CENTERS FOR DISEASE CONTROL


MORBIDITY AND MORTALITY WEEKLY REPORT

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## Epidemiologic Notes and Reports

## Measles - Dade County, Florida

During the period July 14 through December 12, 1986, 258 confirmed cases of measles (1) were reported to the Dade County Department of Public Health. There is detailed information available on the first 223 cases, all of which had been reported by December 6, 1986 (Figure 2). The index case of measles occurred in a 4-year-old, unvaccinated Hispanic resident of Dade County. The child had acquired measles while on vacation in Honduras, and her rash had developed on June 19, the day after she returned home.

FIGURE 1. Reported measles cases, by date of rash onset - Dade County, Florida, June 19, 1986-December 6, 1986


JUN JUL AUG SEP OCT NOV DEC
RASH ONSET (week)

## Measles - Continued

Of the 223 patients reported to Dade County, 98 ( $44 \%$ ) were black; 76 (34\%), Hispanic; 28 (13\%), Haitian; and 21 ( $9 \%$ ), non-Hispanic white. Attack rates were highest among blacks (43 cases $/ 100,000$ population) and Haitians $(32 / 100,000)$, with lower attack rates among Hispanics $(10 / 100,000)$ and whites $(6 / 100,000)$. The age distribution of the 223 patients is presented in Table 1. A total of 171 ( $77 \%$ ) were $<5$ years of age; $91(41 \%)$ were $<16$ months of age (i.e., too young for routine vaccination). The highest attack rate (248/100,000) was in patients < 12 months of age (Table 1).

Overall, 39\% (87) of the 223 patients had preventable illness (1) (Table 2). However, 89\% (71) of cases in preschoolers who were 16 months through 4 years of age were preventable. This age group alone accounted for $82 \%$ of all preventable cases (Table 2). Of the 136 children who had non-preventable cases, 91 (67\%) were too young for routine vaccination, 42 ( $31 \%$ ) had been vaccinated, two ( $2 \%$ ) were born before 1957 (i.e., old enough to be considered already immune), and one ( $0.7 \%$ ) was not a U.S. citizen.

Complications occurred in 77 ( $32 \%$ ) of the 223 patients. The most frequent complication was diarrhea (14\%), followed by otitis media (10\%), pneumonia (6\%), and seizures (1\%). Agespecific complication-to-case ratios were highest among children < 5 years of age ( $44: 172$ ); the 9 - to 15 -month age group had the highest ratio $(24: 73)$. No deaths were reported.

TABLE 1. Age distribution and estimated incidence rates of measles - Dade County, Florida, June 19, 1986-December 6, 1986

| Age group (yrs.) | No. | Percent | Rate |
| :--- | ---: | ---: | ---: |
| $<1$ | 52 | 23.3 | 247.6 |
| $1-4$ | 119 | 53.4 | 121.4 |
| $5-9$ | 23 | 10.3 | 20.2 |
| $10-14$ | 17 | 7.6 | 11.8 |
| $15-19$ | 3 | 1.3 | 2.1 |
| $\geq 20$ | 9 | 4.0 | 0.7 |
|  |  |  |  |
| Total | 223 | 100.0 | 12.6 |

- Per 100,000 population.

TABLE 2. Age distribution and preventability of measles cases - Dade County, Florida, June 19, 1986-December 6, 1986

\left.|  |  | Preventable cases |  |
| :--- | :---: | ---: | ---: |
| Age group | Total cases | No. |  |$\right)(\%)$

## Measles - Continued

The setting of transmission was known for 79 (35\%) patients. Of these patients, 42 (53\%) were exposed to measles in the waiting room of the pediatric emergency room (ER) of a large county hospital. Transmission also occurred in other medical facilities, day-care centers, shelters for children, homes, and schools where immunization levels were known to be high (98\%).

Outbreak control activities included increasing surveillance; instituting mass publicity in newspapers, on radio and television stations, and by physicians and other health professionals; instituting a triage and isolation process in the pediatric ER and clinics of the country hospital; and auditing records of children enrolled in licensed day-care centers and schools. On September 25, the age of vaccination was lowered to 12 months. On October 17, because of continuously high attack rates in infants < 12 months, the age of vaccination was lowered to 6 months for children either living in shelters or using neighborhood clinics or the pediatric ER of the county hospital. Free vaccine was provided in all neighborhood and public health clinics. In neighborhoods where large proportions of patients lived, religious and other community leaders assisted in vaccine clinics held in mobile vans, churches, fleamarkets, and supermarkets. Vaccine was also available in a van outside of the pediatric ER of the county hospital. However, these clinics had limited success in immunizing preschoolers.

Because a large proportion of patients was unvaccinated, a telephone survey was conducted to determine whether patients had missed an opportunity to be vaccinated and what the risk factors were for not being immunized. To determine missed opportunities for vaccination, parents or guardians of 18 unvaccinated patients who were 16 months through 4 years of age were interviewed to determine the number of times they were seen in a medical care facility at an age when they were eligible for vaccination. Of the 18,17 had reportedly been seen in a medical care facility at least one time in the 6-month and 12-month periods prior to measles onset and at an age when they were eligible for vaccination. Review of the clinical records of nine patients indicated that three had been seen for minor upper respiratory tract infections and could have received vaccine. The remaining six were seen when they had an illness which was felt to be a contraindication to vaccination.

To determine the risk factors for not being immunized, a case-control study was conducted. The 18 unvaccinated patients who were 16 months through 4 years of age were compared with 27 community controls in the same age group. The control group was obtained by random digit dialing. Preliminary results of this case-control study indicated that unvaccinated patients were more likely to have received health care from the public sector (odds ratio $[O R]=10,95 \%$ confidence interval $[\mathrm{CI}]=2-40)$, to have single mothers $(O R=13,95 \% \mathrm{CI}=$ $3-58$ ), to live in a household with no employed adult ( $O R=7,95 \% \mathrm{Cl}=2-26$ ), to have received $<3$ doses of DTP $\left(p=0.016^{*}\right)$ and $<2$ doses of OPV $\dagger\left(p=0.048^{*}\right)$. They also had a greater number of siblings (mean $=2$ vs $1, \mathrm{p}<0.05$ ).

Reported by M Ares, MD, H Garcia, MD, A Kimbler, RA Morgan, MD, Dade County Dept of Public Health, HT Janowski, H Loy, S McInelly, JL Velez, JJ Witte, MD, MH Wilder, MD, Acting State Epidemiologist, Florida State Dept of Health and Rehabilitative Svcs; Div of Immunization, Center for Prevention Svcs, CDC.

[^0]
## Measles - Continued

Editorial Note: Measles transmission in preschool-aged children continues to be a major impediment to the elimination of indigenous measles transmission in the United States. Preschoolers have had the highest reported risk of measles among all age groups in 5 of the 6 years from 1981 through 1986 (2,3). Unvaccinated preschoolers aged 16 months through 4 years represent a substantial proportion of patients in recent outbreaks in Phoenix (4), Chicago (5), Jersey City (6), and New York City (CDC, unpublished data). As in those outbreaks, the outbreak in Dade County occurred among preschoolers from low socioeconomic groups.

Generally, immunization levels in preschool-aged children are lower than those for schoolaged children ( 6,7 ). This is true in Dade County where a survey of 2 -year-old children in the population in 1986 showed that the measles immunization level was between 49\% and 65\% (Dade County Department of Public Health, unpublished data). In contrast, the immunization level in children enrolled in kindergarten and first grade in the 1985-86 school year was 94\%.

In the outbreak in Dade County, unvaccinated patients were of lower socioeconomic status, sought health care more often in the public sector, and were more likely not to be in compliance with immunization recommendations for other antigens than were their agematched controls. These children are particularly difficult to reach for several reasons. In addition to not being enrolled in schools or some other institution where immunization requirements could be enforced, they may also have difficulty gaining access to health care services. There is a need for innovative strategies for increasing immunization levels among this hard-to-reach group throughout the United States. Barriers to immunization services should be eliminated, and the services available in public health clinics, where these patients usually seek care, should be more fully used. In addition, susceptible children should be vaccinated every time they visit a health care facility unless vaccination is contraindicated. Educational programs should be targeted to parents in low socioeconomic groups, and physicians and clinics should routinely recall their eligible patients for vaccination. The health care community should involve community leaders in planning activities to educate parents.

