August 18, 1978 / Vol. 27 / No. 33

## International Notes

United States Ends Smallpox Vaccination Requirement for International Travel Current Trends
Increases in Early Syphilis Measles and School Immunization Requirements - United States, 1978 Epidemiologic Notes and Reports Tick Paralysis - N. Mex., Colo. Dengue - Puerto Rico, United States

## International Notes

## United States Ends Smallpox Vaccination Requirement for International Travel

Effective August 14, 1978, the United States does not require smallpox vaccination for any arriving international traveler, and proof of vaccination will not be requested. Since October 1971, the United States has required a valid International Certificate of Vaccination against smallpox only if within the 14 days preceding arrival the traveler had been in a country currently reporting smallpox.

With the elimination of the smallpox vaccination requirement, no vaccinations now are required to enter the United States from any country. The United States eliminated any requirement for cholera vaccination on December 18, 1970, and any requirement for yellow fever vaccination on November 8, 1972.

The last reported case of smallpox occurred in Merka, Somalia, on October 26, 1977. Although transmission apparently has been interrupted, active surveillance will continue until 2 years has elapsed and the last endemic area is confirmed as smallpox-free. Intensive surveillance is underway also in neighboring countries. If no more cases of smallpox are detected, countries which have not been certified as being free of smallpox will be eligible for smallpox-free certification by an International Commission on Smallpox Eradication in October 1979.

With the eradication of smallpox, international travelers do not have any medical reasons for being vaccinated. Smallpox vaccination, as with other medical procedures, has a definite risk of serious complications, including death.

Smallpox vaccination is indicated only for travelers to countries which require vaccination as a condition for entry (primarily those in Africa, Asia, and Central and South America), and for the few laboratory workers who are likely to have contact with the variola virus. The International Health Regulations, Article 86(7) state: "If a vaccinator is of the opinion that vaccination is contraindicated on medical grounds he shall provide the person with reasons, written in English or French, underlying that opinion, which health authorities should take into account."

The annual publication "Health Information for International Travel" (1) and up-to-date changes reported in the MMWR provide current references for those countries requiring certain vaccinations, including smallpox. These requirements should be considered by U.S. travelers in planning international travel.

[^0]
## Current Trends

## Increases in Early Syphilis

A marked reversal has occurred in the national trends of reported cases of early syphilis (primary, secondary, and early latent of less than 1 year's duration). After decreasing for 4 consecutive 6 -month periods, reported cases for January-June 1978 increased $1.0 \%$ over cases reported in January-June 1977 (Table 1). When compared to the same month in the preceding year, monthly increases were first noted in March and have occurred each month since.
TABLE 1. Reported early syphilis* cases by 6 -month periods, United States, JanuaryJune 1975 - January June 1978

| Reporting period | Number <br> of cases | Percent change compared <br> to similar 6 month period <br> of preceding year |
| :--- | :---: | :---: |
| January-June 1975 | 23,060 | +7.9 |
| July-December 1975 | 22,822 | +0.5 |
| January-June 1976 | 22,101 | -4.2 |
| July-December 1976 | 20,442 | -10.4 |
| January-June 1977 | 18,535 | -16.1 |
| July-December 1977 | 18,278 | -10.6 |
| January-June 1978 | 18,726 | +1.0 |

*Primary, secondary and early latent (less than 1 year's duration) syphilis
The reversal in national trends for the first 6 months of 1978 was primarily due to increases in 7 areas that account for $71 \%$ of the cumulative increase (Table 2). During the same time, 28 areas experienced decreases and 2 areas reported no change. The 7 areas that reported increases of 90 or more cases during the first 6 months of 1978 were Chicago (+266), Texas (+240), New York City (+216), Los Angeles (+168), Mississippi (+122), Georgia (excluding Atlanta) (+106), and Atlanta (+92). The 3 reporting the largest decreases were North Carolina ( -363 ), San Francisco (-173), and Philadelphia (-134) (Table 2).

Reported cases of congenital syphilis among infants (<1 year of age), a disease closely related to infectious syphilis in women, have also increased slightly. In the 6-month period October 1976-March 1977, 66 cases of congenital syphilis among infants were reported, and for October 1977-March 1978 (latest period for which data are available), 70 cases were reported. Of these 70 , Texas reported 21 and California, 11. The District of Columbia and 18 states reported 1 to 4 cases, and 30 states reported no cases between October 1977 and March 1978.
Reported by the Venereal Disease Contral Div, Bur of State Services, CDC.
Editorial Note: A single explanation for reversal of disease trends in those areas experiencing large increases is not possible, but several contributing factors are being investigated. In the Southwest and West the proportion of infectious syphilis cases in seasonal farm laborers appears to have increased. Also, in some areas dramatic increases in syphilis among seasonal farm workers have been linked directly to a high incidence of syphilis in an itinerant prostitute population. Traditional control measures are frequently less effective with these populations because of frequent moves to different areas and unavailability or underutilization of health facilities. In some areas, the increase appears to be related to a decrease in the number and the timeliness of referrals, examinations, and treatment of persons exposed to infectious syphilis.

