 110 passengers who did not know engine size.
**Numbers may not add to total because of missing user/age data.
††Not required by law to wear a helmet.
§§Always wears helmet and always attaches chin strap.

Helmet Use by Adolescents — Continued

Helmet use during the most recent trip was reported by 23.2% of all motorcycle and moped users and was more common among those who reported always using a helmet (89.4%) than among those who reported occasional use (23.1%). Among those who reported using helmets sometimes or always during the previous year, 70.6% reported always fastening the chin strap, 19.8% reported doing so sometimes, and 6.9% reported that they never did. Constant correct use of helmets was reported by 17.3% of motorcycle and moped users overall.

Among respondents who reported always using helmets, the most common reasons for use were that helmets provided protection (57.4%) and that they were required by law (31.9%). Among those who reported sometimes or never using helmets, the most frequent reasons for nonuse were that they are uncomfortable (40.9%), not available (20.4%, all passengers), or useless (5.7%).

Among all respondents, 81.8% believed helmets provided protection in crashes, and 65.7% believed use should be compulsory; however, nonusers of motorcycles and mopeds were more likely to favor compulsory use than users (80.0% versus 56.8%, respectively). Most respondents considered motorcycle riding to be dangerous (48.2%) or very dangerous (37.0%).

Of the 423 drivers, 268 (63.2%) reported having been involved in at least one crash. Of these, 53 (19.9%) reported injuries requiring an emergency department visit, and 12 (4.3%) required inpatient admissions.

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Editorial Note: Although motorcycles and mopeds are an inexpensive mode of individual transportation, in most countries, they are associated with the greatest risks for transportation-related injuries (*1*). Per vehicle mile, motorcycle drivers are approximately 20 times more likely than passenger-car occupants to die in a motor-vehicle crash (*2*). In the United States, head injuries occur in approximately 53% of motorcycle-related deaths (*3*). Motorcycle helmets are 46%–85% effective in reducing the incidence of severe, serious, and critical head injuries (*4*) and 29% effective in reducing fatalities (*5*). In addition, nonhelmeted riders who are injured have been more likely to require ambulance service; be admitted to a hospital; incur higher hospital charges; require neurosurgery, intensive care, rehabilitation, and long-term care; and sustain permanent disabilities (*4*).

Laws requiring helmets for population subgroups (such as the one applying to moped users in Italy) are substantially less effective than laws requiring universal helmet use (*4*) and are difficult to enforce. In the United States, helmet laws that apply to population subgroups (i.e., persons aged ≤18 years) result in helmet use of 42%–59%. In comparison, in states with universal helmet laws, up to 99% of riders use helmets (*4,6*).

The findings in this report are subject to at least two limitations. First, only six schools were included in the survey, all in the central part of Rome. Although the three

Helmet Use by Adolescents — Continued

types of schools were included in the survey to ensure the representation of students of different academic achievement levels and different socioeconomic strata, participants probably were not representative of all students in Rome. Second, because self-reported data often overestimate use of safety devices, actual helmet use probably was less than that reported (*7*).

To improve the enforcement of laws related to mopeds, license plates for mopeds are now mandatory. Although this requirement should decrease the number of mopeds carrying more than one person, underenforcement of age-specific helmet use is expected to remain a problem. Results of this survey have been provided to the Ministry of Transport in support of extending helmet use to all moped users in Italy. In addition, the results were used to prepare a health-education leaflet, produced jointly by the ministries of health and education, on the importance of helmet use that was distributed to high school students throughout Italy.

Because helmet use can reduce fatalities associated with head injuries among motorcycle riders and can reduce the severity of nonfatal head injuries, helmet use among motorcycle and moped riders should be encouraged worldwide. In the United States, universal helmet laws (i.e., requiring all riders to wear a helmet) have been the most effective method of increasing helmet use.

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Ebola-Reston Virus Infection Among Quarantined Nonhuman Primates — Texas, 1996

On March 30, 1996, a cynomolgus monkey (*Macaca fascicularis*) imported from the Philippines and held in a private quarantine facility in Texas died following a 3-day illness characterized by anorexia and lethargy. On April 11, an Ebola infection was confirmed in this animal based on antigen detection from a liver specimen as required by CDC regulation (*1,2*).

On April 9, a second monkey that had been held in the same room had onset of similar symptoms; this monkey was euthanized on April 13 following confirmation of

Ebola — Continued

Ebola infection by electron microscopy, antigen detection enzyme-linked immunosorbent assay, and reverse-transcriptase polymerase chain reaction tests of serum and blood samples. Sequence analysis of the entire glycoprotein gene of the Ebola virus from the first monkey indicated a 98.9% nucleotide identity with the original 1989 Ebola-Reston virus.

The two monkeys were part of a shipment of 100 received by the facility on March 21 and housed in two separate self-contained rooms with a capacity of 50 animals each. On April 17, the other 48 monkeys housed in the same quarantine room as the two infected animals were euthanized to minimize potential exposure of employees and to prevent additional transmission within the room. Surveillance has been enhanced for the remaining 50 monkeys and has been initiated to monitor the eight facility employees who had had contact with these monkeys. During the quarantine period, these employees had worn protective clothing and followed strict contact guidelines to minimize exposure to potential infectious agents.