## References

1. CDC. Classification of measles cases and categorization of measles elimination programs. MMVNR 1983;31:707-11.
2. Frank JA Jr, Orenstein WA, Bart KJ, et al. Major impediments to measles elimination. Am J Dis Child 1985;139:881-8.
3. CDC. Measles - United States, first 26 weeks, 1986. MMWR 1986;35:525-8, 533.
4. CDC. Measles-Arizona. MMWR 1986;35:99-100, 105-7.
5. Bennish M, Arnow PM, Beem MO, Doveikis S. Epidemic measles in Chicago in 1983: sustained transmission in the preschool population. Am J Dis Child 1986;140:341-4.
6. CDC. Measles - New Jersey. MMWR 1986;35:213-5.
7. Eddins DL, Sirotkin BI, Holmgreen P, Russell S. Assessment and validation of immunization status in the United States. In: 20th Immunization Conference Proceedings. Dallas, Texas: 20th Immunization Conference, 1985:51-61.

## Epidemiologic Notes and Reports

## Rapidly Progressive Dementia in a Patient Who Received a Cadaveric Dura Mater Graft

In mid-November 1986, a 23-year-old woman developed gait ataxia 19 months after surgical resection of a cholesteatoma* . During surgery she received an imported, commercially prepared, human dura mater graft (LYODURA ${ }^{\circledR}$, Lot $\# 2105$, processed in 1982 by B. Braun Melsungen AG of the Federal Republic of Germany). By early December, she required assistance with ambulation and had developed dysarthria. Two weeks later she gave inappropriate responses to questions and developed visual hallucinations. By early January 1987, she developed myoclonic jerks and, on physical examination, was demented. Diagnosis of Creutzfeldt-Jakob disease (CJD) was confirmed by brain biopsy which demonstrated spongiform encephalopathy. She had no family history of degenerative neurologic disease, nor had she received cadaveric, pituitary-derived human growth hormone (HGH). No patient with known CJD had surgery in the same neurosurgical suite in the 3 months prior to this woman's operation.
Reported by J Prichard, MD, V Thadani, MD, R Kalb, MD, E Manuelidis, MD, Yale University School of Medicine, New Haven, Connecticut, J Hadler, MD, MPH, State Epidemiologist, Connecticut State Dept of Health Svcs; Food and Drug Administration; Hospital Infections Program, Div of Viral Diseases, Center for Infectious Diseases, CDC.
Editorial Note: CJD occurs with a frequency of about $1 / 1,000,000$ population per year in the United States and in various populations worldwide (1). Most cases occur spontaneously in patients $>50$ years of age; CJD is rare in persons $<30$ years of age (1). latrogenic transmission of CJD has occurred in one patient by corneal transplant from an infected donor (2), in two patients who were exposed to intracerebral electrodes after they had been used in a CJD patient (3), in four patients in neurosurgical suites following procedures on CJD patients $(4,5)$, and in four recipients of HGH (6,7). Onsets of symptoms following direct brain or eye exposure to the CJD agent have ranged from 16 to 28 months; however, patients who received systemic HGH have had onsets of symptoms after 4 to 21 years. No other reports of CJD transmission via dura mater grafts have been identified.

Dura mater harvested from cadavers is used predominantly in neurosurgical procedures, but is also used in orthopedic, otologic, dental, urologic, gynecologic, and cardiac procedures. Although the number of recipients of LYODURA ${ }^{\circledR}$ and other dura mater grafts is not well known, the age of this patient and the 19-month interval between her graft and onset of symptoms of CJD strongly suggest that the dural graft was the vehicle for transmission of the CJD agent. The Food and Drug Administration and the Centers for Disease Control are continuing to investigate the association.

Procedures used to sterilize cadaveric dura such as exposure to ethylene oxide or ionizing irradiation are not sufficient to completely inactivate the CJD agent (8,9,10). Until methods to eliminate the CJD agent from dura mater can be better defined, the transmission of this

[^1]
## Dementia - Continued

lethal, degenerative neurological disease remains a possibility. Surgeons may wish to consider the alternative use of autologous fascia lata or temporalis fascia or of synthetic substitutes. Physicians who use cadaveric dura mater should verify that their sources follow stringent donor selection procedures and criteria such as those promulgated by the American Association of Tissue Banks (11,12).

Previous and current patients who have rapidly progressive dementing illnesses consistent with CJD and who have received a dural graft during an operative procedure should be reported, through their state health departments, to R. Janssen, MD, Division of Viral Diseases, Building 6, Room 127, Centers for Disease Control, 1600 Clifton Road, Atlanta, Georgia; telephone number (404)329-3091. Any facility finding remaining stock of LYODURA ${ }^{\circledR}$, Lot \#2105, should contact Dr. Janssen immediately regarding its disposition and possible testing.
(Continued on page 55)

TABLE I. Summary-cases specified notifiable diseases, United States

| Disease | 4th Week Ending |  |  | Cumulative, 4th Week Ending |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Jan. } 31, \\ 1987 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Jan. } 25 \\ 1986 \end{gathered}$ | $\begin{gathered} \text { Median } \\ 1982-1986 \end{gathered}$ | $\begin{gathered} \text { Jan. } 31, \\ 1987 \end{gathered}$ | $\begin{gathered} \text { Jan. } 25, \\ 1986 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Medıan } \\ 1982-1986 \end{gathered}$ |
| Acquired immunodeficiency Syndrome (AIDS) | 1,101 | 203 | N | 1,642 | 839 | N |
| Aseptic meningitis | 83 | 102 | 92 | 333 | 320 | 337 |
| Encephalitis: Primary (arthropod-borne \& unspec.) Post-infectious | 10 | 18 | 15 | 50 | 65 3 | 59 5 |
| Gonorrhea: Civilian | 14.552 | 20,867 | 17.703 | 66,350 | 64,889 | 65,761 |
| Military | 342 | 367 | 387 | 1,403 | 1,045 | 1,642 |
| Hepatitis: Type A | 448 | 536 | 427 | 1,480 | 1.610 | 1.420 |
| Type B | 398 | 485 | 469 | 1,425 | 1.658 | 1.588 |
| Non A, Non B | 50 | 44 | N | 195 | 204 | N |
| Unspecified | 86 | 140 | 140 | 241 | 357 | 357 |
| Legionellosis | 13 | 8 | N | 49 | 34 | N |
| Leprosy | 3 | 10 | 5 | 16 | 27 | 15 |
| Malaria | 8 | 12 | 12 | 39 | 43 | 43 |
| Measles: Total* | 30 | 26 | 8 | 89 | 70 | 34 |
| Indigenous Imported | 29 | 26 | N N | 71 | 67 | N N |
| Meningococcal infections: Total | 1 74 | 55 | $N$ 58 | 18 226 | 3 197 | N 199 |
| Civilian | 74 | 55 55 | 58 | 226 226 | 197 | 199 |
| Military | 7 | 5 | 5 | 22 | 1 | - |
| Mumps | 278 | 48 | 60 | 768 | 172 | 240 |
| Pertussis | 51 | 33 | 25 | 124 | 130 | 100 |
| Rubella (German measies) | - | 11 | 11 | 20 | 21 | 28 |
| Syphilis (Primary \& Secondary): Civilian | 651 | 610 | 670 | 2,306 | 1.747 | 2,042 |
| Military | 1 | 4 | 11 | 2, 6 | 9 | 31 |
| Tuberculosis | 7 372 | 4 435 | N | $\begin{array}{r}16 \\ \hline 155\end{array}$ | 17 1.020 | N |
| Tularemia | 372 | 435 | 369 | 1.155 | 1.020 | 1,165 6 |
| Typhoid fever | 2 | 13 | 1 8 | 7 13 | 6 21 | 23 |
| Typhus fever, tick-borne (RMSF) | 2 | 13 | 8 | 13 | 21 | 23 |
| Rabies, anımal | 57 | 93 | 83 | 210 | 304 | 304 |

TABLE II. Notifiable diseases of low frequency, United States

|  | Cum 1987 |  | Cum 1987 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Leptospirosis | 2 |
| Botulism: Foodborne |  | Plague | - |
| Infant (Calif. 1) | 4 | Poliomyelitis, Paralytic | - |
| Brucellosis | 6 | Psittacosis | 7 |
| Cholera | 6 | Rabies, human | - |
| Congenital rubella syndrome |  | Tetanus (Mich. 1) | 2 |
| Congenital syphilis, ages 1 year | - | Trichinosis (Pa. 1) | 2 |
| Diphtheria (Ala. 1) | 1 | Typhus fever, flea-borne (endemic, murine) | 1 |

