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## Current Trends

## Measles - United States, 1982

In 1982, the reported occurrence of measles reached its lowest level since national reporting of measles began in 1912. A provisional total of 1,697 cases was reported, for a record low incidence rate of 0.7 cases per 100,000 population of all ages (Figure 1). This is a $99.7 \%$ reduction from the 1950-1962 prevaccine era when an annual average of 525,730 cases was reported ( 315.2 cases $/ 100,000$ ), and a $45.7 \%$ reduction from the 3,124 cases in 1981, the previous year of record low incidence ( 1.4 cases/100,000). Fewer than 100 cases were reported each week during the entire year, and record low weekly numbers of cases were reported in 37 weeks. Most reporting areas reported very few or no measles cases (Figure 2). Twenty-two states reported no indigenous cases all year, including 15 states that reported no

FIGURE 1. Reported measles incidence - United States, 1950-1982

cases-indigenous or imported.* Ninety-four percent $(2,944)$ of the nation's 3,138 counties reported no measles cases during the entire year, and only $0.7 \%$ (22) of the counties reported measles during 5 or more weeks. Those 22 counties contained $14.4 \%$ of the U.S. population.

Of the 1,697 measles cases, 119 ( $7.0 \%$ ) were imported, with sources in 32 different countries, for an average of 2.3 international importations per week. In addition, 498 cases within the United States were epidemiologically linked to 19 international importations. Thus, international importations and associated cases together accounted for 36.4\% (617/1,697) of all measles cases reported in 1982.

Of the 1,697 measles cases, 1,072 ( $63.2 \%$ ) occurred in 14 separate chains of transmission, each consisting of from two to 16 generations of infection, and 625 (36.8\%) occurred sporadically. Sources were identified for 11 of the 14 chains of transmission. Of these, eight were international importations, two were out-of-state importations, and one was an indigenous case in a child with a medical exemption to vaccination.
Reported by Div of Immunization, Center for Prevention Svcs, CDC.
Editorial Note: The measles elimination program is succeeding because of public health strategies ${ }^{\dagger}$ implemented to ensure immunization of targeted populations with a safe and
-See CDC. Classification of measles cases and categorization of measles elimination programs. MMWR 1983;31:707-11.
${ }^{\dagger}$ Achievement and maintenance of high immunization levels, maintenance of strong and effective surveillance, and aggressive response to the occurrence of suspected cases.

FIGURE 2. Measles incidence rates by state — United States, 1982*

*Provisional data.

Measles - Continued
highly immunogenic vaccine. However, as long as measles incidence rates are 10 to 10,000 times higher outside the United States than within it, international importations will remain potential sources of measles infection (1). Although relatively few imported cases are preventable (1,2), transmission has been limited when immunity levels are high.

Because indigenous measles is extremely rare in the United States, a major challenge now exists to maintain what has been achieved (3). Measles and other vaccine-preventable diseases will return if the imperative to vaccinate children is relaxed and immunization levels are allowed to fall. Long-term success requires a sustained effort to vaccinate each new birth cohort every year, and to eliminate remaining foci of transmission. Communities that are already measles-free can best preserve that accomplishment by maintaining high immunization levels in their children and intensifying surveillance for all suspected cases of measles.

## References

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2. Turner PM, Amler RW, Orenstein WA. Measles surveillance: United States, imported measles, first 26 weeks of 1982. EPI Newsletter, Pan-American Health Organization 1982;IV(6):4-5.
3. Kirby CD. Measles elimination-the final push and beyond. Proceedings of the 17 th Immunization Conference, May 18-19, 1982, Atlanta: 7-9.

## Spectinomycin-Resistant Penicillinase-Producing Neisseria gonorrhoeae

Transmission of spectinomycin-resistant penicillinase-producing Neisseria gonorrhoeae (PPNG) has been documented for the first time. Between August 1982 and January 1983, 27 cases of spectinomycin-resistant PPNG infection were reported by U.S. Air Force Facilities in the Pacific. Twenty-five of these cases occurred among U.S. Air Force personnel stationed at Osan or Kunsan, Republic of Korea. At least eight spectinomycin-resistant PPNG isolates were identified in pretreatment cultures obtained from individuals with recently acquired gonococcal urethritis.

Strains collected from six of the patients have already been confirmed by CDC as spectinomycin-resistant and penicillinase-producing. Additional analyses show that all these strains contain plasmids of 2.6, 4.4, and 24.5 megadaltons, are serogroup $\mathbf{W}$-II, and require proline for growth.
Reported by $O$ Jones, MD, USAF Hospital, Osan, G Strohmeyer, MD, USAF Hospital, Kunsan, Korea; J Brockett, PhD, USAF Regional Medical Center, Clark Air Force Base; J Wright, MD, HQ, US PACAF; P Grundy, MD, G Lathrop, MD, W Wolfe, MD, J Herbole, DVM, Epidemiology Div, USAF School of Aerospace Medicine; Sexually Transmitted Diseases Research Laboratory, Center for Infectious Diseases, Div of Venereal Disease Control, Center for Prevention Svcs, CDC.
Editorial Note: Until now, person-to-person transmission of spectinomycin-resistant PPNG organisms had not been described. Previously reported cases of spectinomycin-resistant PPNG infection have been sproadic and have occurred among individuals without known contact (1-4). Factors contributing to the emergence and sustained transmission of these organisms are currently unknown.

Importation of spectinomycin-susceptible PPNG from Korea continued in 1982, and included at least 53 cases reported by 16 different states during the first 9 months (5). No spectinomycin-resistant PPNG originating from Korea has been identified in the United States, but continued transmission of this doubly resistant organism within Korea and continued importation of gonococci from that country make eventual importation probable.

## Neisseria gonorrhoeae - Continued

m 1982, the U.S. Air Force (Pacific) began testing all gonococcal isolates for penicillinase production. All PPNG isolates and all isolates from patients who failed spectinomycin therapy were tested for spectinomycin-resistance. Because of the implementation of this surveillance system, the occurrence and distribution of this outbreak can be readily described.

Despite this outbreak, spectinomycin remains the drug of choice for PPNG infections treated in the United States. Recommended treatment of spectinomycin-resistant PPNG cases remains 2 g cefoxitin, plus 1 g probenicid or 1 g cefotaxime ( 6 ).

## References

1. Ashford WA, Potts DW, Adams HJ, et al. Spectinomycin-resistant penicillinase-producing Neisseria gonorrhoeae. Lancet 1981;2:1035-7.
2. Easmon CS, Ison CA, Bellinger CM, Harris JW. Emergence of resistance after spectinomycin treatment for gonorrhea due to $\beta$-lactamase-producing strain of Neisseria gonorrhoeae. Brit Med J 1982;284:1604-5.
3. CDC. Spectinomycin-resistant $\beta$-lactamase-producing Neisseria gonorrhoeae-England. MMWR 1982;31:495-6, 501.
4. CDC. Spectinomycin-resistant Neisseria gonorrhoeae-worldwide. MMWR 1982;31:632, 637-8.
5. Division of Venereal Disease Control, CDC. PPNG data system.
6. CDC. Sexually transmitted diseases: treatment guidelines, 1982. MMWR 1982;31 (2 suppl):39S.