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Editorial Note: Ebola virus is a member of a family of RNA viruses known as filoviruses. Ebola virus was discovered in 1976; since its discovery, four distinct subtypes have been identified: Zaire, Sudan, Ivory Coast, and Reston (*3*). Ebola-Reston subtype was discovered in the United States in 1989 in association with an outbreak of viral hemorrhagic fever among monkeys imported from the Philippines to Reston, Virginia (*4*). Although infection with this virus can be fatal in monkeys, the only four infections confirmed in humans were asymtomatic (*5*); in contrast, infection with Ebola-Sudan or Ebola-Zaire subtypes often is fatal in humans. Four additional episodes of Ebola-Reston infection among monkeys imported from the Philippines have occurred in the United States and Italy (*6*).

Following the earliest episodes, CDC updated and modified the mandatory disease-control requirements and other procedures used in the transportation and quarantine of nonhuman primates (*1,2*). The current episode in Texas indicates the importance and effectiveness of these regulations: both cases of infection were detected while the monkeys were in quarantine, and the potential for transmission to facility employees was minimal. This problem also underscores the need for further characterization of the reservoir(s) for and natural history of infection with this virus.

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1. CDC. Update: Ebola-related filovirus infection in nonhuman primates and interim guidelines for handling nonhuman primates during transit and quarantine. MMWR 1990;39:22–4,29–30.
2. CDC. Requirement for a special permit to import cynomolgus, African green, or Rhesus monkeys in to the United States: notice. Federal Register 1990;55:15210–1.
3. Sanchez A, Trappier SG, Mahy BWJ, Peters CJ, Nichol ST. The virion glycoproteins of Ebola virus are encoded in two reading frames and are expressed through transcriptional editing. Proc Natl Acad Sci U S A 1996;93:3602–7.
4. Jahrling PB, Geisbert TW, Dalgard DW, et al. Preliminary report: isolation of Ebola virus from monkeys imported to USA. Lancet 1990;335:502–5.
5. CDC. Update: filovirus infection in animal handlers. MMWR 1990;39:221.

Ebola — Continued

6. World Health Organization. Viral hemorrhagic fever in imported monkeys. Wkly Epidemiol Rec 1992;67:142.

AIDS Map

The following map provides information about the reported number of acquired immunodeficiency syndrome (AIDS) cases per 100,000 population, by state of residence from January 1995 through December 1995. More detailed information about AIDS cases is provided in the *HIV/AIDS Surveillance Report*, single copies of which are available from the CDC National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231 or (301) 217-0023. Internet users can view an electronic copy of the report by accessing CDC's home page (http://www.cdc.gov), then selecting "More Publications, Products, and Subscription Services."

AIDS Cases per 100,000 population — United States, January–December 1995

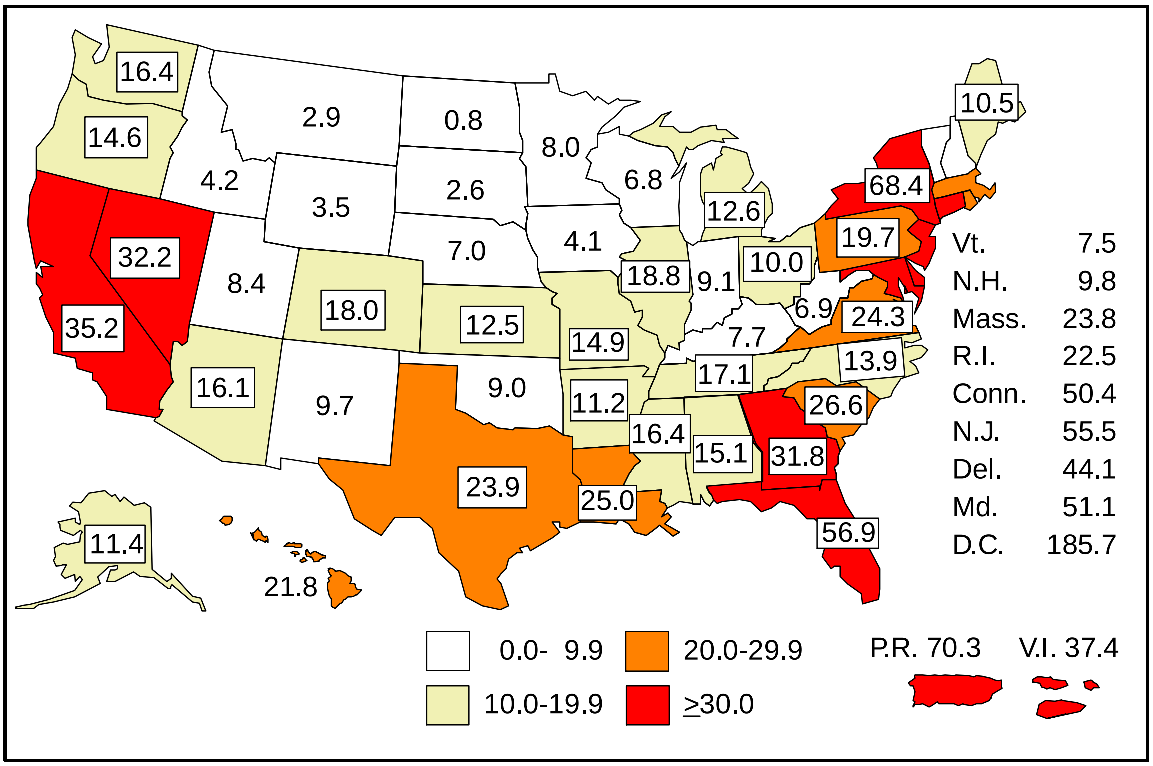
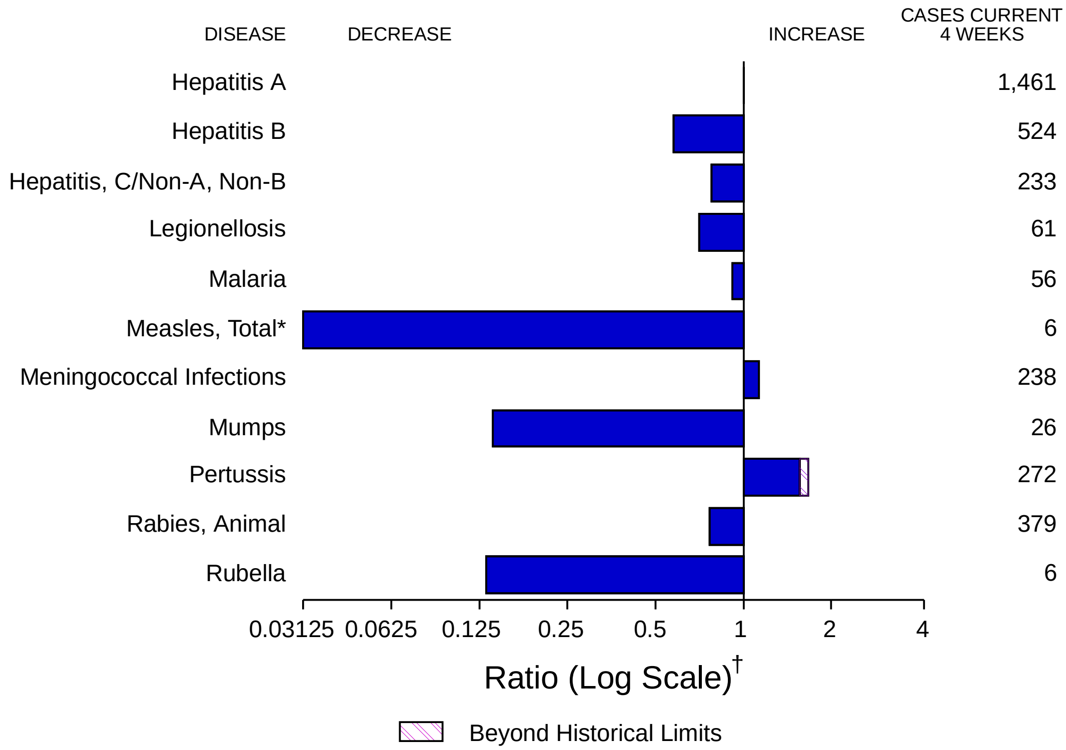


FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending April 13, 1996, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline. (Ratio [log scale] for week 15 measles [total] is 0.022189.)
†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 April 13, 1996 (15th Week)

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric*§	76
Brucellosis	18	Plague	-
Cholera	1	Poliomyelitis, paralytic¶	-
Congenital rubella syndrome	1	Psittacosis	5
Cryptosporidiosis*	396	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	23
Encephalitis: California*	-	Streptococcal toxic-shock syndrome*	9
eastern equine*	1	Syphilis, congenital**	-
St. Louis*	-	Tetanus	3
western equine*	-	Toxic-shock syndrome	40
Hansen Disease	27	Trichinosis	8
Hantavirus pulmonary syndrome*†	1	Typhoid fever	75

*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 Prevention Services (NCPS), last update March 26, 1996.
¶No suspected cases of polio reported for 1996.
**Updated quarterly from reports to the Division of STD Prevention, NCPS. First quarter 1996 is not yet available.
-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending April 13, 1996, and April 15, 1995 (15th Week)

Reporting Area	AIDS*		Chlamydia	*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB		Legionellosis	
				NETSS†	PHLIS§						
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	16,791	20,883	65,303	215	76	78,352	111,537	949	1,181	201	326
NEW ENGLAND	657	1,243	2,735	22	5	2,210	1,664	26	29	7	4
Maine	10	23	-	3	-	13	18	-	-	1	-
N.H.	23	37	204	1	1	38	30	1	3	-	-
Vt.	7	6	-	4	4	17	14	15	2	-	-
Mass.	392	581	1,911	10	-	648	897	7	23	4	3
R.I.	38	87	620	2	-	161	166	3	1	2	1
Conn.	187	509	-	2	-	1,333	539	-	-	N	N
MID. ATLANTIC	4,440	4,906	9,496	31	15	7,047	12,759	90	107	46	44
Upstate N.Y.	538	621	N	16	10	1,503	2,779	81	49	9	11
N.Y. City	2,443	2,333	2,288	-	-	1,785	4,571	1	1	-	1
N.J.	928	1,205	1,498	8	-	723	1,181	-	47	7	9
Pa.	531	747	5,710	N	5	3,036	4,228	8	10	30	23
E.N. CENTRAL	1,395	1,704	11,039	34	15	12,343	23,051	119	89	67	114
Ohio	300	436	2,686	18	8	1,480	7,122	4	4	31	46
Ind.	269	164	2,618	10	1	2,027	2,419	5	-	18	25
Ill.	518	733	-	2	1	5,053	5,971	8	32	2	14
Mich.	228	272	4,101	4	5	2,911	5,628	102	53	15	14
Wis.	80	99	1,634	N	-	872	1,911	-	-	1	15
W.N. CENTRAL	413	497	7,086	22	16	4,475	5,910	106	20	13	22
Minn.	84	93	-	3	10	U	881	-	1	-	-
Iowa	31	32	927	5	3	295	437	71	3	3	8
Mo.	175	215	4,132	3	-	2,346	3,366	31	7	1	7
N. Dak.	1	1	2	1	1	1	9	-	-	-	2
S. Dak.	5	1	370	1	-	60	63	-	1	2	-
Nebr.	32	43	388	4	-	57	317	1	5	6	3
Kans.	85	112	1,267	5	2	717	837	3	3	1	2
S. ATLANTIC	4,590	5,908	15,558	15	2	29,826	32,730	50	74	26	51
Del.	93	114	-	-	-	416	596	1	-	-	-
Md.	444	963	1,710	N	1	3,877	4,108	-	2	5	12
D.C.	225	405	N	-	-	1,269	1,692	-	-	1	3
Va.	224	370	3,463	N	1	2,824	3,271	3	1	9	3
W. Va.	24	30	-	N	-	99	192	4	19	1	3
N.C.	191	308	-	4	-	5,367	7,180	14	21	3	9
S.C.	229	270	-	1	-	3,316	3,235	11	2	1	8
Ga.	685	729	3,697	3	-	7,191	6,178	-	10	-	7
Fla.	2,475	2,719	6,688	4	-	5,467	6,278	17	19	6	6
E.S. CENTRAL	540	650	7,835	8	4	8,270	13,205	171	461	17	9
Ky.	86	63	1,940	-	-	1,150	1,406	7	10	2	2
Tenn.	201	309	3,237	N	4	2,817	3,658	163	450	9	4
Ala.	157	158	2,537	2	-	3,905	5,372	1	1	-	2
Miss.	96	120	121	2	-	398	2,769	-	-	6	1
W.S. CENTRAL	1,480	1,436	3,718	11	2	6,046	10,253	91	53	1	4
Ark.	70	86	-	5	-	833	1,324	1	-	-	-
La.	435	327	1,951	N	2	2,299	3,468	33	26	-	1
Okla.	54	83	1,767	1	-	1,086	1,290	35	21	1	3
Tex.	921	940	-	1	-	1,828	4,171	22	6	-	-
MOUNTAIN	469	641	4,557	30	9	2,112	2,604	164	137	6	40
Mont.	4	8	-	-	-	10	28	8	7	-	2
Idaho	7	17	479	11	4	27	40	39	16	-	1