[^2]TABLE III. Cases of specified notifiable diseases, United States, weeks ending
January 31, 1987 and January 25, 1986 (4th Week)

| Reporting Area | AIDS | Aseptic Meningitis | Encephalitis |  | Gonorrhea (Civilian) |  | Hepatitis (Viral), by type |  |  |  | Legioner losis | Leprosy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Primary | Post-infectious |  |  | A | B | NA, NB | Unspectfied |  |  |
|  | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1986 \end{aligned}$ | 1987 | 1987 | 1987 | 1987 | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ |
| UNITED STATES | 1.642 | 83 | 50 | 1 | 66,350 | 64,889 | 448 | 398 | 50 | 86 | 13 | 16 |
| NEW ENGLAND | 54 | 8 | 6 | 1 | 2,147 | 1,289 | 10 | 36 | 2 | 8 | - | 1 |
| Maine $\mathrm{NH}$ | 4 3 | - | - | - | 90 | 74 | - | 2 | - | . | - | . |
| $\mathrm{V}_{t}$ | 3 | - | 1 | - | 37 14 | 30 18 | 1 | 7 | - | - | - | - |
| Mass | 34 | 6 | 4 | - | 568 | 546 | 7 | 22 | - | 8 | - | 1 |
| RI | 7 | 2 | 1 | 1 | 221 | 104 | . | 2 | 2 | 8 | - | 1 |
| Conn | 6 | . | . | . | 1.217 | 517 | 2 | 1 | 2 | - | - | - |
| MID ATLANTIC | 730 | 1 | 8 | - | 12,153 | 12,430 | 7 | 23 | 1 | 5 | - | - |
| Upstate NY | 312 | 1 | 3 | - | 937 | 1,028 | 7 | 16 | 1 | 1 | - | - |
| NY City | 310 | - | 3 | - | 7.916 | 8,443 | . | 7 | . | 4 | - | - |
| N J | 105 | - | - | - | 936 | 975 | - |  | - | . | - | . |
| Pa | 3 | - | 2 | - | 2,364 | 1,984 | - | - | - | - | - | - |
| En CENTRAL | 103 | 9 | 18 | - | 7.118 | 9,003 | 10 | 33 | 3 | 4 | 9 | - |
| Ohio | 24 | 2 | 14 | - | 2,313 | 2,638 | 2 | 8 | . | 1 | 5 | - |
| Ind | 10 | - | - | - | 515 | 928 | - | 1 | - | . | . | - |
| III | 42 | 7 | - | - | 922 | 1,759 | 3 | 1 | - | - | - | - |
| Mich | 15 | 7 | 4 | - | 2,917 | 2,544 | 5 | 23 | 3 | 3 | 4 | . |
| Wis | 12 | - | - | - | 451 | 1.134 | - | - | - | - | - | - |
| WN CENTRAL | 15 | 5 | 1 | - | 2,685 | 2,832 | 11 | 16 | 3 | 1 | 1 | - |
| Minn | 6 | - | - | - | 467 | 479 | 1 |  | - | - | - | - |
| lowa | - | - | - | - | 265 | 338 | 1 | 5 | - | 1 | - | - |
| Mo | 2 | 3 | - | - | 1.334 | 1.426 | 1 | 6 | 1 | - | 1 | - |
| N Oak | - | - | - | - | 19 | 32 | - | - | - | - | - | - |
| S Dak | - | - | - | - | 72 | 49 | - | - | - | - | - | - |
| Nebr | 4 | - | 1 | - | 189 | 112 | 2 | 3 | - | - | - | - |
| Kans | 3 | 2 | , | - | 339 | 396 | 6 | 2 | 2 | - | - | - |
| S ATLANTIC | 175 | 23 | 8 | - | 17,742 | 15,314 | 44 | 105 | 6 | 21 | 2 | - |
| Del | 6 | , | 1 | - | . 238 | . 269 | 1 | 3 |  | 1 | - | - |
| Md | - | - | - | - | 1.547 | 1.586 | 11 | 29 | 3 | 2 | - | - |
| DC | 16 | - | - | - | 1,048 | 1,203 | - | 1 | - | - | - | - |
| Va | 15 | 3 | 4 | - | 1,564 | 1.279 | 10 | 16 | - | 16 | - | - |
| W Va | 2 | - | 2 | - | 95 | 189 | - | - | - | 1 | - | - |
| NC | 16 | 4 | 1 | - | 2,838 | 2,027 | 3 | 13 | 1 | - | 1 | - |
| S C | 4 | - | - | - | 2,054 | 1.515 | - | 8 | - | - | - | - |
| Ga | 25 | 6 | - | - | 2,868 | 3,365 | 4 | 19 | 1 | 1 | - | - |
| Fla | 91 | 10 | - | - | 5.490 | 3,881 | 15 | 16 | 1 | - | 1 | - |
| E S CENTRAL | 6 | 13 | 2 | - | 4,689 | 5.070 | 2 | 13 | 6 | - | 1 | - |
| Ky | - | - | - | - | 467 | 581 | - | 2 | - | - | - | - |
| Tenn | - | 2 | - | - | 1,524 | 1,995 | 1 | 3 | 2 | - | - | - |
| Ala | 3 | 7 | 2 | - | 1.637 | 1.339 | - | 5 | 2 | - | 1 | - |
| Miss | 3 | 4 | - | - | 1.061 | 1.155 | 1 | 3 | 2 | - | - | - |
| WS CENTRAL | 35 | 7 | 2 | - | 7,926 | 7.976 | 45 | 25 | 3 | 15 | - | 3 |
| Ark | 3 | - | - | - | 813 | 814 | - | - | . | - | - | - |
| La | 25 | - | - | - | 1,109 | 1,291 | 2 | 6 | - | - | - | - |
| Okla | 6 | - | 1 | - | 828 | 894 | 9 | 5 | 1 | 1 | - | - |
| Tex | 1 | 7 | 1 | - | 5.176 | 4,977 | 34 | 14 | 2 | 14 | - | 3 |
| MOUNTAIN | 38 | 1 | 4 | - | 1,583 | 1.906 | 38 | 15 | 2 | 9 | - | - |
| Mont | 1 | - |  | - | 38 | 51 | 2 |  | . |  | - | - |
| Idaho | 1 | - | - | - | 63 | 30 | 7 | 1 | - | - | - | - |
| Wro | 1 | - | - | - | 18 | 34 | . | . | - | - | - | . |
| Colo | 17 | - | - | - | 385 | 502 | 0 | 7 | - | 7 | - | - |
| $N$ Mex | 8 | - | 1 | - | 167 | 208 | 20 | 2 | 1 | 1 | - | - |
| Ariz | 3 | - | 3 | - | 418 | 572 | - | - | - | - | - | - |
| Utah | 3 | - | - | - | 70 | 81 | 5 | - | 1 | - | - | - |
| Nev | 4 | 1 | - | - | 424 | 428 | 4 | 5 | - | 1 | - | - |
| PACIFIC | 486 | 16 | 1 | - | 10,307 | 9,069 | 281 | 132 | 24 | 23 | - | 12 |
| Wash | 11 | 1 | - | - | 517 | 704 | 67 | 11 | 3 | 2 | - | - |
| Oreg | 4 | - | - | - | 405 | 354 | 25 | 16 | 4 | - | - | - |
| Calif | 455 | 11 | 1 | - | 9.067 | 7,663 | 178 | 97 | 17 | 21 | - | 10 |
| Alaska | 2 | 1 | - | - | 209 | 248 | 11 | 8 | - | - | - | - |
| Hawall | 14 | 3 | - | - | 109 | 100 | - | - | - | - | - | 2 |
| Guam | - | U | - | - | 19 | 5 | U | U | U | U | U | - |
| PR | - | 1 | - | - | 190 | 157 | 2 | 1 | 1 | - | - | - |
| VI | - | U | - | - | 20 | 13 | U | U | U | U | U | - |
| Pac Trust Terr | - | U | - | - | 9 | - | U | U | U | U | U | - |
| Amer Samoa | - | U | - | - | 10 | - | U | U | U | U | U | - |