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

| Disease | 4th Week Ending |  |  | Cumulative, 4th Week Ending |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { January 29, } \\ 1983 \\ \hline \end{gathered}$ | $\begin{gathered} \text { January 30, } \\ 1982 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Median } \\ 1978-1982 \end{gathered}$ | $\begin{gathered} \hline \text { January 29, } \\ 1983 \\ \hline \end{gathered}$ | $\begin{gathered} \text { January 30, } \\ 1982 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Median } \\ 1978-1982 \\ \hline \end{gathered}$ |
| Aseptic meningitis | 86 | 70 | 70 | 349 | 314 | 242 |
| Encephalitis: Primary (arthropod-bome \& unspec.) Post-infectious | 9 | 15 | 15 3 | 63 | 48 | 40 |
| Gonorrhea: Civilian | 17,927 | 16,588 | 18,381 | 72,118 | 74,758 | 73,235 |
| Hepatitis: Military | 455 | 641 | 577 | 1,825 | 2,215 | 2,215 |
| Hepatitis: Type A | 542 | 405 | 543 | 1.752 | 1,418 | 1,702 |
| Type B | 399 | 356 | 312 | 1.516 | 1,290 | 1,114 |
| Non A, Non B | 55 | 34 | N | 185 | 81 | N |
| Unspecified | 165 | 146 | 196 | 555 | 563 | 657 |
| Legionellosis Leprosy | 7 4 | 7 | N | 32 | 19 | N 8 |
| Leprosy Malaria | 4 5 | 1 12 | 12 | 19 29 | 3 48 | 8 48 |
| Measles : Total | 9 | 8 | 113 | 21 | 38 | 48 352 |
| Indigenous | 5 | N | N | 15 | N | 352 |
| Imported* | 4 | N | N | 6 | N | N |
| Meningococcal infections: Total | 64 | 74 | 70 | 215 | 217 | 211 |
| Civilian | 64 | 73 | 69 | 208 | 216 | 207 |
| Mumps Military | $10{ }^{-}$ | 1 | 1 | 7 | 1 | 1 |
| Mumps | 109 | 92 | 303 | 293 | 308 | 892 |
| Pertussis ${ }^{\text {Rubella (German measles) }}$ | 19 | 23 | 23 | 60 | 50 | 63 |
| Rubella (German measles) | 18 | - 13 | 71 | 49 | 102 | 181 |
| Syphilis (Primary \& Secondary): Civilian | 683 | 706 | 552 | 2,646 | 2,577 | 1,981 |
| Toxic-shock syndrome Military | 10 12 | 20 | 6 $N$ | 44 | 45 | 32 |
| Toxic-shock syndrome Tuberculosis | 12 387 | N | ${ }^{\text {N }}$ | , 27 | N | N |
| Tuberculosis | 387 | 452 | 469 | 1,352 | 1,482 | 1.517 |
| Typhoid fever | 4 | 16 | 1 | 9 20 | 4 34 | 6 19 |
| Typhus fever, tick-borne (RMSF) | 2 | 2 | 1 | 6 | 11 | 5 |
| Rabies, animal | 77 | 81 | 81 | 307 | 319 | 319 |

TABLE II. Notifiable diseases of low frequency, United States

|  | Cum. 1983 |  | Cum. 1983 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Plague | - |
| Botulism: Foodborne | - | Poliomyelitis: Total | - |
| Infant | 2 | Paralytic | - |
| Other | - | Psittacosis | 4 |
| Brucellosis (Ohio 1) | 5 | Rabies, human | - |
| Cholera | - | Tetanus (La. 1) | 4 |
| Congenital rubella syndrome (Oreg. 1) | 2 | Trichinosis | 1 |
| Diphtheria Leptospirosis | - | Typhus fever, flea-borne (endemic, murine) (Hawaii 2) | 2 |

-Four of the nine reported cases for this week was imported from a foreign country or could be directly traced to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 29, 1983 and January 30, 1982 (4th week)