Wyo.	2	4	197	-	-	10	16	55	56	-	1
Colo.	152	215	-	10	5	567	890	4	26	4	18
N. Mex.	25	69	-	2	-	280	318	27	18	-	3
Ariz.	136	135	2,984	N	-	988	842	22	5	1	5
Utah	64	37	254	5	-	49	60	7	4	-	2
Nev.	79	156	643	2	-	181	410	2	5	1	8
PACIFIC	2,807	3,898	3,279	42	8	6,023	9,361	132	211	18	38
Wash.	220	356	2,790	6	4	708	748	24	60	1	1
Oreg.	153	132	-	12	-	126	148	3	13	-	-
Calif.	2,394	3,279	-	19	-	4,955	8,014	62	129	17	32
Alaska	3	29	N	1	-	131	255	2	1	-	-
Hawaii	37	102	361	N	4	103	196	41	8	-	5
Guam	3	-	26	N	-	13	27	-	-	-	-
P.R.	420	852	N	N	U	67	167	20	52	-	-
V.I.	3	15	N	N	U	-	10	-	-	-	-
Amer. Samoa	-	-	-	N	U	-	8	-	-	-	-
C.N.M.I.	-	-	N	N	U	11	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 Prevention Services, last update March 26, 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 April 13, 1996, and April 15, 1995 (15th 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	993	1,277	251	274	1,108	1,045	3,163	4,678	3,858	4,463	1,247	1,891
NEW ENGLAND	45	89	8	13	37	57	54	64	103	97	145	529
Maine	-	1	2	1	6	3	-	2	4	-	-	-
N.H.	1	9	1	1	1	12	1	1	3	3	20	64
Vt.	-	1	1	-	1	6	-	-	-	1	41	71
Mass.	18	10	3	2	15	18	22	21	41	47	26	212
R.I.	21	10	1	2	-	-	-	1	17	11	17	71
Conn.	5	58	-	7	14	18	31	39	38	35	41	111
MID. ATLANTIC	835	974	63	62	88	108	112	287	584	907	180	464
Upstate N.Y.	374	489	14	11	24	38	11	26	86	91	81	189
N.Y. City	146	31	28	27	14	12	34	154	269	497	-	-
N.J.	50	133	18	17	25	28	35	57	161	157	42	91
Pa.	265	321	3	7	25	30	32	50	68	162	57	184
E.N. CENTRAL	11	13	26	36	140	151	513	806	513	483	11	2
Ohio	9	5	5	1	51	39	196	271	83	81	2	1
Ind.	2	6	3	3	14	28	76	73	47	25	1	-
Ill.	-	1	7	26	44	39	153	309	328	261	-	1
Mich.	-	1	8	2	15	25	41	92	39	103	4	-
Wis.	U	U	3	4	16	20	47	61	16	13	4	-
W.N. CENTRAL	36	23	4	7	92	61	139	246	109	155	115	81
Minn.	1	-	1	3	10	11	27	15	20	32	8	5
Iowa	16	1	1	-	20	10	6	19	13	22	59	28
Mo.	2	9	1	3	37	23	103	198	51	56	9	11
N. Dak.	-	-	-	-	2	-	-	-	1	1	11	7
S. Dak.	-	-	-	-	3	2	-	-	9	8	21	17
Nebr.	-	-	-	1	9	6	3	5	4	8	2	-
Kans.	17	13	1	-	11	9	-	9	11	28	5	13
S. ATLANTIC	35	130	45	58	209	172	997	1,233	581	671	639	550
Del.	1	12	2	1	2	2	12	7	-	15	16	30
Md.	23	92	16	18	21	10	172	111	74	127	162	123
D.C.	-	-	2	4	4	1	46	42	27	23	2	2
Va.	-	3	6	10	16	23	137	205	43	29	147	107
W. Va.	3	7	-	-	6	3	1	1	19	29	22	26
N.C.	6	7	6	5	29	28	293	330	99	71	154	125
S.C.	1	4	2	-	26	25	139	186	40	85	13	44
Ga.	-	4	7	9	65	45	90	218	156	2	84	83
Fla.	1	1	4	11	40	35	107	133	123	290	39	10
E.S. CENTRAL	10	7	4	5	77	67	836	1,062	336	373	42	85
Ky.	1	1	-	-	13	20	47	69	66	70	11	5
Tenn.	3	4	3	2	7	19	328	239	74	118	14	37
Ala.	-	-	1	3	30	15	163	187	119	115	17	42
Miss.	6	2	-	-	27	13	298	567	77	70	-	1
W.S. CENTRAL	3	21	8	5	124	119	370	705	378	538	15	40
Ark.	2	1	-	1	17	12	73	144	20	53	2	21
La.	-	-	-	1	25	14	173	330	-	-	8	9
Okla.	1	12	-	-	9	13	50	56	30	44	5	10
Tex.	-	8	8	3	73	80	74	175	328	441	-	-
MOUNTAIN	-	1	18	19	71	86	38	80	127	127	17	24
Mont.	-	-	1	2	1	2	-	3	-	3	-	12
Idaho	-	-	-	1	7	4	1	-	3	5	-	-
Wyo.	-	-	2	-	3	4	1	-	1	1	10	2
Colo.	-	-	10	9	11	21	14	50	21	5	-	-
N. Mex.	-	-	1	3	14	20	-	1	12	22	1	-
Ariz.	-	-	1	2	21	28	19	11	55	80	4	9
Utah	-	-	2	1	8	2	-	2	10	10	-	-
Nev.	-	1	1	1	6	5	3	13	25	1	2	1
PACIFIC	18	19	75	69	270	224	104	195	1,127	1,112	83	116
Wash.	-	-	2	7	31	33	1	5	71	64	-	-
Oreg.	5	1	7	4	51	40	3	4	30	16	-	-
Calif.	12	18	63	51	181	148	100	185	965	964	75	110
Alaska	-	-	-	1	5	1	-	1	19	21	8	6
Hawaii	1	-	3	6	2	2	-	-	42	47	-	-
Guam	-	-	-	-	1	2	2	1	-	4	-	-
P.R.	-	-	-	-	3	10	52	98	20	53	17	20
V.I.	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	2	-	-
C.N.M.I.	-	-	-	-	-	-	1	-	-	10	-	-