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 31, 1987 and January 25, 1986 (4th Week)

| Reporting Area | Malaria | Measles (Rubeola) |  |  |  |  | Menin-gococcalInfections | Mumps |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Indigenous |  | Imported * |  | Total <br> Cum <br> 1986 |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ |  |  | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1986 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{gathered} \text { Cum } \\ 1986 \end{gathered}$ |
| UNITED STATES | 39 | 29 | 71 | 1 | 18 | 70 | 226 | 278 | 768 | 51 | 124 | 130 | - | 20 | 21 |
| NEW ENGLANC Maıne NH | 4 | - | - | - | 6 | - | 22 | 1 | 4 | 1 | 2 | 11 | - | - | - |
|  | - | - | - | - | - | - | 3 | - |  | . |  | 1 | - | - |  |
|  | - | - | - | - | 5 | - | 5 | 1 | 4 | - | 1 | 7 | - | - |  |
| Mass | 2 | $\stackrel{-}{-}$ | - | - | 5 1 | - | 2 | - | - | - | . | - | - | - | - |
|  | 2 | $\stackrel{-}{-}$ | - | - | 1 | - | 7 | - | - | - | $\square$ | 2 | - | - | - |
| RI Conn | - | - | . | . | - | - | 3 | - | - | 1 | 1 | $i$ | - | - | - |
| MID ATLANTIC | - | 12 | 12 | $1+$ | 12 | 13 | 18 | 4 | 28 | 3 | 14 | 23 | - | - | 6 |
| Upstate NY NY City | - | - | - | $1 \dagger$ | 1 | 2 | 17 | 1 | 8 | 1 | 10 | 16 | - | - | 5 |
|  | - | 12 | 12 | - | - | 11 | 1 | . |  | . | 10 | 16 | - | . | 5 |
| $\begin{aligned} & \mathrm{N} \mathrm{~J} \\ & \mathrm{~Pa} \end{aligned}$ | - | - | - | - | 1 | - | - | - | 8 | . | - |  | - | - | 1 |
|  | - | - | - | - | 10 | - | - | 3 | 12 | 2 | 4 | 7 | - | - | . |
| EN CENTRAL Ohio | 1 | 2 | 21 | - | - | 17 | 31 | 228 | 563 | 7 | 15 | 35 | - | 1 | 1 |
|  | 1 | - | - | - | - | - | 15 | 11 | 15 | 5 | 12 | 11 | . | . | . |
| Ind | - | - | $i$ | - | - | - | . | 33 | 33 | . |  | 3 | - | - | - |
|  | - | 1 | 1 | - | - | 13 | ${ }^{-}$ | 148 | 380 | - | - | 9 | - | - | - |
| Mich | - | 1 | 20 | - | - | - | 15 | 32 | 88 | 2 | 3 | 1 | - | 1 | - |
| Wis | - | - | - | - | - | 4 | 1 | 4 | 47 | - | . | 11 | - | - | 1 |
| W N CENTRALMinn | - | - | - | - | - | 24 | 12 | 7 | 34 | 3 | 15 | 17 | - | - | - |
|  | - | - | - | - | - | - | 2 |  | 5 | 2 | + | 10 | - | - | - |
| lowa | - | - | - | - | - | - | 2 | 5 | 19 | 2 | 2 | 2 | - | . | . |
|  | - | - | - | - | $\stackrel{-}{-}$ | - | 3 | 1 | 2 | - | 5 |  | - | - |  |
| N Dak | - | - | - | - | - | - | - | - | - | i | 1 | 2 | . | - | - |
| S Dak | - | - | - | - | - | - | - | - | 3 | 1 | 1 |  | - | - | - |
| Kans | - | - | - | - | - | 24 | 5 | 1 | 5 | - | 4 | 3 | - | - | - |
| S ATLANTIC | 5 | - | - | - | - | - | 42 | 3 | 9 | 12 | 28 | 15 | - | - | - |
| Del | 1 | - | - | - | - | - | 2 | 3 | 9 | 12 | 28 | 15 | - | - | - |
| Md | - | - | - | - | - | - | 5 | 1 | 3 | . | . | 4 | - | - |  |
|  | 1 | - | - | - | - | - | 5 | 1 | 3 | - | - | 4 | - | - |  |
| Va | 2 | - | - | - | - | - | 10 | - | - | 8 | 13 | 2 | - | - | - |
| W Va | - | - | - | - | - | - | - | 1 | 2 | 1 | + | 2 | - | - | - |
| NCS C | - | - | - | - | - | - | 4 | , | 1 | 2 | 11 | 4 | - | - |  |
|  | - | - | - | - | - | - | 4 | - | 1 | 2 | 11 | 4 | - | - | - |
| Ga | 1 | - | - | - | - | - | 10 | - | 1 | 1 | 2 | 1 | - | - | - |
| Fla | - | - | - | - | - | - | 9 | 1 | 2 | 1 | 2 | 3 | - | - | - |
| ES CENTRAL Ky | 1 | - | - | - | - | - | 14 | 25 | 98 | 2 | 3 | 5 | - | 2 | 1 |
| Tenn | - | - | - | - | - | - | 2 | 7 | 29 | 1 | 1 | 5 1 | - | 2 | 1 |
| Ala Miss | - | - | - | - | - | - | 5 | 17 | 68 | - | - | 1 | - | . | - |
|  | 1 | - | - | - | - | - | 6 1 | 1 | 1 | 1 | 2 | 3 | - | - | - |
| W S CENTRAL Ark | 2 | - | - | - | - | - |  |  |  |  |  |  |  |  |  |
|  | 2 | - | - | - | - | - | 16 | 4 | 6 | 2 | 2 | - | - | - | 1 |
| La | - | - | - | - | . | . | 2 | - | - | - | - |  | - | - |  |
| $\begin{aligned} & \text { Okla } \\ & \text { Tex } \end{aligned}$ | - | - | - | - |  |  | 4 | N | N | 2 | 2 | - | - | - |  |
|  | 2 | - | - | - | - | - | +4 | N 4 | N 6 | 2 | 2 | - | - | - | 1 |
| MOUNTAIN | - | - | - | - | - | 1 | 7 | - | 5 | - |  |  |  | 1 | - |
| Mont | - | - | - | - | - | - |  | . | 5 | - | 3 | 10 | $\bullet$ | 1 | . |
|  | - | - | - | - | - | - | - | - | - | - | - | 2 | - | - | - |
| Idaho Wyo | - | - | - | - | - | - | - | - | - | - | 2 | 2 | - | - |  |
| Colo | - | - | - | - | - | - | 1 | - | 1 | - | 2 |  | - | - | - |
| N Mex | - | - | - | - | - | 1. | 1 | N | N | - | 1 | 4 | - | - | - |
| Ariz | - | - | - | - | - | 1 | 4 | N | N 4 | - | 1 | 4 | - | - | - |
| Utah | - | - | - | - | - | - |  | . | 4 | - | - | 4 | - | 1 | - |
| Nev | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1. | - |
| PACIFIC | 26 | 15 | 38 | - | - | 15 |  |  |  |  |  |  |  |  |  |
| Wash |  |  | - | - | - | 15 |  | 6 | 21 4 | 21 | 42 | 14 | - | 16 | 12 |
| Oreg | - | . | 1 | - | - | - | 13 +10 | N | $\stackrel{4}{\mathrm{~N}}$ | 4 | 5 | 5 | - | - | - |
| Calif | 26 | 15 | 37 | - | - | 14 | 10 41 | N | ${ }_{16}$ | 2 | 8 | - | - | 1 | 12 |
| Alaska | 26 | 15 | 37 | - | - | 14 | 41 | 6 | 16 | 15 | 28 | 8 | - | 14 | 12 |
| Hawaii | . | . | - | - | - | 1 | - | - | i | - | i | - | - | - | . |
|  |  | - |  | - | - | 1 | - | - | 1 | - | 1 | 1 | - | 1 | - |
| Guam | - | U | 1 | U | - | - |  |  |  |  |  |  |  |  |  |
| PR | - | , | , | U | - | - | 1 | U | - | U | - | - | U | - | - |
| VI | - | U | - |  | - | - | - | U | - | 1 | 2 | 2 | - | - | . |
| Pac Trust Terr Amer Samoa | - | U | - | U | - | - | - | U | 1 | U | - | - | U | - | - |
|  | - | U | - | U | - | - | - | U | - | U | - | - | U | - | - |