Recently a few health departments have hired and trained additional staff. When appropriate, multilingual case workers have been sought. New approaches (for example, selective mass treatment and field-screening of blood samples) are being evaluated in

Syphilis - Continued
TABLE 2. Summary of reported primary, secondary, and early latent (less 1 year) syphilis cases, by reporting area, June 1978 and June 1977 - provisional data

| Reperting Arma hy HEW Guyions | Jume |  | Culamiar Yabe Cumelative Lnaumy Jume |  | Rapartiag Area by HEW Rapions | Jame |  | Caleder Yam Cumalim Janury Jume |  | Peparting Arm ly HE Mapie | mex |  | Cendativedenuary /hese |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1974 | 187 | 1878 | 197 |  | 197 | 1977 | 1978 | 1977 |  | 197 | 197 | 157 | 1\%n |
| Comnecticut | 25 | 34 |  |  |  |  |  |  |  | Arizona | 17 | 29 | 119 | $1{ }^{\text {d }}$ |
| Maine | 0 | 3 | $13$ | $18$ | (Exd. Chicrap) | 30 | 25 | 114 | 197 | Calilarni |  |  |  |  |
|  | 64 | 95 | 384 | 500 | Dhicrya | 143 | 112 | 1,000 | 134 | (Exdi La a SF) | 189 | 179 | 1,345 | 1.270 |
| Miw Hampashire | 0 | 3 | 5 | 9 | Indiern |  |  |  |  | Las Anyela' | 219 | 211 | 1.414 | 1250 |
| Whode Isand | 5 | 1 | 38 | 11 | (Exed. Incianmpolis) | 8 | 15 | 102 | 94 | Som Framixa* | 98 | 118 | ${ }_{6} 61$ | 834 |
| hemona | 7 | 1 | ${ }_{5}^{3}$ | 6 | Indiumupolis" | 1 | 1 | 54 | 39 | $\mathrm{Ha}=\mathrm{Ci}$ | 1 | 7 | 31 | 36 |
| hegiom itital | 19 | 142 | 513 | 361 | - Michipen | 40 10 | 56 15 | 258 163 | 274 109 | ( | 53 | 5488 | 3, 33 | (7,579 |
| Mow Jarser | 81 | 60 | 345 | 388 | Ohia | 40 | 57 | 383 | 424 |  |  |  |  |  |
| Naw Yoik |  |  |  |  | Wixcansin | 9 | 16 | 67 | 90 | Alacka | 1 | 1 | 12 | 41 |
| \|Exal. NYCI | 35 | 39 | 227 | 247 | REfIOM V total | 295 | 297 | 2.101 | 1,961 | Itaha | 3 | 0 | 5 | 4 |
| Naw Yort Ciny | 345 | 265 | 1,874 | 1.659 |  |  |  |  |  | Orapan | 19 | 13 | 126 | 95 |
| hegiom il tatal | 451 | 354 | 2.445 | 2.283 | Astanem | 10 | 6 | 72 | 45 | Wrechinyam | 36 | 41 | 113 | 183 |
| Dalmant |  |  |  |  | Lovinima | 124 | 103 | 605 | 637 | REGIOM X TOTAL | cs | 6 | 316 | 323 |
| Ointrict al Calumbia | 103 | 102 | 501 | 23 | Mre Maxito | 10 | 9 | 85 | 76 |  |  |  |  |  |
| Maryland Calumbia | 103 | 102 | 501 | 639 | Oklahomi Tax | 19 345 | 12 338 | 96 2.017 | 66 1.721 | $\begin{aligned} & \text { UMITER STATES } \\ & \text { TOTAL } \end{aligned}$ | 3,170 | 2,509 | 11.72 | 11,535 |
| (Exct. Aaltimara) | 25 | 25 | 184 | 165 | hegion vitatal | 518 | 461 | 2.175 | 2,596 |  |  |  |  |  |
| Pintimara | 43 | 47 | 267 | 246 |  |  |  |  |  | Puerta fira | 91 | 97 | 524 | $5: 6$ |
| (Exsy Philadelatia) |  |  |  |  | Igma | 10 | 3 | 42 | 21 | Virpin Idand | 5 | 0 | 19 | 11 |
| Pratil Philadelphia) | 16 | 17 | 120 | 158 | Kansa | 9 | 10 | 78 | 63 | UMITED STATES. |  |  |  |  |
| Philadalphia | 37 | 59 | 202 | 336 | Misouri | 17 | 18 | 137 | 151 | ImCLUDIMG |  |  |  |  |
| Wentia Virginia | 84 | 85 | 447 | 481 | Matrusta | 4 | 5 | 20 | 41 | duteyimg areas | 3,266 | 3,066 | 19,269 | 19,060 |
| Regiowilitatal | 312 | 336 | 1.757 | 2.060 | hegiom vil rotal | 40 | 36 | 271 | 212 |  |  |  |  |  |
|  |  |  |  |  | Colarada | 12 | 14 | 103 | 111 |  throuph previact menthe. |  |  |  |  |
| Florima | 34 | 18 | 157 | 120 | Maniana | - | 4 | 10 | 10 |  |  |  |  |  |
| Giarga | 309 | 249 | 1.731 | 1.723 | Morth Dasata | 0 | 0 | 2 | 2 |  |  |  |  |  |
| IExel. Ailantal |  |  |  |  | South Datieta |  | 2 | 1 | 1 |  |  |  |  |  |
| Atlantas |  | 105 80 | 45 | 608 | Utah <br> Wyoming | 7 |  | 19 | 13 | Source CDC 9.9a. HEW. PHS, CDC, RSS. VD Control Derismen. Allonis Georea 30021 |  |  |  |  |
| ${ }^{\text {Kinfueky }}$ | 74 32 | 80 16 | 138 138 | 360 106 | Whoming vill total | 19 | 20 | 139 | 143 |  |  |  |  |  |
| Misissippi | 89 | 41 | 400 | 278 | REGIOM VII TOTAL |  |  |  |  |  |  |  |  |  |
| North Caralina | 113 | 111 | 531 | 894 |  |  |  |  |  |  |  |  |  |  |
| South Carclina | 50 | 59 | 231 | 293 |  |  |  |  |  |  |  |  |  |  |
| Regiomiv total | 39 | 37 | 265 | 215 |  |  |  |  |  |  |  |  |  |  |
| Regiomivtital |  | 696 | 4.619 | 4.597 |  |  |  |  |  |  |  |  |  |  |

high-risk population groups.
Syphilis incidence is decreasing or is stable in many program areas; the national downward trend of syphilis which began in 1976 can be re-established by concentrating control resources in areas experiencing the largest increases.