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

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 13, 1996, and April 15, 1995 (15th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (viral), by type				Measles (Rubeola)			
			A		B		Indigenous		Imported†	
	Cum. 1996*	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
UNITED STATES	408	402	6,959	7,167	2,207	2,579	1	66	-	4
NEW ENGLAND	9	20	79	50	46	66	-	5	-	1
Maine	-	1	9	9	2	2	-	-	-	-
N.H.	7	3	3	4	1	7	-	-	-	-
Vt.	-	1	1	3	2	1	-	1	-	-
Mass.	2	4	42	18	10	19	-	3	-	1
R.I.	-	-	3	8	4	7	-	-	-	-
Conn.	-	11	21	8	27	30	-	1	-	-
MID. ATLANTIC	60	43	486	395	368	302	-	2	-	1
Upstate N.Y.	17	14	107	91	82	92	-	-	-	-
N.Y. City	7	5	222	164	177	63	-	2	-	1
N.J.	20	8	108	67	77	98	-	-	-	-
Pa.	16	16	49	73	32	49	-	-	-	-
E.N. CENTRAL	62	75	590	1,006	239	342	-	2	-	-
Ohio	38	38	292	555	39	31	-	2	-	-
Ind.	2	12	105	48	40	77	-	-	-	-
Ill.	14	20	67	213	27	94	-	-	-	-
Mich.	3	5	97	112	122	117	-	-	-	-
Wis.	5	-	29	78	11	23	-	-	-	-
W.N. CENTRAL	19	20	544	345	140	182	-	2	-	-
Minn.	7	6	22	33	3	11	-	2	-	-
Iowa	6	1	144	16	64	14	-	-	-	-
Mo.	5	10	244	242	51	129	-	-	-	-
N. Dak.	-	-	9	6	-	1	-	-	-	-
S. Dak.	1	-	27	6	-	1	-	-	-	-
Nebr.	-	1	55	16	5	14	-	-	-	-
Kans.	-	2	43	26	17	12	-	-	-	-
S. ATLANTIC	100	101	240	307	321	355	-	2	-	-
Del.	1	-	5	5	1	3	-	1	-	-
Md.	21	34	56	62	85	75	-	1	-	-
D.C.	-	-	7	2	5	8	-	-	-	-
Va.	3	12	44	55	43	27	-	-	-	-
W. Va.	2	2	6	9	9	20	-	-	-	-
N.C.	13	16	33	34	103	96	-	-	-	-
S.C.	3	-	25	10	28	10	-	-	-	-
Ga.	55	23	2	37	3	34	-	-	-	-
Fla.	2	14	62	93	44	82	-	-	-	-
E.S. CENTRAL	7	4	602	376	203	285	-	-	-	-
Ky.	2	1	8	20	21	28	-	-	-	-
Tenn.	-	-	433	292	165	218	-	-	-	-
Ala.	4	3	76	37	17	39	-	-	-	-
Miss.	1	-	85	27	-	-	-	-	-	-
W.S. CENTRAL	11	17	1,056	660	172	230	-	-	-	1
Ark.	-	3	173	37	16	4	-	-	-	-
La.	-	1	20	19	13	25	-	-	-	-
Okla.	11	11	471	148	22	31	-	-	-	-
Tex.	-	2	392	456	121	170	-	-	-	1
MOUNTAIN	40	39	945	1,255	250	191	1	4	-	-
Mont.	-	-	39	19	2	7	-	-	-	-
Idaho	1	2	106	141	29	23	-	-	-	-
Wyo.	18	2	8	46	7	3	-	-	-	-
Colo.	4	6	22	156	8	38	1	1	-	-
N. Mex.	7	5	152	255	112	72	-	-	-	-
Ariz.	5	11	287	302	42	25	-	-	-	-
Utah	3	4	279	299	39	15	-	-	-	-
Nev.	2	9	52	37	11	8	-	3	-	-
PACIFIC	100	83	2,417	2,773	468	626	-	49	-	1
Wash.	1	4	144	159	27	47	-	4	-	-
Oreg.	12	9	355	566	26	35	-	-	-	-
Calif.	85	68	1,865	1,985	411	536	-	1	-	-
Alaska	-	-	29	15	2	3	-	44	-	-
Hawaii	2	2	24	48	2	5	U	-	U	1
Guam	-	-	1	1	-	-	U	-	U	-
P.R.	-	3	30	11	106	88	-	-	-	-
V.I.	-	-	-	-	-	1	U	-	U	-
Amer. Samoa	-	-	-	5	-	-	U	-	U	-
C.N.M.I.	10	-	1	10	5	1	U	-	U	-