[^3]N Not notifiable U Unavaitable $\boldsymbol{t}^{\text {International }}{ }^{\boldsymbol{\xi}}$ Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 31, 1987 and January 25, 1986 (4th Week)

| Reporting Area | Syphilis (Civilian) (Primary \& Secondary) |  | $\begin{gathered} \text { Toxic } \\ \text { shock } \\ \text { Syndrome } \end{gathered}$ | Tuberculosis |  | Tularemia | Typhoid Fever | Typhus Fever (Tick-borne) (RMSF) | Rabies Animal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Cum } \\ 1987 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Cum } \\ & 1986 \end{aligned}$ | 1987 | $\begin{aligned} & \hline \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1986 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum } \\ & 1987 \end{aligned}$ |
| united states | 2.306 | 1.747 | 7 | 1,155 | 1,020 | 7 | 13 | 5 | 210 |
| NEW ENGLAND | 27 | 50 | - | 19 | 28 | - | 2 | - | - |
| Maine | . | 3 | - | 1 | 6 | : | $\underline{.}$ | - |  |
| NH | - | 1 | - | 1 | 3 | - |  | $:$ |  |
| V t | $10^{-}$ | 3 | - | 1 | 1 | - | - | - |  |
| Mass | 16 | 25 | - | 3 | 7 | - | 2 | - |  |
| RI | 11 | 17 | - | 13 | 11 |  |  | - |  |
| Conn | 11 | 17 | - | 13 | 11 | - | - | - |  |
| mid ailantic | 279 | 250 | - | 218 | 188 | - | - | - | 34 |
| Upstate $\mathrm{N} Y$ | 5 | 14 | - | 49 | 31 | - | - | - | 3 |
| NYClity | 173 | 166 | - | 101 | 112 | - | - | - |  |
| N J | 45 | 49 | - | 43 | 19 | - | - | - |  |
| Pa | 56. | 21 | - | 25 | 26 | - | - | - | 31 |
| en central | 31 | 59 | - | 164 | 161 | 1 | 3 | 1 | 5 |
| Ohio | 7 | 7 | - | 27 | 21 | 1 | 2 | 1 |  |
| Ind | 1 | 18 | - | 3 | 14 | . | . | . |  |
| III | 17 | 19 | - | 72 | 86 | - |  | - | 1 |
| Mich | 2 | 6 | - | 57 | 30 | - | 1 | - | . |
| Wis | 4 | 9 | - | 5 | 10 | - | . | - | 4 |
| Wn Central | 13 | 17 | 3 | 37 | 11 | 2 | 2 | - | 37 |
| Minn | 4 | 3 | 1 | 6 | 2 | - | . | - | 14 |
| lowa | 1 | 3 | 1 | 5 | 2 | 2 | - | - | 13 |
| Mo | 8 | 9 | 1 | 20 | 6 | - | 2 | - | 1 |
| N Dak | - | 2 | - | 1 | 1 | - | - | - | 6 |
| Nebr | - | - | - |  | - | - | : | $\stackrel{-}{\square}$ |  |
| Kans | - | - | - | 3 | - | - | - | - | 3 |
| S Atlantic | 754 | 480 | - | 217 | 215 | - | 3 | - | 48 |
| Del | 6 | 1 | - |  |  | - | . | - | - |
| Md | 40 | 41 | - | 20 | 11 | - | - | - | 10 |
| DC | 8 | 19 | - | 10 | 14 | - | - | - | 1 |
| Va | 23 | 34 | - | 23 | 9 | - | - | - | 18 |
| W Va | - | 2 | - | 10 | 5 | - | 1 | - | 4 |
| NC | 48 | 37 | - | 22 | 38 | - | 1 | - | - |
| S C | 57 | 70 | - | 31 | 35 | - | . | - | 2 |
| Ga | 134 | 139 | - | 11 | 25 | - | ; | - - | 13 |
| fla | 438 | 137 | - | 90 | 78 | - | 1 | - - | , |
| Es central | 202 | 120 | - | 128 | 108 | - | - | 1 | 14 |
|  |  | 8 | - | 27 | 39 | - | - | - | 10 |
| Ala | 75 | 59 | - |  | 19 | - | - | - | - |
| Miss | 79 | 53 | - | 49 52 | 50 | - | - | i | 4 |
| w s central | 327 | 384 | - |  |  |  |  |  |  |
| Ark | 13 | 19 | - | 5 | 78 10 | 3 | - | 3 | 38 |
| La | 47 | 66 | - | 25 | 45 | - | - | - | 1 |
| Okla | 13 | 10 | - | 9 | 4 | 3 | - | 3 | . |
| Tex | 254 | 289 | - | 30 | 19 | . | : | . | 26 |
| MOUNTAIN | 41 | 41 | 1 | 11 | 21 | 1 | - | - | 12 |
| Mont | - |  | - | - | . | - | - | - | 5 |
| Wyo | 1 | 1 | 1 | 2 | - | - | - | - | - |
| Colo | 7 | 24 | - | - | 1 | $\square$ | - | $:$ | 5 |
| N Mex | 7 | - | - | 6 | 6 | : | - | - | - |
| Ariz | 6 | 14 | - | 1 | 9 | 1 | - | - | 2 |
| Utah | $0^{-}$ | 2 | - | - |  | . | - |  | 2 |
| Nev | 20 | . | - | 2 | 5 | - | - | - | - |
| PACIFIC | 632 | 346 | 3 | 292 | 210 | - | 3 | - | 22 |
| Wash |  | 16 |  | 11 | 14 | - | . | - | 22 |
| Calif | 13 | 11 | - | 7 | 9 | - | - | - |  |
| Alaska | 618 | 313 | 3 | 252 | 182 | - | 3 | - | 21 |
| Hawaı | 1 | 6 | - | 15 | 5 | - | - | - | 1 |
| Guam |  | 1 | U | - | - | - |  |  |  |
| R | 52 | 57 | U | 10 | 20 | - | - | $\because$ | 5 |
| $\checkmark 1$ |  |  | U | 10 | 2 | - | - | - | 5 |
| Pac Trust Terr | - | - | U | - | - | - |  | - |  |
| Amer Samoa | - | - | U | - | - | - | - | - | - |