## Epidemiologic Notes and Reports

## Tick Paralysis - New Mexico, Colorado

On June 3, 1978, a 5 -year-old girl from Farmington, New Mexico, was admitted to an Albuquerque hospital with flaccid paralysis of all 4 extremities.

The child had been well until 3 days before admission, when she had developed a fever after receiving a DPT/OPV booster. The next day she became afebrile but developed weakness in her legs and was unable to walk. On June 2, the weakness had progressed to involve her upper extremities.

On admission, the patient was noted to have flaccid paralysis of all extremities as well as weakness of cranial nerves VI, VII, IX, and X. She was unable to bring herself to a sitting position. Pulmonary function testing revealed forced vital capacity and Peak expiratory flow rate at $50 \%$ of normal.

An extensive admission history revealed that the patient had been camping in southwestern Colorado 1 week before her illness. Her scalp was examined for ticks, and 3 were found and removed.

Twelve hours after admission, the patient showed improvement and was able to sit. By 18 hours after admission, she was walking, and her cranial nerve palsies had resolved. She was discharged within 24 hours of admission after regaining normal neuromuscular function.

## Tick Paralysis - Continued

Two of the ticks removed from the patient's scalp were identified as Dermacentor andersoni. One tick was a fully engorged female, and the other was a partially engorged male. The third tick was not submitted for identification.

This is the first case of tick paralysis reported from Colorado since 1970. No cases have been reported during this period in New Mexico.
Reported by JK Fisk, MD, Farmington, New Mexico; R Miller, MD, D Watts, MD, Bernalillo County Medical Center, University of New Mexico School of Medicine, Albuquerque; M Burkhart, MPH, T Gardiner, MD, J Mann, MD, State Epidemiologist, New Mexico Health and Environment Dept; TA Edell, MD, Acting State Epidemiologist, Colorado State Dept of Health; Vector-Borne Diseases Div, Bur of Laboratories, Viral Diseases Div, Field Services Div, Bur of Epidemiologv, CDC.
Editorial Note: Reported cases are not believed to accurately reflect the incidence of tick paralysis in humans and in domestic and wild animals in North America. Several species of hard-shell ticks (/xodidae) have been associated with tick paralysis; $D$. andersoni and $D$. variabilis are the most frequently involved. The toxin responsible for this condition is believed to be associated with the female tick's egg production and to enter the salivary glands late in the feeding process.

Although certain areas such as Idaho and British Columbia report cases most frequently , tick paralysis may occur anyplace where ticks are encountered.

Early suspicion of this thoroughly reversible syndrome and a meticulous search for ticks are essential in eliminating fatalities, especially in young children.

TABLE I. Summary - cases of specified notifiable diseases, United States
(Cumulative tota/s include revised and delayed reports through previous weeks.)

| DISEASE | 32nd WEEK ENDING |  | $\begin{gathered} \text { MEDIAN } \\ 1973-1977^{\circ} \end{gathered}$ | CUMULATIVE, FIRST 32 WEEKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { August } 12 . \\ 1978 \\ \hline \end{gathered}$ | August 13. 1977* |  | $\begin{gathered} \text { August } 12, \\ 1978 \end{gathered}$ | Augus 13. 1977* | $\begin{aligned} & \text { MEDIAN } \\ & 19 / 31977^{\circ *} \end{aligned}$ |
| Aseptic meningitis | 207 | 194 | 116 | 2,099 | 2,078 | 1.591 |
| Brucellosis | 3 | 2 | 7 | 93 | 126 | 126 |
| Chicicenpox | 358 | 359 | 395 | 121,233 | 159,400 | 143.948 |
| Diphtheria | - | 3 | 2 | 50 | 58 | 123 |
| Encaphalitis: Primary (arthropod-borne 8 unspec.) | - 23 | 28 | 29 | 422 | 455 | 531 |
| Post-infectious | 4 | 8 | 8 | 123 | 139 | 187 |
| Hepatifis, Viral: Type B | 258 | 351 | 245 | 9.011 | 10.107 | 7.009 |
| Type A Type unspecified | 569 | 547 | 1690 | 17.373 | 18.984 | 21.587 |
| Malaria Type unspecified | 224 | 178 13 | 111 | 5.436 425 | 5.426 321 | 245 |
| Measles (rubeola) | 306 | 203 | 150 | 22,252 | 52,374 | 23.698 |
| Meningococcal infections: Total | 40 | 17 | 20 | 1,642 | 1,181 | 991 |
| Civilian | 40 | 16 | 18 | 1.622 | 1.173 | 970 |
| Mumps Military |  | 1 | - | . 20 | - 8 | 21 4325 |
| Pertussis Rubella (German measles) | 49 108 | 53 | - | 1.141 | 18, 701 | 14.533 |
| Tetanus | 108 | 1 | 81 | 14.697 49 | 18,315 38 | 14.539 |
| Tuberculosis | 668 | 559 | 626 | 18,567 | 18.499 | 19.511 |
| Tularemia | 4 | 7 | 4 | 18. 65 | 18.495 | 88 |
| Typhoid fever | 6 | 7 | 7 | 266 | 212 | 231 |
| Typhus fever, tick-bome (Rky. Mt. spotted) | 60 | 60 | 41 | 662 | 781 | 558 |
| Venereal diseases: <br> Gonorrhea: Civilian | 21,926 | 22,804 |  |  |  | 595,737 |
| Military | 21, 375 | 22,804 | 22.879 | $15.545$ | $16.586$ | 595,301 18,301 |
| Syphilis, primary 81 secondary: Civilian | 431 | 394 | 447 | 12,804 | 12,562 | 14,904 |
| Military | 3 | 4 | 5 | 12.804 | 186 | 215 |
| Rabies in animals | 61 | 88 | 70 | 1.876 | 1.877 | 1.800 |