| Reporting Area | Aseptic Meningitis | Encephalitis |  | Gonorrhea (Civilian) |  | Hepatitis (Viral), by type |  |  |  | Legionellosis | Leprosy | Malaria |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Primary | Post-infectious |  |  | A | B | NA,NB | Unspecified |  |  |  |
|  | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1982 \end{aligned}$ | 1983 | 1983 | 1983 | 1983 | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ |
| UNITED STATES | 86 | 63 | 7 | 72,118 | 74,758 | 542 | 399 | 55 | 165 | 7 | 19 | 29 |
| NEW ENGLAND | 2 | 3 | - | 1,946 | 1,641 | 9 | 23 | - | 5 | - | - | - |
| Maine | - | - | - | 99 | 104 | - | 1 | - | - | - | - | - |
| N.H. | - | - | - | 50 | 71 | 1 | 2 | - | - | - | - | - |
| V . | - | - | - | 31 | 42 | 1 | - | - | - | - | - | - |
| Mass. | 1 | 3 | - | 815 | 646 | 3 | 16 | - | 5 | - | - | - |
| R.I. | - | - | - | 103 | 113 | 4 | 4 | - | - | - | - | - |
| Conn. | 1 | - | - | 848 | 685 | - | - | - | - | - | - | - |
| MID ATLANTIC | 14 | 9 | - | 8,521 | 8,196 | 102 | 86 | 5 | 26 | - | 2 | 7 |
| Upstate N.Y. | 6 | 4 | - | 1,139 | 1.117 | 5 | 24 | 2 | 4 | - | - | 1 |
| N.Y. City | 7 | 3 | - | 3,638 | 4,131 | 69 | 20 | - | 16 | - | 2 | 6 |
| N.J. |  | 1 | - | 1,412 | 1,116 | 28 | 42 | 3 | 6 | - | - | - |
| Pa. | 1 | 1 | - | 2,332 | 1.832 | - | - | - | - | - | - | - |
| E.N. CENTRAL | 9 | 15 | 1 | 9,007 | 10,130 | 80 | 49 | 5 | 11 | 4 | 1 | 2 |
| Ohio | 4 | 8 | 1 | 2,555 | 2,795 | 39 | 15 | 1 | 6 | 3 | 1 | - |
| Ind. | 1 | - | - | 1,372 | 1,662 | 5 | 4 | - | - | - | - | - |
| III. | - | - | - | 1,361 | 2,294 | 9 | 5 | - | - | - | - | - |
| Mich. | 4 | 7 | - | 2,811 | 2,468 | 27 | 25 | 4 | 5 | 1 | - | 2 |
| Wis. | - | - | - | 908 | 911 | - | - | - | - | - | - | - |
| W.N. CENTRAL | 5 | 3 | - | 3,459 | 3,726 | 16 | 14 | 1 | 6 | - | - | 1 |
| Minn. | - | - | - | 558 | 622 | 4 | 5 | - | - | - | - | - |
| lowa | 4 | 3 | - | 363 | 314 | - | 2 | - | 2 | - | - | - |
| Mo. | - | - | - | 1,583 | 1,705 | 4 | 5 | - | 2 | - | - | - |
| N. Dak. | - | - | - | 40 | 35 | - | - | - | - | - | - | - |
| S Dak | 1 | - | - | 89 | 99 | 2 | - | - | - | - | - | - |
| Nebr. | - | - | - | 206 | 198 | 2 | 1 | 1 | - | - | - | - |
| Kans. | - | - | - | 620 | 753 | 4 | 1 | - | 2 | - | - | 1 |
| S. ATLANTIC | 18 | 11 | 3 | 18,550 | 20,848 | 39 | 77 | 8 | 9 | 1 | - | 2 |
| Del. |  | - |  | 462 | 299 | 1 | 3 | 1 | 1 | - | - | - |
| Md. | 2 | 1 | - | 2,489 | 2,874 | 4 | 15 | 1 | 3 | - | - | 1 |
| D. C. | - | - | - | 1,355 | 875 | 1 | 4 | - | - | - | - | - |
| Va . | 4 | 6 | 1 | 1.719 | 1,599 | 3 | 7 | 3 | 1 | 1 | - | 1 |
| W Va. |  | - | - | 188 | 199 | 6 | - | 1 | 1 | - | - | - |
| N.C. | 6 | 3 | - | 2,244 | 3,362 | 1 | 12 | - | 1 | - | - | - |
| S.C. | 1 | 1 | - | 1,859 | 1.575 | 2 | 15 | - | - | - | - | - |
| Ga . | - | - | - | 3,162 | 3,844 | 6 | 12 | $\overline{-}$ | - | - | - | - |
| Fla. | 5 | - | 2 | 5,072 | 6,221 | 15 | 9 | 2 | 2 | - | - | - |
| ES CENTRAL | 8 | 3 | 2 | 6,239 | 4,952 | 21 | 13 | 1 | 2 | - | - | - |
| $K y$ | 6 | - | - | 834 | 768 | 4 | 4 | 1 | 1 | - | - | - |
| Tenn. | 1 | - | - | 2.438 | 1,869 | 7 | 7 | 1 | - | - | - | - |
| Ala. | 1 | 3 | 2 | 1.780 | 1.225 | - | 2 | - | 1 | - | - | - |
| Miss. | - | - | - | 1,187 | 1,090 | 10 | - | - | - | - | - | - |
| W. S CENTRAL | 9 | 5 | - | 10.526 | 11.184 | 101 | 25 | 3 | 60 | - | 2 | - |
| Ark |  |  | - | 746 | 967 | 1 | - | 1 | 7 | - | - | - |
| La. | - | - | - | 1,474 | 1,682 | 5 | 3 | - | 1 | - | - | - |
| Okla. | 6 | 1 | - | 1,243 | 1,112 | 12 | 3 | 2 | 4 | - |  | - |
| Tex. | 3 | 4 | - | 7,063 | 7.423 | 83 | 19 | - | 48 | - | 2 | - |
| MOUNTAIN | 2 | 2 | - | 2,103 | 2,619 | 78 | 24 | 8 | 18 | 1 | 2 | - |
| Mont. | 2 | - | - | 106 | 139 | - | - | - | - | 1 | - | - |
| Idaho | - | - | - | 95 | 86 | - | 2 | - | - | - | - | - |
| Wyo | - | 1 | - | 78 | 82 | 4 | 3 | - | - | - | - | - |
| Colo. | 2 | - | - | 589 | 741 | 8 | 3 | - | 1 | - | - | - |
| N. Mex. | 2 | - | - | 272 | 332 | 7 | 2 | 2 | 2 | - | - | - |
| Ariz. | - | - | - | 495 | 707 | 52 | 13 | 6 | 10 | - | 2 | - |
| Utah | - | 1 | - | 91 | 117 | 5 | 2 | - | 5 | - | - | - |
| Nev . | - | - | - | 377 | 415 | 2 | 2 | - | - | - | - | - |
| PACIFIC | 19 | 12 | 1 | 11.767 | 11,462 | 96 | 88 | 24 | 28 | 1 | 12 | 17 |
| Wash. | 1 | 1 | 1 | 560 | , 958 | 3 | 3 | 7 | - | - | 1 | 1 |
| Oreg. | - | , | - | 513 | 633 | 10 | 9 | 2 | - | - | 1 | 2 |
| Calif. | 16 | 10 | 1 | 10.234 | 9,365 | 81 | 73 | 15 | 26 | 1 | 10 | 14 |
| Alaska |  |  |  | 224 | 303 | - | 2 | - | 2 | - | - | - |
| Hawaii | 2 | 1 | - | 236 | 203 | 2 | 1 | - | - | - | - | - |
| Guam | U | - | - | - | 5 | U | U | U | U | U | - | - |
| P.R. |  | - | - | - | 233 | 2 | 5 | - | - | - | - | - |
| V.I. | - | - | - | 27 | 22 | 1 | - | - | - | - | - | - |
| Pac. Trust Terr. | U | - | - | - | 36 | U | U | U | U | U | - | - |

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending January 29, 1983 and January 30, 1982 (4th week)