*Of 88 cases among children aged <5 years, serotype was reported for 22 and of those, 5 were type B.
†For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 13, 1996, and April 15, 1995 (15th Week)

Reporting Area	Measles (Rubeola), cont'd. Total		Mumps			Pertussis			Rubella		
	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
UNITED STATES	70	172	4	166	237	41	705	760	-	43	24
NEW ENGLAND	6	3	-	-	3	8	134	114	-	5	2
Maine	-	-	-	-	2	-	8	11	-	-	-
N.H.	-	-	-	-	-	2	17	6	-	-	1
Vt.	1	-	-	-	-	-	6	2	-	-	-
Mass.	4	1	-	-	-	6	100	89	-	3	1
R.I.	-	2	-	-	-	-	-	-	-	-	-
Conn.	1	-	-	-	1	-	3	6	-	2	-
MID. ATLANTIC	3	2	-	20	37	5	73	68	-	3	2
Upstate N.Y.	-	-	-	6	9	5	42	38	-	2	-
N.Y. City	3	-	-	4	5	-	13	12	-	1	1
N.J.	-	2	-	-	6	-	-	6	-	-	1
Pa.	-	-	-	10	17	-	18	12	-	-	-
E.N. CENTRAL	2	1	1	43	31	2	116	76	-	1	-
Ohio	2	-	-	17	15	-	51	32	-	-	-
Ind.	-	-	-	5	5	-	9	7	-	-	-
Ill.	-	-	-	9	-	2	45	-	-	1	-
Mich.	-	-	1	12	11	-	9	26	-	-	-
Wis.	-	1	-	-	-	-	2	11	-	-	-
W.N. CENTRAL	2	1	-	2	14	-	26	48	-	1	-
Minn.	2	-	-	-	2	-	22	14	-	-	-
Iowa	-	-	-	-	3	-	2	1	-	1	-
Mo.	-	1	-	-	7	-	1	12	-	-	-
N. Dak.	-	-	-	2	-	-	-	5	-	-	-
S. Dak.	-	-	-	-	-	-	1	6	-	-	-
Nebr.	-	-	-	-	2	-	-	3	-	-	-
Kans.	-	-	-	-	-	-	-	7	-	-	-
S. ATLANTIC	2	-	1	16	40	9	62	75	-	-	4
Del.	1	-	-	-	-	-	7	5	-	-	-
Md.	1	-	1	8	9	-	25	-	-	-	-
D.C.	-	-	-	-	-	-	-	1	-	-	-
Va.	-	-	-	3	9	-	3	7	-	-	-
W. Va.	-	-	-	-	-	-	2	-	-	-	-
N.C.	-	-	-	-	16	9	9	49	-	-	-
S.C.	-	-	-	3	3	-	3	9	-	-	-
Ga.	-	-	-	1	-	-	2	-	-	-	-
Fla.	-	-	-	1	3	-	11	4	-	-	4
E.S. CENTRAL	-	-	-	8	8	1	16	20	-	2	-
Ky.	-	-	-	-	-	-	5	1	-	-	-
Tenn.	-	-	-	1	-	1	7	4	-	-	-
Ala.	-	-	-	4	3	-	1	15	-	-	-
Miss.	-	-	-	3	5	-	3	-	N	N	N
W.S. CENTRAL	1	2	-	7	12	1	9	33	-	-	1
Ark.	-	2	-	-	3	-	2	3	-	-	-
La.	-	-	-	7	2	-	2	1	-	-	-
Okla.	-	-	-	-	-	-	1	2	-	-	-
Tex.	1	-	-	-	7	1	4	27	-	-	1
MOUNTAIN	4	56	-	17	11	7	102	199	-	1	3
Mont.	-	-	-	-	-	-	3	3	-	-	-
Idaho	-	-	-	-	2	1	41	59	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-
Colo.	1	17	-	-	-	3	17	32	-	-	-
N. Mex.	-	28	N	N	N	3	22	17	-	-	-
Ariz.	-	10	-	1	1	-	4	85	-	1	3
Utah	-	-	-	1	1	-	2	2	-	-	-
Nev.	3	1	-	15	7	-	13	1	-	-	-
PACIFIC	50	107	2	53	81	8	167	127	-	30	12
Wash.	4	14	-	5	4	7	42	20	-	1	1
Oreg.	-	1	N	N	N	1	22	7	-	-	1
Calif.	1	91	1	38	68	-	95	96	-	27	9
Alaska	44	-	1	2	8	-	-	-	-	-	-
Hawaii	1	1	U	8	1	U	8	4	U	2	1
Guam	-	-	U	1	2	U	-	-	U	-	-
P.R.	-	3	-	1	1	-	-	4	-	-	-
V.I.	-	-	U	-	1	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 April 13, 1996 (15th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	635	436	112	49	27	10	38
Boston, Mass.	139	82	29	11	13	3	5
Bridgeport, Conn.	37	30	1	3	2	1	1
Cambridge, Mass.	14	9	4	1	-	-	2
Fall River, Mass.	34	29	4	1	-	-	-
Hartford, Conn.	64	41	15	4	3	1	-
Lowell, Mass.	28	23	2	2	1	-	3
Lynn, Mass.	12	8	2	2	-	-	-
New Bedford, Mass.	30	24	2	4	-	-	2
New Haven, Conn.	38	20	10	6	1	1	2
Providence, R.I.	72	48	13	6	3	2	8
Somerville, Mass.	9	7	2	-	-	-	-
Springfield, Mass.	62	41	13	3	4	1	7
Waterbury, Conn.	38	26	9	3	-	-	4
Worcester, Mass.	58	48	6	3	-	1	4
MID. ATLANTIC	2,419	1,611	486	240	43	39	116
Albany, N.Y.	46	36	5	5	-	-	6
Allentown, Pa.	19	19	-	-	-	-	-
Buffalo, N.Y.	87	60	12	11	3	1	3
Camden, N.J.	33	21	7	3	2	-	1
Elizabeth, N.J.	13	8	4	1	-	-	-
Erie, Pa.§	46	41	4	-	-	1	5
Jersey City, N.J.	38	26	5	6	-	1	1
New York City, N.Y.	1,230	800	258	126	21	25	51
Newark, N.J.	61	31	20	6	3	1	1
Paterson, N.J.	31	18	5	4	-	4	2
Philadelphia, Pa.	400	235	97	55	8	5	22
Pittsburgh, Pa.§	51	42	7	2	-	-	3
Reading, Pa.	13	12	-	-	1	-	-
Rochester, N.Y.	125	94	22	6	3	-	7