TABLE II. Notifiable diseases of low frequency, United States

|  | CLPM. 1978 |  | Cum. 1978 |
| :---: | :---: | :---: | :---: |
| Anthrax | 4 | Poliomyelitis: Total |  |
| Botulism (P.R. 3) | 55 | Paralytic |  |
| Congenital rubella syndrome | 21 | Psittacosist (Pa. 1, Ma. 1) | 71 |
| Leprosy ${ }^{\text {( Tex. 1, Ariz. 2, Calif. 3) }}$ | 56 | Plabies in man | 4 |
| Leptospirosis (Tex. 1) | 37 | Trichinosis (Conr. 3, Ups. N.Y. 1, Calif. 1) | 34 |
| Plague | 3 | Typhus fever, flea-borne (endemic, murine) (P. R. 1) | 26 |

[^1]TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 12, 1978, and August 13, 1977 (32nd week)

| heporting area | ASEPTIC MENINtITIS | BRU CELLONS | $\underset{\text { PIX }}{\text { CHILKE }}$ | QIPHTHERIA |  | ENCEPHALITIS |  |  | HEPATITIS (VIRAL). BY TYPE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Primary |  | Part-in fectious | B | A | Unepecitied | malafia |  |
|  | 1971 | 1978 | 1974 | 1978 | $\begin{aligned} & \hline \text { CUM } \\ & \text { 1978 } \end{aligned}$ | 1971 | 1977* | 1971 | 1974 | 1971 | 1978 | 1974 | $\begin{aligned} & \hline \text { CUM } \\ & \text { 1978 } \end{aligned}$ |
| UNITED STATES | 207 | 3 | 358 | - | 50 | 23 | 28 | 4 | 256 | 569 | 224 | 28 | 425 |
| NEW ENGLAND | 7 | - | 39 | - | - | - | 1 | - | 8 | 9 | 11 | - | 15 |
| Maine | 2 | - | 4 | - | - | - | - | - | - | - | - | - | 1 |
| N.H.t | - | _ | - | - | _ | - | - | - | 2 | - | - | - | 2 |
| Vt $\dagger$ | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| Mass. | 2 | - | 16 | - | - | - | - | - | 2 | 3 | 9 | - | 3 |
| R.I. | - | - | 7 | - | - | - | - | - | - | 3 | $\rightarrow$ | - | 1 |
| Conn. | 3 | - | 12 | - | - | - | 1 | - | 3 | 3 | 2 | - | 8 |
| MID. ATLANTIC | 35 | - | 52 | - | 1 | 2 | 6 | - | 48 | 49 | 25 | 8 | 87 |
| Upstate N.Y. | 14 | - | 23 | - | - | - | 1 | - | 15 | 24 | 11 | 1 | 12 |
| N.Y. City | 4 | - | 27 | - | 1 | 1 | - | - | 5 | 8 | 5 | 4 | 39 |
| N.J. 1 | 8 | - | NN | - | - | - | 2 | - | 15 | 10 | 5 | 2 | 18 |
| Pa | 9 | - | 2 | - | - | 1 | 3 | - | 13 | 7 | 4 | 1 | 18 |
| E.N. CENTRAL | 28 | - | 122 | - | - | 4 | 9 | - | 27 | 61 | 14 | 3 | 24 |
| Ohio | 1 | - | - | - | - | - | 7 | - | 2 | 12 | - | - | 4 |
| Ind.t | 4 | - | 9 | _ | _ | - | 1 | - | 2 | 4 | 2 | - | 3 |
| 1 II . | 2 | - | 16 | - | - | - | - | - | 3 | 19 | , | - | 4 |
| Mich. | 16 | - | 24 | - | - | 2 | 1 | - | 17 | 23 | 11 | 2 | 11 |
| Wis.t | 5 | - | 73 | - | - | 2 | - | - | 3 | 3 | - | 1 | 2 |
| W.N. CENTRAL | 15 | - | 11 | $\cdots$ | 2 | - | 2 | 1 | 17 | 18 | 8 | 2 | 19 |
| Minn. | - | - | - | - | - | - | - | - | 6 | 6 | - | - | 4 |
| lowa | - | - | - | - | - | - | - | - | 1 | 4 | 1 | - | - |
| Mo.t | 14 | - | 5 | - | 1 | - | - | 1 | 8 | 6 | 1 | 1 | 7 |
| N. Dak. | 14 | - | 2 | - | - | - | 1 | - | - | - | - | - |  |
| S. Dak | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Nebr. | - | - | 4 | - | 1 | - | - | - | 2 | 2 | - | - | 3 |
| Kans. | 1 | - | - | - | - | - | 1 | - | - | $-$ | - | 1 | 4 |