| Reporting Area | Measles (Rubeola) |  |  |  |  | Menin- <br> gococcal <br> Infections <br> Cum. <br> 1983 | Mumps |  |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indigenous |  | Imported* |  | $\begin{aligned} & \text { Total } \\ & \hline \text { Cum. } \\ & 1982 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ |  |  | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1982 \end{aligned}$ | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1982 \end{aligned}$ | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1982 \end{aligned}$ |
| UNITED STATES | 5 | 15 | 4 | 6 | 34 | 215 | 109 | 293 | 308 | 19 | 60 | 50 | 18 | 49 | 102 |
| NEW ENGLAND <br> Maine <br> N.H. <br> Vt . <br> Mass. <br> R.I. <br> Conn. | - | - | - | - | 2 | 11 | 7 | 15 | 42 | 2 | 3 | 4 | - | 1 | 5 |
|  | - | - | - | - | - | - | - | 1 | 7 | . | - | - | - | 1 | 5 |
|  | - | - | - | - | - | 1 | 2 | 6 | 2 | - | - | - | - | - | 5 |
|  | - | - | - | - | 2 | , | 2 | 2 | 3 | - | 1 | - | - | - | 5 |
|  | - | - | - | - | - | 3 | 1 | 2 | 27 | 1 | 1 | 2 | - | 1 | - |
|  | - | - | - | - | - |  | - | 2 | 1 | 1 | 1 | 2 | - | 1 | - |
|  | - | - | - | - | - | 7 | 2 | 4 | 2 | 1 | 1 | 2 | - | - | - |
| MID ATLANTIC <br> Upstate N.Y. <br> N.Y. City <br> N.J. <br> Pa . | - | - | - | - | 11 | 25 | 8 | 14 | 18 | 4 | 13 | 6 | 1 | 2 | 3 |
|  | - | - | - | - | 7 3 | 10 | 2 | 5 | 6 | 2 | 8 | 2 | 5 | 1 | 1 |
|  | - | - | - | - | 3 | 4 | 1 | 2 | 6 | 1 | 1 | 3 | 1 | 1 | 2 |
|  | - | - | - | - | - | 2 9 | 2 | 4 3 | 2 | $i$ | 3 1 | 1 | - | - | - |
| E.N. CENTRAL Ohio Ind. III. Mich. Wis. | - | - | - | - | 1 | 42 | 63 | 153 | 117 | 6 | 17 | 16 | 2 | 6 | 13 |
|  | - | - | - | - | - | 21 | 45 | 100 | 60 |  | 9 | 2 | 2 | 1 | 1 |
|  | - | - | - | - | - | 7 | 2 | 2 | 6 | 2 | 2 | 2 | - | 1 | 1 |
|  | - | - | - | - | - | 1 | 4 | 6 | 6 | 3 | 3 | 3 | 1 | 1 | 8 |
|  | - | - | - | - | 1 | 13 | 11 | 41 | 36 | 1 | 1 | 5 | 1 | 2 | 1 |
|  | - | - | - | - | - | - | 1 | 4 | 9 | , | 2 | 6 | , | 2 | 3 |
| W.N. CENTRAL <br> Minn. <br> lowa <br> Mo. <br> N. Dak. <br> S. Dak. <br> Nebr. <br> Kans. | - | - | - | - | - | 15 | 10 | 31 | 14 | - | 3 | 2 | 3 | 6 | 5 |
|  | - | - | - | - | - | - | - | 17 | 5 | - | - | 2 | - | 2 | 1 |
|  | - | - | - | - | - | 3 | 2 | 17 | 5 | - | 1 | - | - | 2 | - |
|  | - | - | - | - | - | 9 | - |  | 2 | - | 1 | 2 | - | - | 2 |
|  | - | - | - | - | - | - | - | - |  | - | - | - | - | - | - |
|  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
|  | - | - | - | - | - | 3 | 8 | 13 | 7 | - | 1 | - | 3 | 4 | 2 |
| S. ATLANTIC <br> Del. <br> Md. <br> D.C. <br> Va . <br> W. Va. <br> N.C. <br> S.C. <br> Ga. <br> Fla. | - | - | 2 | 2 | 8 | 40 | - | 10 | 45 | 2 | 4 | 4 | - | 3 | 6 |
|  | - | - |  | - |  | - | - | - | 1 | 2 | - | 4 | - | $\stackrel{-}{-}$ | 6 |
|  | - | - | - | - | - | 5 | - | 1 | 3 | - | - | - | - | 1 | - |
|  | - | - | $1+$ | 1 | 8 | 7 | - | 5 | 4 | - | $i$ | - | - | - | 5 |
|  | - | - | , | 1 | 8 | 7 | - | 3 | 25 | - | 1 | 1 | - | $i$ | 5 |
|  | - | - | it | - | - | 12 | - |  | 2 | - | - | 1 | - | 1 | - |
|  | - | - | $1^{\dagger}$ | 1 | - | 5 | - | - | 2 | - | - | 1 | - | - | - |
|  | - | - | - | - | - | 6 | - | 1 | 2 | 2 | 3 | - | - | 1 | 1 |
|  | - | - | - | - | - | 5 | - | - | 6 | - | - | 1 | . | 1 | 1 |
| E.S. CENTRAL Ky . <br> Tenn. <br> Ala. <br> Miss. | - | - | - | - | 2 | 16 | 2 | 3 | 3 | - | - | 1 | - | 1 |  |
|  | - | - | - | - | 1 | 6 | 1 | 1 | 1 | - | - | 1 | - | 1 | $4$ |
|  | - | - | - | - | 1 | 4 | 1 | 2 | 1 | - | - | 1 | - | - | - |
|  | - | - | - | - | - | 6 | - | - | 1 | - | - | - | - | - | - |
|  |  |  | - |  | - |  | - | - | 1 | - | - | - | - | - | - |
| W.S. CENTRAL Ark. <br> La. <br> Okia. <br> Tex. | 1 | 1 | - | - | 1 | 19 | 9 | 25 | 12 | 1 | 12 | 1 | 5 | 7 | 10 |
|  | - | - | - | - | - | 5 | - | 1 | 2 | 1 | 12 | 1 | 5 | 7 | 10 |
|  | - | - | - | - | - | 5 | - |  | 2 | - | - | - | - | - | - |
|  | - | - | - | - | - | 1 | - | - | - | 1 | 1 | - | - | - | - |
|  | 1 | 1 | - | - | 1 | 13 | 9 | 24 | 10 | 1 | 11 | 1 | 5 | 7 | 10 |
| MOUNTAIN <br> Mont. <br> Idaho <br> Wyo. <br> Colo. <br> N. Mex. <br> Ariz. <br> Utah <br> Nev. | - | - | - | - | - | 7 | 3 | 8 | 9 | 4 |  | 4 | - | 2 |  |
|  | - | - | - | - | - |  | 3 | 8 | 1 | 1 | 1 | 4 | - | 2 | 1 |
|  | - | - | - | - | - | 2 | - | 1 | 2 | - |  | . | . | - |  |
|  | - | - | - | - | - | - | - | - | 2 | - | - | - | - | - | 1 |
|  | - | - | - | - | - | 2 | - | 1 | 1 | 2 | 2 | $i$ | - | - | 1 |
|  | - | - | - | - | - | 1 | - | - |  | 1 | 3 | 2 | - | - | - |
|  | - | - | - | - | - | - | 3 | 3 | 3 | - | - | 1 | - | - | - |
|  | - | - | - | - | - | 2 | - | 3 | 1 | - | - | - | - | 2 | 1 |
| PACIFIC <br> Wash. <br> Oreg. <br> Calif. <br> Alaska <br> Hawaii | 4 | 14 | 2 | 4 | 9 | 40 | 7 | 34 | 48 | - | 2 | 12 | 7 | 21 |  |
|  | - | 14 | 2 |  |  | 13 | 1 | + 4 | 12 | - | 2 | 12 | 7 | 21 | 53 1 |
|  | 4 | 13 | ${ }^{+}$ | - | $\bar{\square}$ | 3 | - | 4 | 12 | - | - | 2 | - | - | - |
|  | 4 | 13 | $2^{\dagger}$ | 4 | 8 | 22 | 6 | 25 | 36 | - | 2 | 8 | 7 | 21 | 51 |
|  | - | 1 | - | - | 1 | 2 | - | 4 | - | - | - | - |  | 2 | - |
|  |  |  |  |  |  |  | - | 1 | - | - | - | - | - | - | 1 |
| Guam <br> P.R. <br> V.I. <br> Pac. Trust Terr. | U | - | U | - |  |  | U | - |  | U | - |  |  |  |  |
|  | U | - | $i$ | - | 5 | 2 | 5 | 11 | 2 | U | - | - | U | - |  |
|  | - | 2 | $1^{\dagger}$ | 2 |  | 2 | - | 11 | 2 | - | - | - | - | 1 | - |
|  | U | - | U |  | - | - | U | - | - | u | - | - | U | 1. | - |