Schenectady, N.Y.	23	21	2	-	-	-	1
Scranton, Pa.§	33	26	6	1	-	-	2
Syracuse, N.Y.	84	60	16	6	1	1	4
Trenton, N.J.	40	27	7	5	1	-	3
Utica, N.Y.	18	14	4	-	-	-	2
Yonkers, N.Y.	28	20	5	3	-	-	2
E.N. CENTRAL	2,265	1,508	470	192	58	34	147
Akron, Ohio	45	35	6	1	2	1	1
Canton, Ohio	49	39	8	1	1	-	4
Chicago, Ill.	485	280	122	58	14	8	27
Cincinnati, Ohio	112	79	19	7	4	3	16
Cleveland, Ohio	208	139	42	17	7	3	7
Columbus, Ohio	175	117	42	9	5	2	21
Dayton, Ohio	126	94	24	8	-	-	7
Detroit, Mich.	192	120	37	28	6	1	6
Evansville, Ind.	48	36	10	2	-	-	3
Fort Wayne, Ind.	82	55	17	3	4	3	7
Gary, Ind.	15	8	3	3	1	-	-
Grand Rapids, Mich.	52	39	8	4	-	1	3
Indianapolis, Ind.	213	135	48	19	7	4	9
Madison, Wis.	U	U	U	U	U	U	U
Milwaukee, Wis.	131	89	25	11	2	4	8
Peoria, Ill.	33	18	12	2	1	-	3
Rockford, Ill.	50	38	8	3	1	-	4
South Bend, Ind.	58	45	9	3	-	1	4
Toledo, Ohio	129	98	20	6	3	2	14
Youngstown, Ohio	62	44	10	7	-	1	3
W.N. CENTRAL	741	513	130	62	12	15	61
Des Moines, Iowa	69	51	14	3	1	-	10
Duluth, Minn.	21	17	1	3	-	-	1
Kansas City, Kans.	43	31	6	5	1	-	1
Kansas City, Mo.	113	69	22	9	2	2	7
Lincoln, Nebr.	31	23	6	-	2	-	6
Minneapolis, Minn.	146	110	17	14	2	3	4
Omaha, Nebr.	93	55	19	14	2	3	7
St. Louis, Mo.	102	68	23	5	2	4	18
St. Paul, Minn.	50	38	8	3	-	1	6
Wichita, Kans.	73	51	14	6	-	2	1
S. ATLANTIC	1,267	764	269	159	42	29	63
Atlanta, Ga.	193	111	37	34	4	7	6
Baltimore, Md.	189	113	38	30	5	3	16
Charlotte, N.C.	96	68	18	7	2	1	7
Jacksonville, Fla.	123	76	27	14	2	2	1
Miami, Fla.	109	62	28	13	4	2	-
Norfolk, Va.	63	34	19	5	4	1	4
Richmond, Va.	73	43	20	8	1	1	1
Savannah, Ga.	44	24	8	6	5	1	7
St. Petersburg, Fla.	54	40	9	5	-	-	5
Tampa, Fla.	171	110	27	18	8	6	12
Washington, D.C.	141	78	33	19	6	5	4
Wilmington, Del.	11	5	5	-	1	-	-
E.S. CENTRAL	799	579	134	62	17	7	67
Birmingham, Ala.	120	87	19	10	2	2	5
Chattanooga, Tenn.	99	69	15	9	3	3	6
Knoxville, Tenn.	61	44	15	1	1	-	9
Lexington, Ky.	76	50	17	4	3	2	9
Memphis, Tenn.	182	135	25	17	5	-	16
Mobile, Ala.	55	44	3	6	2	-	7
Montgomery, Ala.	59	45	11	2	1	-	3
Nashville, Tenn.	147	105	29	13	-	-	12
W.S. CENTRAL	1,600	978	343	172	69	38	110
Austin, Tex.	61	39	11	7	1	3	2
Baton Rouge, La.	46	24	10	4	2	6	2
Corpus Christi, Tex.	56	35	9	5	2	5	1
Dallas, Tex.	185	106	44	27	5	3	7
El Paso, Tex.	56	39	13	1	2	1	1
Ft. Worth, Tex.	106	71	19	7	4	5	8
Houston, Tex.	462	255	110	64	27	6	49
Little Rock, Ark.	74	49	15	3	7	-	5
New Orleans, La.	159	72	43	28	11	5	-
San Antonio, Tex.	224	158	40	17	6	3	19
Shreveport, La.	28	21	7	-	-	-	1
Tulsa, Okla.	143	109	22	9	2	1	15
MOUNTAIN	994	694	179	81	28	12	86
Albuquerque, N.M.	125	89	22	11	3	-	10
Colo. Springs, Colo.	57	44	8	4	-	1	4
Denver, Colo.	96	53	21	13	7	2	2
Las Vegas, Nev.	218	147	54	13	3	1	19
Ogden, Utah	27	20	5	-	-	2	4
Phoenix, Ariz.	193	134	32	19	6	2	20
Pueblo, Colo.	20	16	3	1	-	-	3
Salt Lake City, Utah	109	73	18	8	7	3	9
Tucson, Ariz.	149	118	16	12	2	1	15
PACIFIC	2,131	1,466	346	212	60	45	158
Berkeley, Calif.	11	7	1	3	-	-	-
Fresno, Calif.	106	72	22	4	3	5	3
Glendale, Calif.	47	32	6	2	6	1	10
Honolulu, Hawaii	91	67	10	7	3	3	10
Long Beach, Calif.	88	58	17	8	3	2	18
Los Angeles, Calif.	716	474	116	87	23	15	27
Pasadena, Calif.	30	20	7	1	2	-	2
Portland, Oreg.	123	94	17	7	3	2	10
Sacramento, Calif.	181	131	31	15	1	3	17
San Diego, Calif.	164	112	21	16	6	9	12
San Francisco, Calif.	126	78	23	23	1	1	8
San Jose, Calif.	176	123	36	10	4	3	20
Santa Cruz, Calif.	32	23	4	4	1	-	5
Seattle, Wash.	135	89	25	18	3	-	1
Spokane, Wash.	48	38	6	4	-	-	8
Tacoma, Wash.	57	48	4	3	1	1	7
TOTAL	12,851¶	8,549	2,469	1,229	356	229	846