| S. ATLANTIC | 30 | - | 73 | - | - | 4 | - | 2 | 61 | 96 | 37 | 5 | 83 |
| Del. | 2 | - | 3 | - | - | - | - | - | 2 | 2 | - | - | 1 |
| Md. | 7 | - | 6 | - | - | 1 | - | - | 24 | 15 | 7 | 2 | 19 |
| D.C. | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| Va | 5 | - | 4 | - | - | 3 | - | - | 6 | 22 | 2 | 1 | 18 |
| W. Vat | 2 | - | 32 | - | - | - | - | - | 1 | 3 | - | - | 1 |
| N.C. | - | - | NN | - | - | - | - | - | - | - | - | - | 7 |
| S.C. | 2 | - | N | - | - | - | - | - | 2 | - | 6 | - | 4 |
| $\stackrel{\mathrm{Ga}}{\mathrm{Fa}}$ | - | - | - | - | - | - | - | - | 10 | 7 | - | - | 6 |
| Fa | 12 | - | 28 | - | - | - | - | 2 | 16 | 47 | 22. | 2 | 25 |
|  | 27 | - | 2 | - | - | 2 | - | - | 24 | 66 | 15 | - | 4 |
| Ky. | 6 | - | 2 | - | - | 2 | - | - | 1 | 6 | - | - | 1 |
| Tenn. | 4 | - | NN | - | - | - | - | - | 16 | 42 | 15 | - | 1 |
| Misis | 16 | - | - | - | - | - | - | - | 7 | 15 | - | - | 1 |
| W.S CENTRAL | 33 | 3 | 18 | - | 1 | 5 | 4 | - | 17 | 99 | 43 | - |  |
| Ark. | 1 | 1 | - | - | 1 | 2 | 4 | - | - | 5 | - | - | 1 |
| La. | 14 | - | NN | - | - | 1 | - | - | 8 | 26 | 12 | - | 3 |
| Okla | 2 | - | - | - | - | 1 | - | - | 3 | 12 | 4 | - | - |
| Tex | 16 | 2 | 18 | - | - | 1 | - | - | 6 | 56 | 27 | - | 17 |
| Mountain | 5 | - | 7 | - | 3 | 4 | 1 | - | 11 | 74 | 37 | - | 4 |
| Mont. 1 | - | - | 4 | - | - | 1 | - | - | - | 2 | 1 | - | - |
| Idatho | - | - | - | - | - | - | - | - | 1 | 5 | - | - | - |
| Wyo. | - | - | - | - | - | - | - | - | - | 5 | - | - | - |
| Colo. | 5 | - | 3 | - | 2 | - | - | - | 5 | 15 | 1 | - | 1 |
| N. Mex. | - | - | - | - | - | 3 | 1 | - | I | 18 | 3 | - | 1 |
| Ariz. | - | - | NN | - | - | - | - | - | 3 | 26 | 32 | - | 1 |
| Urah | - | - | N | - | - | - | - | - |  | 1 | - | - | - |
| Nev. | - | - | - | - | 1 | - | - | - | 1 | 2 | - | - | 1 |
|  | 27 | - | 34 | - | 43 | 2 | 5 | 1 | 43 | 91 | 34 | 10 | 168 |
| Wash. | 1 | - | 25 | - | 39 | - | - | - | 6 | 16 | 6 | - | 6 |
| Oreg- | 9 | - | - | - | - | 1 | - | 1 | 4 | 17 | 8 | 1 | 4 |
| Calif.t | 16 | - | - | - | 1 | 1 | 4 | - | 34 | 60 | 20 | 9 | 140 |
| Alsaka |  | - | 4 | - | 3 | - | 1 | - | 1 | 2 | - | - | $\begin{array}{r}3 \\ \hline\end{array}$ |
| Hawaii | 1 | - | 5 | - | - | - | - | - | - | 2 | - | - | 15 |
| Guam | Na | NA | Na | NA | - | NA | - | - | NA | Na | Na | NA | - |
| P.R. | - | Na | 6 | Na | - | - | - | - | 1 | 3 | 2 | - | 4 |
| V.I. | - | - | 6 | - | - | - | - | - | - | - | - | - | 1 |

NN: Not notifiable.
NA: Not available.
"Delaved reports received for 1977 are not shown below but are used to update last vear's weeklv and cumulative totals.
1The following delayed reports will be reflected in next week's cumulative mals: Asep. Meng: Wis. -2, Mo. +1: Chickenpax: Calif. +10 ; Enceph., primary: Ind. +2, Wis. -1; Post Enceph. Mumps: Wis. +1; Hep. B: Vt. -2, N.J. 47, Wis +1. Mo. 43, Mont 41; Hep A: N.H. +1, N.」. +12, W. Va. -1. Alaska -1; Hep. uris.: N.J. +11. Mont. - 1 .