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending January 29, 1983 and January 30, 1982 (4th week)

| Reporting Area | Syphilis (Civilian) (Primary \& Secondary) |  | Toxicshock Syndrome | Tuberculosis |  | Tularemia | Typhoid Fever | Typhus Fever <br> (Tick-borne) (RMSF) | Rabies. Animal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1982 \end{aligned}$ | 1983 | 1983 | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1983 \end{aligned}$ | Cum. <br> 1983 |
| UNITED STATES | 2,646 | 2,577 | 12 | 387 | 1,352 | 9 | 20 | 6 | 307 |
| NEW ENGLAND | 74 | 39 | - | 4 | 19 | - | 1 | - | - |
| Maine | 2 | - | - | - | - | - | - | - | - |
| N.H. | - | - | - | - | - | - | - | - | - |
| Vt. | - | - | - | - | - | - | - | - | - |
| Mass. | 50 | 28 | - | 1 | 6 | - | 1 | - | - |
| R.I. | 1 | 3 | . | - | 4 | - | - | - | - |
| Conn. | 21 | 8 | - | 3 | 9 | - | - | - | - |
| MID ATLANTIC | 277 | 360 | - | 69 | 268 | - | 5 | - | 10 |
| Upstate N.Y. | 13 | 26 | - | 14 | 56 | - | 2 | - | 7 |
| N.Y. City | 168 | 248 | - | 20 | 95 | - | 3 | - | - |
| N.J. | 53 | 35 | - | 23 | 60 | - | - | - | ; |
| Pa . | 43 | 51 | - | 12 | 57 | - | - | - | 3 |
| E.N. CENTRAL | 115 | 141 | 5 | 71 | 217 | - | 2 | - | 19 |
| Ohio | 42 | 14 | 4 | 17 | 28 | - | 1 | - | 4 |
| Ind. | 22 | 20 | - | 9 | 26 | - | - | - | - |
| III. | 25 | 83 | - | 27 | 113 | - | - | - | 5 |
| Mich. | 16 | 15 | 1 | 16 | 41 | - | 1 | - | $10^{-}$ |
| Wis. | 10 | 9 | - | 2 | 9 | - | - | - | 10 |
| W.n. Central | 28 | 52 | - | 19 | 41 | 4 | - | 2 | 39 |
| Minn. | 16 | 11 | - | 2 | 3 | - | - | - | 7 |
| lowa | 2 | 1 | - | 1 | 8 | - | - | - | 13 |
| Mo. | 7 | 32 | - | 14 | 24 | 4 | - | 2 | 8 |
| N. Dak. | - | 1 | - | - | , | - | - | - | 3 |
| S. Dak. | - | - | - | - | 2 | - | - | - | - |
| Nebr. | 1 | - | - | 1 | 1 | - | - | - | 2 |
| Kans. | 2 | 7 | - | 1 | 3 | - | - | - | 6 |
| S. ATLANTIC | 700 | 728 | - | 91 | 313 | 2 | 3 | - | 122 |
| Del. | 5 | 2 | - | - | 1 | - | - | - | - |
| Md. | 34 | 52 | - | 14 | 70 | 1 | - | - | 56 |
| D.C. | 38 | 43 | - | 4 | 11 | - | - | - |  |
| Va | 53 | 50 | - | 13 | 15 | 1 | 2 | - | 52 |
| W. Va. | 2 | 2 | - | 4 | 14 | - | 1 | - | 5 |
| N.C. | 75 | 59 | - | 7 | 9 | - | - | - | - |
| S.C. | 52 | 44 | - | 5 | 32 | - | - | - | 2 |
| Ga . | 124 | 150 | - | 17 | 50 | - | - | - | 5 |
| Fla. | 317 | 326 | - | 27 | 111 | - | - | - | 2 |
| E.S. CENTRAL | 192 | 157 | 2 | 31 | 126 | - | - | 3 | 23 |
| Ky. | 11 | 9 | - | 8 | 29 | - | - | - | 6 |
| Tenn. | 50 | 25 | - | 6 | 42 | - | - | 1 | 14 |
| Ala. | 89 | 51 | 2 | 13 | 42 | - | - | 2 | 3 |
| Miss. | 42 | 72 | . | 4 | 13 | - | - | . | . |
| W.S. CENTRAL | 698 | 734 | - | 28 | 81 | 2 | - | - | 40 |
| Ark. | 9 | 20 | - | 1 | 2 | 2 | - | - | 7 |
| La. | 157 | 126 | - | 7 | 19 | . | - | - | 1 |
| Okla. | 20 | 15 | - | - | 20 | - | - | - | 5 |
| Tex. | 512 | 573 | - | 20 | 40 | - | - | - | 27 |
| MOUNTAIN | 62 | 58 | 2 | 18 | 51 | 1 | - | - | 19 |
| Mont. | 2 | - | - | 2 | 5 | - | - | - | 18 |
| Idaho | 1 | 1 | ; | - | 3 | - | - | - |  |
| Wyo. | 1 | 3 | 1 | - | 1 | - | - | - | - |
| Colo. | 10 | 23 | 1 | 5 | - | - | - | - | - |
| N. Mex. | 28 | 15 | - | 5 | 10 | 1 | - | - | - |
| Ariz. | 14 | 1 | - | 10 | 30 | - | - | - | 1 |
| Utah | 1 | 2 | - |  |  | - | - | - | - |
| Nev . | 5 | 13 | - | 1 | 2 | - | - | - | - |
| PACIFIC | 500 | 308 | 3 | 56 | 236 | - | 9 | 1 | 35 |
| Wash. | - | 11 |  | 4 | 8 | - | 9 | - | 3 |
| Oreg. | 5 | 16 | ; | 3 | 12 | - | - | - | - |
| Calif. | 488 | 273 | 3 | 46 | 202 | - | 9 | 1 | 35 |
| Alaska Hawaii | 7 | 1 | - | 3 | - | - | - | - | - |
| Hawaii | 7 | 7 | - | 3 | 14 | - | - | - | - |
| Guam | - | $\stackrel{-}{-}$ | U | U | - | - | - | - |  |
| P.R. | - | 32 |  | 13 | 34 | - | - | - | 6 |
| ${ }^{\text {V.I. }}$ Pact | 1 | - | - |  | - | - | - | - | . |
| Pac. Trust Terr. | - | - | U | U | - | - | - | - | - |