TABLE IV. Deaths in 121 U.S. cities . ${ }^{*}$ week ending
January 31, 1987 (4th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&100 } \\ & \text { Total } \end{aligned}$ | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&1•• } \\ & \text { Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { Ages } \end{gathered}$ | $\geqslant 65$ | 45-64 | 25-44 | 1-24 | $<1$ |  |  | All Ages | $\geqslant 65$ | 45-64 | 25-44 | 1.24 | $<1$ |  |
| NEW ENGLAND | 709 | 499 | 153 | 31 | 10 | 16 | 62 | S ATLANTIC | 1.221 | 774 | 270 | 100 | 37 | 34 | 61 |
| Boston. Mass | 168 | 108 | 42 | 9 | 4 | 5 | 24 | Atlanta. Ga | 147 | 88 | 32 | 17 | 7 | 3 | 8 |
| Bridgeport. Conn | 47 | 33 | 9 | 1 | 2 | 2 | 3 | Baitimore. Md | 191 | 128 | 38 | 11 | 7 | 7 | 8 |
| Cambridge, Mass | 30 | 25 | 5 | - | - | . | - | Charlotte, N C | 88 | 57 | 21 | 7 | 2 | 1 | 2 |
| Fall River. Mass | 28 | 22 | 5 | 1 | - | - | 1 | Jacksonville. Fla | 124 | 76 | 33 | 7 | 4 | 4 | 8 |
| Hartford. Conn | 75 | 43 | 21 | 7 | 2 | 2 | 2 | Mıamı, Fla | 107 | 56 | 30 | 11 | 4 | 6 |  |
| Lowell. Mass | 44 | 33 | 9 | 2 | . | - | 1 | Norfolk, Va | 51 | 27 | 16 | 4 | 2 | 2 | 2 |
| Lynn. Mass | 23 | 17 | 5 | - | - | 1 | 1 | Richmond, Va | 39 | 25 | 11 | 1 | 2 | - | 7 |
| New Bedford. Mass | s 29 | 25 | 4 | - | - | - | 3 | Savannah. Ga | 25 | 17 | 4 | 2 | 2 | - | 2 |
| New Haven. Conn | 39 | 30 | 4 | 4 | 1 | - | 1 | St Petersburg. Fla | 147 | 120 | 15 | 4 | 2 | 6 | 6 |
| Providence, RI | 66 | 50 | 10 | 5 | - | 1 | 5 | Tampa. Fla | 104 | 66 | 23 | 6 | 1 | 2 | 11 |
| Somerville. Mass | 15 | 12 | 3 | . | - | - | 2 | Washington. D C | 171 | 96 | 43 | 25 | 4 | 3 | 7 |
| Springfield. Mass | 45 | 27 | 15 | - | - | 3 | 1 | Wilmington. Del | 27 | 18 | 4 | 5 | - | . |  |
| Waterbury. Conn | 45 | 35 | 9 | 1 |  |  | 8 |  |  |  |  |  |  |  |  |
| Worcester, Mass | 55 | 39 | 12 | 1 | 1 | 2 | 10 | ES CENTRAL | 865 | 551 | 209 | 59 | 22 | 24 | 64 |
|  |  |  |  |  |  |  |  | Birmingham. Ala | 143 | 86 | 35 | 7 | 7 | 8 | 4 |
| MID ATLANTIC | 2,972 | 2.008 | 587 | 257 | 61 | 58 | 176 | Chattanooga. Tenn | 58 | 36 | 16 | 3 | 2 | 1 | 5 |
| Albany. $\mathrm{N} Y$ | 58 | 50 | 4 | 3 | 1 | - | 1 | Knoxville. Tenn | 106 | 66 | 32 | 6 | 2 | - | 6 |
| Allentown, Pa | 30 | 25 | 5 | - | - | - | 4 | Louisville. Ky | 128 | 85 | 29 | 9 | 3 | 2 | 12 |
| Butfalo. N Y | 123 | 86 | 27 | 4 | 3 | 3 | 14 | Memphis. Tenn | 218 | 144 | 50 | 16 | 5 | 3 | 21 |
| Camden. N J | 44 | 22 | 11 | 4 | 2 | 5 | - | Mobile. Ala | 79 | 47 | 16 | 7 | 1 | 8 | 9 |
| Elizabeth. N J | 34 | 26 | 8 | . | . | - | 2 | Montgomery. Ala | 44 | 32 | 9 | 3 | - | - | - |
| Erie. Pa $\dagger$ | 38 | 32 | 5 |  | - | 1 | 2 | Nashville. Tenn | 89 | 55 | 22 | 8 | 2 | 2 | 7 |
| Jersey City. NJ | 58 | 36 | 12 | 7 | 1 | 2 | 1 |  |  |  |  |  |  |  |  |
| NYCity. NY | 1.659 | 1.080 | 336 | 180 | 37 | 26 | 83 | WS CENTRAL | 1.576 | 970 | 340 | 145 | 53 | 68 | 74 |
| Newark. NJ | 80 | 33 | 24 | 16 | 3 | 3 | 6 | Austin. Tex | 56 | 39 | 12 | 2 | 1 | 2 | 9 |
| Paterson. N J | 30 | 20 | 4 | 2 | 2 | 2 | 3 | Baton Rouge. La | 48 | 34 | 8 | 4 | 1 | 1 | - |
| Philadelphia. Pa | 308 | 211 | 55 | 28 | 6 | 8 | 23 | Corpus Christı. Tex | 52 | 35 | 11 | 4 | - | 2 | 1 |
| Pittsburgh. Pa $\dagger$ | 83 | 57 | 20 | 1 | - | 5 | 2 | Dallas. Tex | 205 | 114 | 43 | 20 | 10 | 18 | 8 |
| Reading. Pa | 33 | 22 | 9 | 1 | 1 | - | 2 | El Paso. Tex | 86 | 60 | 17 | 4 | 2 | 3 | 5 |
| Rochester. N Y | 120 | 93 | 20 | 3 | , | 3 | 15 | Fort Worth. Tex | 122 | 75 | 28 | 14 | 5 | - | 9 |
| Schenectady. N Y | 35 | 30 | 4 | . | 1 | - | 3 | Houston. Tex | 314 | 169 | 72 | 42 | 15 | 16 | 5 |
| Scranton, Pa $\dagger$ | 32 106 | 26 | 6 |  | - | - | - | Little Rock. Ark | 89 | 55 | 18 | 42 9 | 4 | 3 | 7 |
| Syracuse, N Y | 106 | 83 | 20 |  | 3 | - | 9 | New Orleans. La | 164 | 103 | 35 | 16 | 5 | 5 | - |
| Trenton. NJ | 33 33 | 23 28 | 7 | 3 | - | - | - | San Antonio. Tex | 234 | 152 | 44 | 18 | 6 | 14 | 15 |
| Utica, NY | 33 35 | 28 | 5 | 5 | - | - | 2 | Shreveport, La | 65 | 45 | 19 | 1 |  | - | 4 |
| Yonkers, N Y | 35 | 25 | 5 | 5 | $\bullet$ | $\bullet$ | 4 | Tulsa, Okla | 141 | 89 | 33 | 11 | 4 | 4 | 11 |
| EN CENTRAL | 2,424 | 1,614 | 519 | 148 | 47 | 95 | 111 | MOUNTAIN | 749 | 493 | 146 | 45 | 30 | 34 | 49 |
| Akron. Ohio | 50 | 42 | 5 | - | - | 3 | - | Albuquerque. N Mex | 69 | 45 | 9 | 5 | 7 | 2 | 4 |
| Canton. Ohio | 43 | 31 | 9 | 2 | 1 | - | 5 | Colo Springs. Colo | 40 | 29 | 8 | 1 | 1 | 1 | 6 |
| Chicago. III § | 564 | 362 | 125 | 45 | 10 | 22 | 16 | Denver, Colo | 176 | 102 | 36 | 14 | 8 | 16 | 9 |
| Cincinnati. Ohio | 171 | 115 | 36 | 5 | 5 | 10 | 14 | Las Vegas. Nev | 96 | 56 | 32 | 7 | 1 | - | 9 |
| Cleveland. Ohio | 184 | 114 | 47 | 13 | 4 | 6 | 1 | Ogden. Utah | 16 | 15 | 1 | - | - | $\bar{\square}$ | 5 |
| Columbus. Ohio | 128 | 79 | 33 | 3 | 4 | 9 | 4 | Phoenix, Ariz | 155 | 100 | 30 | 8 | 8 | 9 | 6 |
| Dayton. Ohio | 106 | 69 | 23 | 5 | 1 | 8 | 1 | Pueblo. Colo | 32 | 25 | 5 | 1 | 1 | - | 1 |
| Detroit. Mich | 300 | 185 | 67 | 33 | 8 | 6 | 7 | Salt Lake City. Utah | 50 | 32 | 8 | 3 | 2 | 5 | 2 |
| Evansville. Ind | 30 | 21 | 7 | 1 | . | 1 | . | Tucson. Ariz | 115 | 89 | 17 | 6 | 2 | 1 | 7 |
| Fort Wayne. Ind | 42 | 31 | 5 | 4 | - | 2 | 6 |  |  |  |  |  |  |  |  |
| Gary, Ind | 21 | 12 | 6 | 2 | 1 | . | - | PACIFIC | 2,410 | 1,568 | 521 | 199 | 68 | 43 | 158 |
| Grand Rapids. Mich | h 59 | 45 | 11 | 3 | - | - | 6 | Berkeley, Calif | 26 | 16 | 6 | 4 | - | - | 1 |
| Indianapolis, Ind | 189 | 123 | 43 | 7 | 6 | 10 | 4 | Fresno. Calif | 115 | 81 | 24 | 2 | 4 | 4 | 13 |
| Madison. Wis | 43 | 29 | 8 | 1 | 1 | 4 | 3 | Glendale. Calif | 25 | 22 | 2 | 1 | - | - | 14 |
| Milwaukee. Wis | 153 | 109 | 27 | 8 | 3 | 6 | 7 | Honolulu. Hawaı | 95 | 59 | 28 | 6 | 1 | 1 | 14 |
| Peoria. III | 52 | 36 | 14 | 1 |  | 1 | 12 | Long Beach. Calif | 67 | 53 | 9 | 4 | - | 1 | 6 |
| Rockford. III | 44 | 33 | 8 | 2 | - | 1 | 4 | Los Angeles. Calif | 800 | 511 | 171 | 79 | 24 | 8 | 40 |
| South Bend, Ind | 50 | 32 | 12 | 3 | 2 | 1 | 3 | Oakland. Calif § | 87 | 60 | 17 | 6 | 2 | 2 | 3 |
| Toledo. Ohio | 129 | 97 | 19 | 8 | 1 | 4 | 14 | Pasadena, Calif | 39 | 31 | 7 | 8 | 1 | - | 4 |
| Youngstown. Ohio | 66 | 49 | 14 | 2 | - | 1 | 4 | Portland. Oreg | 137 | 94 118 | 28 | 8 | 1 | 6 4 | 9 1 |
| W N CENTRAL | 975 | 694 | 178 |  | 29 | 21 |  | Sacramento. Calif | 192 182 | 118 108 | 40 | 22 | 7 | 4 7 | 10 |
| Des Moines, lowa | 49 | 32 | 14 | 5 | 29 | 21 | 87 | San Francisco. Cailf | 170 | 100 | 44 | 20 | 4 | 1 | 5 |
| Duluth, Minn. | 22 | 19 | 2 | - | - | 1 | - | San Jose. Calif | 203 | 131 | 44 | 13 | 8 | 7 | 29 |
| Kansas City. Kans | 38 | 26 | 6 | 4 | 2 | - | 2 | Seattle, Wash | 170 | 112 | 38 | 12 | 6 | 2 | $\begin{array}{r}7 \\ \hline\end{array}$ |
| Kansas City. Mo | 135 | 99 | 25 | 7 | 4 | - | 11 | Spokane. Wash | 56 | 43 | 7 | 3 | 3 | - | 11 |
| Lincoln, Nebr | 30 | 22 | 4 | 2 | 1 | 1 | 2 | Tacoma. Wash | 46 | 29 | 15 | 1 | 1 | - | 5 |
| Minneapolis. Minn | 256 | 186 | 44 | 15 | 5 | 6 | 19 |  | $13.901{ }^{\text {t }}$ |  |  |  | 357 | 393 | 842 |
| Omaha, Nebr | 98 | 71 | 15 | 4 | 6 | 2 | 6 | TOTAL | 13,901 | 9,171 | 2,923 | 1.037 | 357 | 393 | 842 |
| St Louis. Mo | 167 | 111 | 37 | 10 | 4 | 5 | 24 |  |  |  |  |  |  |  |  |
| St. Paul, Minn | 81 | 62 | 13 | 2 | 4 | - | 4 |  |  |  |  |  |  |  |  |
| Wichita, Kans | 99 | 66 | 18 | 6 | 3 | 6 | 12 |  |  |  |  |  |  |  |  |