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending August 12, 1978, and August 13, 1977 (32nd week)

| heporting anea | MEASLES (RUBEOLA) |  |  | MENINGOCOCCAL INFECTIANS TOTAL |  |  | MUMPS |  | PERTUSSIS | RUBELLA |  | TETANUS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1978 | CUM <br> 1978 | $\begin{aligned} & \text { CUM. } \\ & \text { 19?7* } \end{aligned}$ | 1978 | CUM. <br> 1978 | CUM. 1977* | 1978 | CUM. <br> 1978 | 1978 | 1978 | CUM. <br> 1978 | CUM. <br> 1978 |
| UNITED STATES | 306 | 22,252 | 52,374 | 40 | 1,642 | 1.181 | 87 | 12,814 | 49 | 108 | 14,697 | 49 |
| NEW ENGLAND | 5 | 1,957 | 2,472 | 3 | 86 | 52 | 1 | 714 | 3 | 5 | 721 | 1 |
| Maine | 3 | 1,312 | 166 | - | 6 | 3 | - | 484 | - | 1 | 148 | - |
| N.H.t | - | $4 E$ | 510 | - | 9 | 3 | - | 13 | - | 1 | 99 | - |
| V1. | - | 25 | 290 | - | 2 | 5 | - | 5 | - | - | 27 | 1 |
| Mass. $\dagger$ | 1 | 247 | 620 | 2 | 27 | 17 | 1 | 83 | - | 1 | 214 | - |
| R.1. | 1 | e | 44 | - | 17 | 1 | - | 32 | - | - | 41 | - |
| Conn. | - | 319 | 822 | 1 | 25 | 23 | - | 97 | 3 | 2 | 192 | - |
| MID. ATLANTIC | 16 | 2.114 | 8,278 | 7 | 285 | 155 | 8 | 581 | 2 | 11 | 2,950 | 3 |
| Upstate N.Y. | 11 | 1,359 | 3.772 | 7 | 98 | 35 | 3 | 196 | 2 | 4 | 512 | 1 |
| N.Y. City | 2 | 331 | 698 | - | 65 | 41 | 2 | 133 | - | - | 115 | - |
| N.J. | - | 73 | 195 | - | 49 | 35 | 1 | 129 | - | 6 | 1.590 | - |
| Pa. $\dagger$ | 3 | 351 | 3.613 | - | 73 | 44 | 2 | 123 | - | 1 | 733 | 2 |
| E.S. CENTRAL | 229 | 4,6,78 | 11,359 | 5 | 151 | 127 | 26 | 5,112 | 12 | 64 | 6,738 | 2 |
| Ohio | 2 | 476 | 1,832 | 2 | 55 | 41 | 1 | 855 | 2 | - | 1,255 | 1 |
| ind. | 1 | 17e | 4,294 | 1 | 29 | 8 | 3 | 296 | 6 | 5 | 557 | 1 |
| III. | 1 | 618 | 1.624 | - | 7 | 33 | 10 | 1.637 | 1 | 4 | 420 | - |
| Mich. | 212 | 6.97C | 914 | 2 | 49 | 33 | 1 | 1.337 | 1 | 38 | 2,997 | - |
| Wis.t | 13 | 1.438 | 2,395 | - | 11 | 12 | 11 | 985 | 2 | 17 | 1.509 | - |
| W.N. CENTRAL | - | 377 | S.427 | 1 | 55 | 53 | 1 | 1.888 | 7 | 4 | 635 | 6 |
| Minn. | - | 34 | 2,61日 | 1 | 13 | 19 | - | 18 | - | 1 | 128 | 1 |
| lowa | - | 51 | 4,267 | - | 5 | A | - | 129 | - | 2 | 52 | $-$ |
| Mo. 1 | - | 11 | 1,036 | - | 23 | 15 | - | 1,151 | 7 | - | 96 | - |
| N. Dak. | - | 191 | 23 | - | 3 | 1 | 1 | 12 | - | - | 81 | - |
| S. Dak. | - | - | 66 | - | 2 | 4 | - | 6 | - | - | 111 | 1 |
| Nebr. | - | 5 | 209 | - | - | 1 | - | 21 | - | - | 34 | - |
| Kans. | - | 85 | 1,208 | - | 9 | 5 | - | 560 | - | 1 | 133 | 4 |
| S. ATLANTIC | 22 | 4,742 | 4,491 | 8 | 408 | 273 | 23 | 719 | 4 | 12 | 984 | 9 |