TABLE IV. Deaths in 121 U.S. cities,* week ending January 29, 1983 (4th week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&10- } \\ & \text { Total } \end{aligned}$ | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | P\&1•• |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Ages | $\geqslant 65$ | 45-64 | 25-44 | 1-24 | <1 |  |  | $\begin{gathered} \text { All } \\ \text { Ages } \end{gathered}$ | $\geqslant 65$ | 45-64 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 724 | 506 | 156 | 34 | 14 | 14 | 69 | S. ATLANTIC | 1,314 | 781 | 365 | 80 | 35 | 53 | 65 |
|  | 184 | 119 | 45 | 8 | 7 | 5 | 21 | Atlanta, Ga. | 137 | 72 | 46 | 13 | 4 | 2 | 1 |
|  | 61 | 38 | 13 | 6 | 3 | 1 | 4 | Baltimore, Md. | 174 | 109 | 43 | 8 | 5 | 9 | 3 |
| Bridgeport, Conn. Cambridge, Mass | 35 | 28 | 7 | - | . | - | 5 | Charlotte, N.C. | 77 | 39 | 31 | 1 | 2 | 4 | 3 |
|  | 27 | 21 | 6 | - | - | - | - | Jacksonville, Fla. | 100 | 60 | 24 | 5 | 8 | 3 | 13 |
| Fall River, Mass Hartford, Conn. | 65 | 38 | 18 | 6 | 1 | 2 | 1 | Miami, Fla. | 101 | 66 | 24 | 8 | - | 3 | 4 |
| Lowell, Mass. | 23 | 16 | 7 | . | - | - | 2 | Norfolk, Va. | 63 | 38 | 14 | 3 | 1 | 7 | 4 |
| Lynn, Mass. | 18 | 15 | 3 | - | - | - | - | Richmond, Va. | 89 | 52 | 26 | 3 | 5 | 3 | 8 |
|  | s. 32 | 24 | 6 | 2 | - | - | 1 | Savannah, Ga. | 76 | 43 | 28 | 3 | - | 2 | 8 |
| New Haven, Conn. | 61 | 45 | 9 | 4 | 1 | 2 | 4 | St. Petersburg, Fla. | 113 | 89 | 18 | 3 | 1 | 2 | 4 |
| Providence, R.I. | 68 | 48 | 13 | 4 | 1 | 2 | 6 | Tampa, Fla. | 96 | 58 | 26 | 5 | 3 | 4 | 7 |
| Somerville, Mass. | 12 | 10 | 1 |  | 1 | 2 | 1 | Washington, D.C. | 262 | 139 | 78 | 25 | 6 | 14 | 8 |
| Springfield, Mass. | 34 | 25 | 7 | 1 | . | 1 | 11 | Wilmington, Del. | 26 | 16 | 7 | 3 | - | - | 2 |
| Waterbury, Conn. | 33 | 28 | 4 | 1 | - | - | 2 |  |  |  |  |  |  |  |  |
| Worcester, Mass. | 71 | 51 | 17 | 2 | - | 1 | 11 | E.S. CENTRAL | 760 | 469 | 203 | 34 | 27 | 27 | 42 |
|  |  |  |  |  |  |  |  | Birmingham, Ala. | 117 | 74 | 31 | 5 | 4 | 3 | 2 |
| MID. ATLANTIC 2Albany. N.Y. | 2,723 | 1,822 | 600 | 161 | 54 | 86 | 123 | Chattanooga, Tenn. | 69 | 36 | 29 | 2 | - | 2 | 5 |
|  | 45 | 28 | 9 | 3 | 2 | 3 |  | Knoxville, Tenn. | 48 | 35 | 10 | 3 | - | - | 2 |
| Allentown, Pa.Buffalo, $\mathrm{N} . \mathrm{Y}$. | 15 | 12 | 3 | - | - | - | , | Louisville, Ky. | $15 \%$ | 104 | 35 | 5 | 5 | 8 | 17 |
|  | 147 | 104 | 27 | 2 | 4 | 10 | 12 | Memphis, Tenn. | 175 | 96 | 55 | 12 | 8 | 4 | 9 |
| Camden, N.J. | 41 | 23 | 15 | 1 | 1 | 1 | 1 | Mobile, Ala. | 53 | 34 | 14 | 2 | 3 | - | 1 |
| Elizabeth, N.J. | 35 | 30 | 3 | 2 | - | - | 3 | Montgomery, Ala. | 39 | 26 | 6 | 1 | 3 | 3 | 1 |
| Erie, Pa.t | 39 | 26 | 11 | 1 | - | 1 | 3 | Nashvilie. Tenn. | 102 | 64 | 23 | 4 | 4 | 7 | 5 |
| Jersey City, N.J. <br> N.Y. City, N.Y. | 54 | 39 | 10 | 4 | - | 1 | 1 |  |  |  |  |  |  |  |  |
|  | 1,552 | 1,017 | 341 | 113 | 34 | 47 | 69 | W.S. CENTRAL | 1,131 | 692 | 275 | 87 | 34 | 42 | 44 |
| Newark, N.J. | 43 | 21 | 13 | 5 | 1 | 3 | - | Austin, Tex. | 45 | 31 | 8 | 4 | 2 | - | . |
| Paterson, N.J. | 44 | 33 | 5 | 3 | - | 3 | 3 | Baton Rouge, La. | 22 | 12 | 7 | 3 | - | - | - |
| Philadelphia, Pat $\dagger$ | 226 | 143 | 60 | 11 | 4 | 8 | 12 | Corpus Christi. Tex. | 61 | 41 | 12 | 3 | 1 | 4 | - |
| Pittsburgh, Pa.t | 70 | 44 | 19 | 4 | 1 | 2 | 2 | Dallas. Tex. | 231 | 144 | 54 | 18 | 6 | 9 | 6 |
| Reading, Pa . Rochester, N.Y. | 34 | 30 | 4 | - | - | - | 4 | El Paso. Tex. | 56 | 34 | 15 | 5 | - | 1 | 2 |
|  | 125 | 91 | 22 | 4 | 5 | 3 | 6 | Fort Worth, Tex. | 99 | 61 | 19 | 10 | 6 | 3 | 2 |
| Schenectady, N.Y. | 30 | 21 | 8 | - | - | 1 | 2 | Houston, Tex | 41 | 11 | 11 | 8 | 3 | 8 | 1 |
| Scranton, Pa.t | 29 | 25 | 4 | - | - | - | 1 | Little Rock, Ark. | 80 | 52 | 22 | 4 | 1 | 1 | 7 |
| Syracuse, N.Y. | 96 | 64 | 28 | 3 | - | 1 | - | New Orleans, La | 125 | 71 | 39 | 9 | 2 | 4 | 2 |
| Trenton, N.J. | 39 | 27 | 8 | 1 | 2 | 1 | 1 | San Antonio. Tex. | 212 | 136 | 45 | 11 | 9 | 11 | 16 |
| Utica, N.Y. <br> Yonkers, N.Y. | 18 | 13 | 4 | 1 | - | - | 1 | Shreveport, La. | 57 | 35 | 15 | 3 | 4 | , | - |
|  | 41 | 31 | 6 | 3 | - | 1 | 2 | Tulsa, Okla. | 102 | 64 | 28 | 9 | - | 1 | 8 |
| E.N. CENTRAL Akron, Ohio | 2,405 | 1,543 | 555 | 141 | 74 | 92 | 117 | MOUNTAIN | 686 | 430 | 167 | 52 | 15 | 21 | 44 |
|  | 61 | 37 | 17 | 4 | 1 | 2 | 3 | Albuquerque, N.Mex | $\times 83$ | 51 | 21 | 8 | 1 | 2 | 8 |
| Canton, Ohio Chicago, III | 37 | 21 | 13 | 3 | - | - | 3 | Colo. Springs, Colo | . 34 | 25 | 8 | - | 1 | - | 3 |
|  | 476 | 283 | 118 | 31 | 15 | 29 | 3 | Denver, Colo. | 149 | 83 | 42 | 16 | 6 | 1 | 10 |
| Chicago, III Cincinnati, Ohio | 188 | 123 | 40 | 8 | 5 | 12 | 19 | Las Vegas, Nev. | 73 | 46 | 22 | 4 | - | 1 | 5 |
| Cleveland, Ohio | 204 | 121 | 55 | 13 | 8 | 7 | 5 | Ogden, Utah | 25 | 16 | 6 | 1 | 1 | 1 | 2 |
| Columbus, OhioDayton, Ohio | 131 | 76 | 36 | 9 | 4 | 6 | 6 | Phoenix, Ariz. | 159 | 106 | 31 | 8 | 4 | 10 | 7 |
|  | 101 | 70 | 19 | 7 | 2 | 3 | 2 | Pueblo, Colo | 16 | 15 | 1 | - | - | - | 2 |
| Detroit, Mich.Evansville, Ind. | 311 | 192 | 74 | 29 | 9 | 7 | 22 | Salt Lake City, Utah | - 42 | 22 | 11 | 5 | 2 | 2 | 1 |
|  | 52 | 37 | 10 | 2 | 3 | . | 4 | Tucson, Ariz. | 105 | 66 | 25 | 10 | - | 4 | 6 |
| Evansville, Ind. Fort Wayne, Ind. | 51 | 35 | 10 | 5 | 1 | - | 2 |  |  |  |  |  |  |  |  |
| Gary, Ind. Grand Rapids, Mich | 23 | 17 | 2 | 2 | 2 | - | - | PACIFIC | 1,872 | 1,278 | 404 | 102 | 49 | 38 | 105 |
|  | h. 68 | 53 | 9 | 1 | 3 | 2 | 5 | Berkeley, Calif. | 19 | 13 | 3 | 3 | - | - | 1 |
| Indianapolis, Ind. | 166 | 95 | 43 | 13 | 7 | 8 | 7 | Fresno, Calif. | 74 | 50 | 15 | 4 | 2 | 3 | 5 |
| Madison, Wis. Milwaukee, Wis. | 51 | 33 | 11 | 2 | - | 5 | 7 | Glendale, Calif. | 15 | 14 | 1 | - | - | - | 1 |
|  | 149 | 105 | 34 | 4 | 2 | 4 | 10 | Honolulu, Hawaii | 69 | 50 | 12 | 2 | 2 | 3 | 5 |
| Peoria, III. Rockford, III | 39 | 28 | 7 | 2 | 2 | - | 4 | Long Beach, Calif. | 109 | 71 | 30 | 4 | 2 | 2 | 4 |
|  | 43 | 34 | 4 | 2 | 2 | 1 | 7 | Los Angeles, Calif. | 522 | 341 | 124 | 32 | 17 | 7 | 19 |
| South Bend, Ind. | 39 | 23 | 12 | 1 | 3 | - | 2 | Oakland, Calif. | 98 | 57 | 27 | 7 | 3 | 4 | 3 |
| Toledo, Ohio Youngstown, Ohio | 150 | 112 | 28 | 1 | 4 | 5 | 9 | Pasadena, Calif. | 27 | 21 | 5 | 7 |  | 1 | 2 |
|  | - 65 | 48 | 13 | 2 | 1 | 1 | - | Portland, Oreg. | 145 | 106 | 28 | 5 | 4 | 2 | 15 |
| Youngstown, Ohio |  |  |  |  |  |  |  | Sacramento, Calif. | 74 | 46 | 21 | 5 | 1 | 1 | 7 |
| W.N. CENTRAL | 762 | 524 | 156 | 35 | 21 | 26 | 38 | San Diego, Calif. | 142 | 97 | 25 | 14 | 4 | 2 | 15 |
| Des Moines, IowaDuluth, Minn. | 51 | 34 | 10 | 5 | - | 2 | 2 | San Francisco, Calif. | f. 151 | 102 | 31 | 10 | 3 | 5 | 4 |
|  | 28 | 23 | 4 | 1 | - | - | 1 | San Jose, Calif. | 171 | 126 | 36 | 5 | 2 | 2 | 8 |
| Kansas City, Kans. | 38 | 25 | 11 | 1 | 1 | 7 | 4 | Seattle, Wash. | 162 | 121 | 30 | 7 | 1 | 3 | 5 |
| Kansas City, Mo. | 124 | 87 | 24 | 3 | 3 | 7 | 7 | Spokane, Wash. | 56 | 42 | 5 | 3 | 4 | 2 | 9 |
| Lincoln, Nebr. Minneapolis, Minn. | 24 | 17 | 5 | - | 1 | 1 | - | Tacoma, Wash. | 38 | 21 | 11 | 1 | 4 | 1 | 2 |
|  | . 81 | 54 | 17 | 4 | 4 | 2 |  |  |  |  |  |  |  |  |  |
| Omaha, Nebr. | 93 | 61 | 16 | 8 | 6 | 2 | 8 | TOTAL 1 | 12,377 | 8.045 | 2,881 | 726 | 323 | 399 | 647 |
| St. Louis, Mo. | 165 | 108 | 40 | 6 | 6 | 5 | 6 |  |  |  |  |  |  |  |  |
| St. Paul, Minn Wichita, Kans. | 87 | 66 | 14 | 3 |  | 4 | 5 |  |  |  |  |  |  |  |  |
|  | 71 | 49 | 15 | 4 | - | 3 | 5 |  |  |  |  |  |  |  |  |