- 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
$\dagger$ 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
$\dagger \dagger$ Total includes unknown ages
§ Data not available Figures are estimates based on average of past 4 weeks


## Dementia - Continued

## References

1. Brown P. An epidemiologic critique of Creutzfeldt-Jakob disease. Epidemiol Rev 1980;2:113-35.
2. Duffy P, Wolf J, Collins G, DeVoe AG, Streeten B, Cowen D. Possible person-to-person transmission of Creutzfeldt-Jakob disease [Letter]. N Engl J Med 1974;290:692-3.
3. Bernoulli C, Siegfried J, Baumgartner G, et al. Danger of accidental person-to-person transmission of Creutzfeldt-Jakob disease by surgery [Letter]. Lancet 1977;i:478-9.
4. Will RG, Matthews WB. Evidence for case-to-case transmission of Creutzfeldt-Jakob disease. J Neurol Neurosurg Psychiatry 1982;45:235-8.
5. Foncin J, Gaches J, Cathala $F$, et al. Transmission iatrogène interhumaine possible de maladie de Creutzfeldt-Jakob avec atteinte des grains du cervelet [Abstract]. Rev Neurol (Paris) 1980; 136:280.
6. CDC. Fatal degenerative neurologic disease in patients who received pituitary-derived human growth hormone. MMWR 1985;34:359-60, 365-6.
7. Powell-Jackson J, Weller RO, Kennedy P, Preece MA, Whitcombe EM, Newsom-Davis J. Creutzfeldt-Jakob disease after administration of human growth hormone. Lancet 1985;ii:244-6.
8. Brown P, Gibbs CJ Jr, Amyx HL, et al. Chemical disinfection of Creutzfeldt-Jakob disease virus. N Engl J Med 1982;306:1279-82.
9. Committee on Health Care Issues, American Neurological Association. Precautions in handling tissues, fluids, and other contaminated materials from patients with documented or suspected Creutzfeldt-Jakob disease. Ann Neurol 1986;19:75-7.
10. Asher DM, Gibbs CJ Jr, Gajdusek DC. Slow viral infections: safe handling of the agents of subacute spongiform encephalopathies. In: Laboratory safety: principles and practices. BM Miller, ed. Washington, DC: American Society for Microbiology, 1986:59-71.
11. American Association of Tissue Banks. Standards for tissue banking. Arlington, Virginia: American Association of Tissue Banks, 1984.
12. American Association of Tissue Banks. Technical manual: Musculoskeletal Council. Arlington, Virginia: American Association of Tissue Banks, [in press].

Perspectives in Disease Prevention and Health Promotion

## Changes in Premature Mortality - United States, 1984-1985

Premature mortality in the United States, as measured in total years of potential life lost (YPLL) before age 65, increased from $11,788,125$ in 1984 to $11,844,475$ in 1985, an increase of $0.5 \%$. This is the second straight year with an increase in total YPLL; prior to this increase, there had been 3 years of gradual decline. However, the rate of YPLL/ 1,000 persons has decreased every year since 1980. In 1985, the rate decreased $0.3 \%$ from the 1984 level; this is explained by an increase of 1.7 million in the number of persons under age 65 in the U.S. population from 1984 to 1985.

A major reason for the increase in total YPLL is the greater number of deaths from the acquired immunodeficiency syndrome (AIDS). The YPLL due to AIDS increased from 82,885 in 1984 to 152,595 in 1985; this represented a rate increase of $82.4 \%$.

Death due to AIDS became the 11 th leading cause of YPLL in 1985; in 1984, it was the 13 th leading cause. The relative rankings of the remaining 12 leading causes of YPLL did not change. Unintentional injuries, malignancies, and heart disease continue to be the three leading causes of YPLL in the United States.

## Premature Mortality - Continued

TABLE V. Estimated years of potential life lost before age 65, 1984 and 1985, and cause-specific mortality, 1985, by cause of death - United States

| Cause of mortality (Ninth Revision ICD) | YPLL for persons dying in 1984* | YPLL for persons dying in 1985* | Cause-specific mortality, 1985 (rate/100,000) |
| :---: | :---: | :---: | :---: |
| ALL CAUSES |  |  |  |
| (Total) | 11,788,125 | 11,844,475 | 874.8 |
| Unintentional Injuries $\S$ |  |  |  |
| (E800-E949) | 2,313,048 | 2,235,064 | 38.6 |
| Malignant neoplasms |  |  |  |
| (140-208) | 1,804,809 | 1,813,245 | 191.7 |
| Diseases of the heart |  |  |  |
| (390-398,402,404-429) | 1,564,522 | 1,600,265 | 325.0 |
| Suicide, homicide |  |  |  |
| (E950-E978) | 1,250,642 | 1,241,688 | 20.1 |
| Congenital anomalies |  |  |  |
| (740-759) | 685,315 | 694,715 | 5.5 |
| Prematurity 9 ( ${ }^{\text {a }}$ |  |  |  |
| $(765,769)$ | 474,290 | 444,931 | 2.9 |
| Sudden infant death syndrome |  |  |  |
| (798) | 316,909 | 313,386 | 2.0 |
| Cerebrovascular disease |  |  |  |
| (430-438) | 266,486 | 253,044 | 64.0 |
| Chronic liver diseases and cirrhosis |  |  |  |
| (571) | 233,099 | 235,629 | 11.2 |
| Pneumonia and influenza |  |  |  |
| (480-487) | 163,474 | 168,949 | 27.9 |
| Acquired immunodeficiency |  |  |  |
| syndrome (AIDS)* | 82,885 | 152,595 | 2.3 |
| Chronic obstructive pulmonary diseases |  |  |  |
| (490-496) | 123,275 | 129,815 | 31.2 |
| Diabetes mellitus |  |  |  |
| (250) | 119,555 | 128,229 | 16.2 |

* For details of calculation, see MMWR Supplement, Premature Mortality in the United States, December 19, 1986, Vol. 35, No. 2S. Cause-specific mortality rates were obtained from the National Center for Health Statistics, Monthly Vital Statistics Report (MVSR), Vol. 34, No. 13, September 19, 1986. Agespecific population estimates for 1984 and 1985 were obtained from the Bureau of the Census, Estimates of the Population of the United States by Age, Sex, and Race: 1980 to 1985, Series P-25, No. 985.
${ }^{\dagger}$ Cause-specific mortality rates as reported in the MVSR are compiled from a $10 \%$ sample of all deaths.
§ Equivalent to accidents and adverse effects.
I Category derived from disorders relating to short gestation and respiratory distress syndrome.
* Reflects CDC AIDS surveillance data.