| Del. | - | 5 | 22 | 2 | 15 | 17 | 1 | 49 | - | - | 34 | - |
| Md. | - | 44 | 371 | 2 | 23 | 13 | 3 | 65 | - | - | 6 | 1 |
| D.C. | - | - | 14 | - | 1 | - | - | 1 | - | - | 1 | - |
| Va.t | 2 | 2,798 | 2.685 | 2 | 52 | 20 | 6 | 130 | - | 4 | 234 | - |
| W. Va | 6 | 1,028 | 214 | - | 9 | 9 | 3 | 163 | 1 | 2 | 326 | - |
| N.C. | - | 116 | 62 | - | 78 | 59 | 5 | 64 | - | - | 178 | 2 |
| SC. | - | 194 | 147 | - | 24 | 28 | - | 15 | - | - | 28 | 1 |
| Ga. | - | 17 | 764 | - | 46 | 42 | - | 64 | 2 | 1 | 5 | - |
| Fla. | 14 | 538 | 212 | 2 | 160 | 80 | 5 | 188 | 1 | 5 | 172 | 5 |
| E.S. CENTRAL | 5 | 1.378 | 1,960 | 1 | 133 | 128 | 8 | 1,099 | 6 | 2 | 499 | 2 |
| Ky. | 2 | 117 | 1,175 | - | 27 | 26 | - | 181 | 3 | 1 | 126 | 1 |
| Tenn. | 3 | 956 | 671 | - | 32 | 31 | 2 | 444 | 2 | 1 | 195 | - |
| Ala. | - | 89 | 77 | 1 | 40 | 47 | 5 | 404 | - | - | 21 | - |
| Miss | - | 214 | 37 | - | 34 | 24 | 1 | 70 | 1 | - | 147 | 1 |
| W.S. CENTRAL | 20 | GA 7 | 2.042 | 13 | 256 | 210 | 7 | 1.625 | 7 | 6 | 898 | 13 |
| Ark. | - | 16 | 29 | - | 21 | 10 | 1 | 581 | - | 1 | 58 | 1 |
| La. | 9 | 325 | 74 | 11 | 105 | 77 | - | 61 | - | 3 | 483 | 1 |
| Okia. | - | 13 | 54 | - | 16 | 10 | - | 4 | 1 | - | 11 | 2 |
| Tex. | 11 | 624 | 1.845 | 2 | 114 | 113 | 6 | 979 | 6 | 2 | 346 | 9 |
| MOUNTAIN | 3 | 245 | 2.454 | 1 | 35 | 30 | $?$ | 376 | 1 | 1 | 194 | 1 |
| Mont. | 3 | 105 | 1,157 | - | 1 | 2 | 1 | 141 | - | - | 17 | - |
| Idaho | - | 1 | 161 | - | 3 | 4 | - | 20 | - | - | 2 | - |
| Wro. | - | - | 18 | - | - | 1 | - |  | - | - |  | - |
| Colo. | $\rightarrow$ | 29 | 458 | - | 2 | 1 | 1 | 77 | - | - | 45 | - |
| N. Mex. | - | - | 254 | - | 7 | H | - | 15 | - | - | 3 | - |
| Ariz. | - | 45 | 297 | - | 13 | 10 | - | 10 | 1 | - | 90 | - |
| Utah | - | 44 | 16 | 1 | 5 | 3 | - | 109 | $\underline{-}$ | 1 | 26 | 1 |
| Nev. | - | 17 | 93 | - | 4 | 1 | - | 4 | - | - | 11 | - |
| PACIFIC | 6 | 776 | 10. 151 | 1 | 233 | 153 | 11 | 700 | 7 | 3 | 1.088 | 12 |
| Wash. | 3 | 143 | 529 | - | 30 | 18 | - | 164 | - | 1 | 94 | - |
| Oreg. | - | 144 | 357 | - | 22 | 17 | 1 | 81 | - | - | 101 | - |
| Calif. | 2 | 4 त6 | 9,173 | 1 | 162 | 40 | 10 | 424 | 7 | 2 | 880 | 12 |
| Alaska | - | , | 60 | - | 6 | 26 |  | 7 | - | - | 3 | - |
| Hawaii | 1 | $\varsigma$ | 35 | - | 4 | 2 | - | 25 | - | - | 10 | - |
| Guam |  |  |  | - |  | - | Na |  | NA | NA | 3 |  |
| P.R. | 9 | 214 | 859 | - | 3 | 1 | 23 | 1.097 | - | - | 15 | 5 |
| V.I. | - | 6 | 14 | - | 1 | - | - | 1 | - | - | 1 | - |