[^0]
## Epidemiologic Notes and Reports

## Noise-Induced Hearing Loss in Fire Fighters - New York

In October 1980, the International Association of Fire Fighters asked the National Institute for Occupational Safety and Health (NIOSH) to evaluate reported hearing loss from noise exposure in fire-fighting operations at the Newburgh Fire Department, Newburgh, New York. Audiometric evaluation of 53 of the 55 full-time fire fighters by an outside consultant had detected hearing losses.

In February 1981, NIOSH surveyed noise exposures of the fire fighters at this department (1). Noise levels emitted by sirens and fire engines during simulated response calls ranged from 99 dBA to 116 dBA at various riding positions on the vehicles; measurements were obtained by using a General Radio 1982 sound level meter. ${ }^{\dagger}$ These were later taped and analyzed. The 8-hour time-weighted average (TWA) noise exposures of 16 fire fighters during their regular activities over a 2-day period ranged from 62.8 dBA to $85.3 \mathrm{dBA} ; \mathfrak{\}}$ these noise measurements were obtained by using Metrosonics dB-301/562 Metrologger dosimeters.

In June 1981, using Gradson-Stadler 1703 B self-recording audiometers, NIOSH conducted audiometric evaluations of 54 of these fire fighters. An average hearing loss of 61.8 decibels at 6000 Hz was found for the five fire fighters over 50 years of age, each of whom had nearly 30 years of service. Non-occupational causes of high-frequency hearing loss were not identified.
Reported by Physical Agents Effects Br, Div of Biomedical and Behavioral Science, Hazard Evaluations and Technical Assistance Br, Div of Surveillance, Hazard Evaluations, and Field Studies, NIOSH, CDC.

Editorial Note: The NIOSH evaluation verified the high-frequency hearing losses reported in the initial audiometric evaluation of these fire fighters. The NIOSH environmental survey, in which personal noise dosimeters were used, was conducted on 2 days when no fires and two false alarms occurred; however, simulated runs were made to study the noise intensities normally encountered on the fire vehicles. On the basis of the limited noise survey and the 5-year average number of fire calls in a 40-hour workweek, these fire fighters would average less than 1.5 hours per week of exposure to noise in the range of 99 dBA to 116 dBA . Based on an extension of the Occupational Safety and Health Administration 8-hour TWA noise exposure limit of 90 dBA to a 24 -hour TWA of 82 dBA, only two of the 16 fire fighters' 8 -hour TWA exposures exceeded the 24-hour exposure limit. Even though the TWA noise exposures do not seem great enough to cause the observed hearing losses, the noise intensities during the simulated and false-alarm runs were high. Noise was not measured during actual fire fighting, but the audiograms point to noise overexposure.