*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.

†Pneumonia and influenza.

§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.

¶Total includes unknown ages.

U: Unavailable -: no reported cases

Monthly Immunization Table

To track progress toward achieving the goals of the Childhood Immunization Initiative (CII), CDC publishes monthly a tabular summary of the number of cases of all diseases preventable by routine childhood vaccination reported during the previous month 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, January–March 1996 and 1995–1996*

Disease	No. cases, January–March 1996	Total cases January–March		No. cases among children aged <5 years† January–March	
		1995	1996	1995	1996
Congenital rubella syndrome	0	**3**	**0**	3	0
Diphtheria	1	**0**	**1**	0	0
Haemophilus influenzae§	340	**356**	**340**	86	77
Hepatitis B¶	1,665	**2,176**	**1,665**	14	11
Measles	45	**167**	**45**	64	3
Mumps	145	**201**	**145**	38	24
Pertussis	557	**669**	**557**	363	268
Poliomyelitis, paralytic**	0	**0**	**0**	0	0
Rubella	37	**16**	**37**	3	3
Tetanus	3	**4**	**3**	0	0

*Data for 1995 and 1996 are provisional.
†For 1995 and 1996, age data were available for ≥91% cases.
§Invasive disease; *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System. Of 77 cases among children aged <5 years, serotype was reported for 20 cases, and of those, 4 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.
**One case with onset in July 1994 has been confirmed; this case was vaccine-associated. An additional six suspected cases are under investigation. In 1993, three of 10 suspected cases were confirmed; two of the confirmed cases were vaccine-associated, and one was imported. The imported case occurred in a 2-year-old Nigerian child brought to the United States for care of his paralytic illness; no poliovirus was isolated from the child.

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