## Premature Mortality - Continued

The rate of YPLL/1,000 persons increased for seven of the 13 leading causes. As with total YPLL, the most notable rate increase was for AIDS. Other increases in the rate of YPLL occurred for diabetes $(6.4 \%)$, chronic obstructive pulmonary disease ( $4.5 \%$ ), pneumonia and influenza ( $2.5 \%$ ), heart disease ( $1.5 \%$ ), congenital anomalies ( $0.6 \%$ ), and diseases of the liver and cirrhosis ( $0.3 \%$ ). Declines in the rate of YPLL were noted for prematurity (7.0\%), cerebrovascular diseases ( $5.8 \%$ ), unintentional injuries ( $4.2 \%$ ), sudden infant death syndrome ( $1.9 \%$ ), suicide and homicide ( $1.5 \%$ ), and malignancies ( $0.3 \%$ ) (Figure 2).

FIGURE 2. Percentage of change in rates of years of potential life lost before age 65 United States, 1984-1985


Epidemiologic Notes and Reports

## Influenza A(H1N1) Associated With Mild IIIness in a Nursing Home - Maine

Maine. On January 15, 1987, the Maine Bureau of Health was notified of an outbreak of respiratory illness affecting residents of a central Maine nursing home. The nursing home is an intermediate care facility housing 59 residents ranging from 17 to 93 years of age (median = 68 years). Influenza A/Taiwan/86(H1N1)-like virus was isolated from two throat swabs obtained from ill residents on January 16. The nursing home had offered the trivalent influenza

## Influenza - Continued

vaccine to all residents and staff in November 1986; 50 ( $85 \%$ ) residents and 14 (23\%) of the 60 staff members had been vaccinated.

Eleven (19\%) of the 59 residents met the case definition for influenza-like illness (i.e., culture-confirmed influenza or fever $\geqslant 37.8 \mathrm{C}[100 \mathrm{~F}]$ accompanied by at least one respiratory symptom [cough, coryza, or sore throat]). The attack rate among vaccinated residents was $16 \%(8 / 50)$ compared with $33 \%(3 / 9)$ among unvaccinated residents. The median age of cases was 68 years. The index case was a 17 -year-old female who experienced onset of symptoms January 8; the last case occurred January 16 . Only two ( $3 \%$ ) of the 60 staff members reported an influenza-like illness during the corresponding time period. Most residents had clinically mild cases, and many were able to continue their usual activities during their illnesses. The median duration of fever $\geqslant 37.8 \mathrm{C}(100 \mathrm{~F})$ was 2.5 days. None of the ill residents were hospitalized or developed complications such as pneumonia.

United States. For the week ending January 24, 10 states* reported widespread outbreaks of influenza-like illness, and 18 states ${ }^{\dagger}$, the District of Columbia, and Puerto Rico reported regional outbreaks of influenza-like illness. This is the fifth week with more than 20 states reporting outbreak activity.

Influenza A/Taiwan/86(H1N1)-like virus continues to be the predominant strain of influenza this season and represents $99 \%$ of isolates reported from collaborating diagnostic laboratories. Forty-seven states and the District of Columbia have now reported isolates of influenza A(H1N1) virus ${ }^{\text {§ }}$.
Reported by D Williams, A Littlefield, K Gensheimer, MD, State Epidemiologist, Bur of Health, Maine Dept of Human Svcs; State and Territorial Epidemiologists and State Laboratory Directors; WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.
Editorial Note: A few sporadically occurring cases of laboratory-confirmed influenza $A(H 1 N 1)$ have been reported in nursing home residents this season. The fact that this is the first outbreak of respiratory illness associated with influenza $A(H 1 N 1)$ in a nursing home that has been reported to CDC this season suggests that such outbreaks are uncommon. Since laboratory diagnosis could not be obtained for nine of the 11 cases in this outbreak, it is impossible to confirm that all cases of febrile respiratory illness were caused by influenza.

The mild illnesses overall and the lower attack rate in vaccinated residents suggest that A/Taiwan/86 infections were prevented or abated by prior exposure to type $A(H 1 N 1)$ strains or by vaccination with the $\mathrm{A} / \mathrm{Chile} / 83(\mathrm{H} 1 \mathrm{~N} 1)$ antigen in the trivalent influenza vaccine. However, because of the small number of unvaccinated residents and the lack of laboratory diagnosis for most cases, this hypothesis could not be proven.

The observation that the illnesses were clinically mild, of short duration, and not associated with serious complications is consistent with clinical observations of laboratory-proven influenza $A(H 1 N 1)$ infection in most other older adults. Furthermore, only $2.1 \%$ of type $A(H 1 N 1)$

[^4]
## Influenza - Continued

virus isolates reported to CDC so far this season have been from persons $\geqslant 65$ years of age. These observations are consistent with those made during other influenza seasons since 1977 I in which $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ has predominated.

## References.

1. ACIP. Monovalent influenza $A(H 1 N 1)$ vaccine, 1986-1987. MMWR 1986;35:518.

II Influenza $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ stopped circulating in 1987 and reemerged in 1977 (1).

## Notice to Readers

## Agency for Toxic Substances and Disease Registry to Hold Meeting on National Registry Proposal

The Agency for Toxic Substances and Disease Registry (ATSDR), Public Health Service, will hold a public workshop to discuss the development of a National Registry of persons exposed to selected toxic substances. The meeting will focus on organizational, ethical, and social issues concerning a national exposure registry. Viewpoints and suggestions from industry, organized labor, environmental groups, academia, state and Federal agencies, and the public are invited.

The meeting will be held on March 23-24, 1987, at the Westin Peachtree Plaza, Peachtree Street at International Boulevard, Atlanta, Georgia. Copies of the National Registry Proposal and additional information about the meeting may be obtained from W.E. Kaye, Ph.D., ATSDR, Exposure Registry Implementation Group, 1600 Clifton Road, Atlanta, Georgia 30333; telephone (404) 454-4592 (commercial) or 236-4592 (FTS).

## Errata

## Vol. 35, Nos. 51 \& 52

p. 790 In the article entitled "Drinking and Driving and Binge Drinking in Selected States, 1982 and 1985 - The Behavioral Risk Factor Surveys", the last sentence of the first paragraph should read: "By contrast, only for men 35 to 54 years of age and women 18 to 34 years of age did a majority of states show a decrease in the prevalence of drinking and driving."
p. 791 In the above mentioned article, delete the second sentence of the last paragraph which reads: "Between 1982 and 1985, neither binge drinking nor drinking and driving decreased significantly for 18- to 34-year-old males."

## Vol. 36, No. 2

p. 17 In the article entitled "Update: Influenza Activity-United States", the title of the first figure in Figure 1 should read: "Average of influenza-like cases reported by physicians."

FIGURE I. Reported measles cases - United States, week 53, 1986, and weeks 01-03, 1987


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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, Morbidity and Mortality Week/y Report. Centers for Disease Control. Atlanta. Georgia 30333.
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[^0]:    * Odds ratio not calculated; zero value in one cell.
    ${ }^{\dagger}$ At least two doses of OPV and three doses of DTP are recommended by 15 months of age

[^1]:    * A cholesteatoma is a cyst-like mass with a lining of stratified squamous epithelium; it occurs most commonly in the middle ear or mastoid region.

[^2]:    - One of the 30 reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

[^3]:    For measies only, imported cases includes both out-of-state and international importations.

[^4]:    - Arizona, Colorado, Connecticut, Hawaii, New Hampshire, Oregon, Tennessee, Texas, Washington, and Wyoming.
    † Alabama, Alaska, Arkansas, California, Idaho, lowa, Kansas, Kentucky, Minnesota, Mississippi, Nebraska, New Mexico, North Carolina, North Dakota, Pennsylvania, South Dakota, Utah, and Wisconsin.
    $\S_{\text {Rhode }}$ Island and Wyoming have not reported any influenza isolates so far this season. South Dakota has reported isolating influenza type $A$, subtype unspecified.