A similar study of hearing loss in fire fighters, conducted at the Los Angeles City Fire Department $(2,3)$, produced results comparable to those of the NIOSH study. The noise levels reported in Los Angeles were more intense than those found in Newburgh; differences in the measurement techniques used in the two surveys may account for these discrepancies. Additional studies are planned.

[^1]Hearing Loss - Continued

## References

1. Tubbs R, Flesch J. Health hazard evaluation-Newburgh, New York. (HETA report no. 81-059-1045). Cincinnati, Ohio: National Institute for Occupational Safety and Health, 1982.
2. Reischl U, Hanks TG, ReischI P. Occupational related fire fighter hearing loss. Am Ind Hyg Assoc J 1981;42:656-62.
3. Reischl U, Bair HS Jr, Reischl P. Fire fighter noise exposure. Am Ind Hyg Assoc J 1979;40:482-9.

## Tuberculosis - California

California recorded 4,520 new tuberculosis cases in 1981, for a rate of 18.7 per 100,000 population, compared with a national rate of $11.9 / 100,000$. Since special tuberculosis hospitals and sanitoria no longer exist, tuberculosis may now be seen by any health care provider or clinic. Following are two examples in which the disease was not initially considered.

Case 1: On November 19, 1982, a 39 -year-old Chinese-speaking housewife was discovered to have laboratory-confirmed (sputum and culture positive) pulmonary tuberculosis. She had immigrated from Burma in 1972, and, at that time, her chest x-ray was normal. Throughout the summer of 1982, she felt unwell and developed fever and some weight loss. She sought medical advice in July, but no diagnosis was established. Her symptoms persisted, and she presented again in September with an eight-pound weight loss, a frequent cough, and fatigue. Again no diagnosis was established, and she was given vitamins. In early November, her cough became productive of heavy sputum. She returned to her physician later that month after a 2-year-old child she was tending was found on routine examination to have a significant tuberculin skin test. This child was subsequently admitted to a hospital with pleurisy and x-ray findings compatible with tuberculosis; the child was started on therapy.

Investigation revealed that the woman tended four or five children each day. Three other children in this group (ages $21 / 2$ years, 3 years, and 21 months) were found to have significant skin test reactions and had x-ray findings compatible with pulmonary tuberculosis. All three are being treated as patients. One other child also under her care had a significant reaction to purified protein derivative (PPD) and was placed on isoniazid (INH). In addition, her own children (ages 5, 11, and 15 years) and her husband had significant reactions to PPD and were placed on INH.

Case 2: The second patient is a 38 -year-old native of the Philippines whose father had died of tuberculosis during the patient's childhood. This patient had a significant PPD reaction before his arrival in the United States in 1969. He underwent a renal transplant 20 months ago, and because of problems with chronic rejection, continues on immunosuppressive medication. He did not take INH at the time of surgery. On December 5, 1982, he was admitted to a hospital with productive cough, night sweats, fever and chills, and a progressive weight loss of 25 pounds during the past 2-3 months. On admission, his posterior pharynx was erythematous, and the tonsils were ulcerated and covered with a whitish exudate. Chest $x$-ray showed several cavities, and numerous acid-fast bacilli (AFB) were found on sputum smear. Culture was subsequently positive. AFB were also recovered in large numbers from the tonsils. He was placed on triple drug therapy and a week later, was discharged home as improved.

In the 2 months before his hospitalization, the patient had sought medical attention several times. Antibiotics for 'flu' were prescribed on one visit, and on a subsequent visit in November, he received Nystatin for a presumed fungus infection of mouth and tonsils.
Editorial Note: Refugees from Southeast Asia and other immigrants from Asia, Latin America, and the Pacific Basin are coming to California in large numbers. This trend can be ex-

## Tuberculosis - Continued

pected to continue. Tuberculosis must be considered in these patients who come from high incidence areas and present with cough and fever. Although the risk of developing current tuberculosis is greatest during the first few years after arrival, these persons remain at higher risk of developing current tuberculosis than the general population.
Reported in California Morbidity, January 14, 1983.

## Update: Influenza Virus Activity - United States, Canada

United States: Through January 28, 1983, 33 states in all areas of the country have reported influenza virus isolations from residents (Figure 3). Almost all isolates have been type $A(H 3 N 2)$ virus, related to the $A / B a n g k o k / I / 79$ component of currently available vaccine. Type A(H1N1) virus was identified from sporadic cases in two locations-Chicago, Illinois, and San Bernadino, California. Type B influenza virus has been identified from sporadic cases in Houston, Texas, and Canton, Ohio.

For the third consecutive week this season, deaths attributed to pneumonia and influenza ( P \& I) were elevated in 121 U.S. cities for the week ending January 28. The ratio of P \& I deaths to total deaths was 5.2, compared with 4.9 the previous week.

Canada: Influenza cases have now been reported by most provinces. Laboratory-
FIGURE 3. Influenza type A virus isolations by state through January 28, 1983 United States, 1982-1983 season


Influenza - Continued
confirmed influenza A/Bangkok activity has been reported by British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Labrador, and Northwest Territories. As of January 7, 1983, 133 isolates and 91 seroconversions of influenza A/Bangkok-like (H3N2) had been reported by the provinces. By contrast, as of January 7. 1982, one isolate and seven seroconversions of influenza type $A$ virus-some Bangkok-like and others Brazil-like - had been reported.
Reported by J Baxa, Ohio State Dept of Health; L Blouse, MD, U.S. School Aerospace Medicine, San Antonio, Texas; Respective State Epidemiologists and Laboratory Directors; Canada Diseases Weekly Report, January 15, 1983;9:3; Communicable Disease Div, Bureau of Epidemiology, Laboratory Centre for Disease Control, Ottawa, Ontario, Canada; Consolidated Surveillance Activity, Epidemiology Program Office, WHO Collaborating Center for Influenza, Influenza Br, Statistics Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Erratum: Vol. 31, No. 40

p. 542. In the article, "Sporotrichosis Associated with Wisconsin Sphagnum Moss," JF Stoebig, Wisconsin State Laboratory of Hygiene, should have been included in the credits on p. 543.

The Morbidity and Mortality Weekly Report is prepared by the Centers for Disease Control, Atlanta, Georgia, and distributed by the National Technical Information Service, Springfield, Virginia. 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 Weekly Report, Centers for Disease Control, Atlanta, Georgia 30333.
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[^0]:    - 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 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
    t† Total includes unknown ages.

[^1]:    -Decibels measured on the A-weighting scale.
    ${ }^{\dagger}$ Use of trade names is for identification only and does not imply endorsement by the Centers for Disease Control or the Public Health Service.
    $\S_{\text {NIOSH }}$ currently recommends a maximum 85 dBA level for an 8 -hour TWA noise exposure.