NA: Not available.

- Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cufnulative totals.

1 The following delayed reports will be reflected in next week's cumulative totals: Measles: Pa. +1, Wis. +2; Men. Inf.: N.H. $\mathbf{- 1}$; Pertussis: Wis. $\mathbf{- 1 ,}$, Mo. +2, Va - 1 ; Ruhella: Mass. -4 , Wis -3 .

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending August 12, 1978, and August 13, 1977 (32nd week)

| Reporting area | TUBERCULOSIS |  | tula REMIA <br> cum. <br> 1974 | TYPHIID FEVER |  | TYPHLS FEVER(Tick.harne)(RMSF) |  | VENEREAL DISEASES (Codian) |  |  |  |  |  | RABIES <br> (in <br> Animals) <br> CUM. <br> $197 B$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | conarrhea |  |  | SYPHILIS (Pri. \& See.) |  |
|  | 1978 | CUM. <br> 1978 |  | 1978 | $\begin{aligned} & \text { Cum. } \\ & 1978 \end{aligned}$ |  |  | 1978 | $\begin{aligned} & \hline \text { CUM. } \\ & 1978 \end{aligned}$ | 1978 | $\begin{aligned} & \hline \text { cum } \\ & 1978 \end{aligned}$ | $\begin{aligned} & \text { CUM } \\ & 1977^{*} \end{aligned}$ | 1978 |  | $\begin{aligned} & \hline \text { CUM } \\ & 1978 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CUM. } \\ & 1971 \text {. } \end{aligned}$ |
| UNITED STATES | 668 | 18,567 |  | 65 | 6 | 266 | 60 | 662 | 21.926 | 596,628 | 595,737 | 431 | 12,804 | 12,562 | 1,876 |
| NEW ENGLAND | 14 | EC6 | - | - | 38 | 3 | 11 | 667 | 15,54, | 15,561 | 17 | 366 | 524 | 70 |
| Maine | 2 | 43 | - | - | - | - | - | 60 | 1.184 | 1,105 | - | 7 | 14 | 60 |
| N.H.t | - | 11 | - | - | 5 | - | - | 27 | 711 | 6.18 | - | 4 | 3 | 1 |
| V . | - | 25 | - | - | 1 | - | - | 17 | 355 | 407 | - | 3 | 6 | 1 |
| Mass. 1 | 9 | 355 | - | - | 22 | - | 3 | 285 | 6.881 | 6,714 | 9 | 224 | 376 | 6 |
| R.1. | - | 43 | - | - | 4 | - | 1 | 30 | 1.108 | 1.272 | - | 16 | 7 | - |
| Conn. | 3 | 129 | _ | - | 6 | 3 | 7 | 248 | 5,301 | 5,445 | 8 | 112 | 118 | 2 |
| mid. ATLANTIC | 83 | 3.171 | 3 | - | 30 | 4 | 41 | 2,310 | 63,873 | 60.183 | 52 | 1.703 | 1,745 | 50 |
| Upstate N.Y. | 21 | 470 | 2 | - | 7 | 1 | 23 | 405 | 10,977 | 10,325 | - | 133 | 168 | 39 |
| NY. City | 16 | 1.145 | 1 | - | 16 | - | 2 | 988 | 24.856 | 23,460 | 34 | 1,191 | 1.097 | - |
| N.J. | 25 | 781 | - | _ | 4 | 2 | 8 | 332 | 11.597 | 10,480 | 6 | 18 a | 226 | a |
| Pa . | 21 | 775 | - | - | 3 | 1 | 8 | 585 | 16,443 | 15,918 | 12 | 191 | 254 | 3 |
| E.N. CENTRAL | 134 | 2,840 | 1 | 1 | 17 | - | 14 | 3,432 | 89.777 | 93,640 | 59 | 1,408 | 1.339 | 105 |
| Ohio | 35 | 520 | 1 | - | 5 | - | 9 | 1.094 | 23.418 | 24.916 | 12 | 26: | 310 | 11 |
| Ind. | 15 | 336 | - | - | - | - | 1 | 480 | 9.337 | 8,488 | 1 | 86 | 101 | 8 |
| III. | 29 | 1.060 | - | - | 4 | - | 4 | 739 | 28,182 | 30.422 | 36 | 8 A 2 | 708 | 29 |
| Mich. 1 | 44 | ego | - | 1 | 8 | - | - | 960 | 20.764 | 21,390 | 8 | 135 | 153 | 5 |
| Wis. | 11 | 124 | - | 1 | - | - | - | 251 | 8,076 | 8.424 | 2 | 44 | 67 | 52 |
| W.N. CENTRAL | 14 | 616 | 12 | - | 12 | 3 | 20 | 981 | 30,042 | 31,331 | 14 | 304 | 279 | 402 |
| Minn. | 3 | 113 | - | _ | 4 | $-$ | - | 150 | 5,197 | 5.722 | 5 | 124 | 86 | 130 |
| Iowa | - | 69 | - | - | 2 | - | - | 126 | 3,362 | 3,624 | 1 | 38 | 26 | 81 |
| Mo. 1 | 7 | 263 | 11 | - | 4 | 2 | 13 | 416 | 12,899 | 13,182 | 1 | 81 | 101 | 47 |
| N. Dak. | 2 | 29 | - | - | - | - | 1 | 17 | 552 | 593 | - | 2 | 2 | 66 |
| S. Dak. | 2 | 52 | - | - | - | - | 2 | 38 | 1,071 | 913 | - | 2 | 2 | 56 |
| Nabr. | - | 12 | - | - | - | - | - | 77 | 2,243 | 2.667 | 1 | 9 | 24 | 2 |
| Kans. | - | 78 | 1 | - | 2 | 1 | 4 | 157 | 4.718 | 4.630 | 6 | 48 | 38 | 20 |
| S ATLANTIC | 141 | 4.021 | 6 | 1 | 37 | 36 | 384 | 5,798 | 145,986 | 148.492 | 125 | 3,380 | 3,530 | 253 |
| Del. | 161 | 31 | - | - | 1 | 1 | 5 | 152 | 1.993 | 2.024 | - | 6 | 18 | 1 |
| Md. | 31 | 614 | 4 | - | 6 | 3 | 87 | 725 | 18,552 | 18.608 | 8 | 258 | 236 |  |
| D.C. | 5 | 210 | - | - | 1 | - | - | 499 | 9,473 | 9.698 | 5 | 259 | 378 | - |
| Va . | 13 | 427 | 2 | - | 5 | 5 | 81 | 509 | 13,762 | 15,351 | 15 | 291 | 360 | 6 |
| W. Var ${ }^{\text {r }}$ | 4 | 167 | - | - | 2 | - | 9 | 82 | 2,060 | 2,011 | - | 9 | 2 | 4 |
| N.C. $\dagger$ | 24 | 624 | - | - | 2 | 18 | 129 | 886 | 20.859 | 21.810 | 27 | 345 | 501 | 6 |
| Sc. | 25 | 365 | - | - | - | 2 | 43 | 494 | 14,235 | 13,643 | 7 | 173 | 155 | 60 |
| Ga. $\dagger$ | 15 | 538 | - | - | 3 | 7 | 30 | 1,287 | 28,124 | 28,804 | 26 | 824 | 742 | 165 |
| Fla. | 29 | 1.045 | - | 1 | 13 | - | - | 1,184 | 36,928 | 36,543 | 37 | 1,225 | 1,196 | 11 |
| E.S. CENTRAL | 60 | 1.714 | 5 | 2 | 7 | $a$ | 117 | 1,818 | 51,380 | 52,973 | 25 | 656 | 448 | 94 |
| $K_{y}$. | 25 | 371 | 2 | - | 2 | - | 34 | 266 | 6,393 | 7.256 | 2 | 85 | 53 | 51 |
| Tenn. | 30 | 531 | 3 | 2 | 3 | 3 | 73 | 667 | 18,994 | 21.565 | 5 | 223 | 143 | 19 |
| ${ }_{\text {Ala }}$ | 10 | 4 Cl | - | 2 | 1 | - | 5 | 477 | 14,688 | 14.234 | 3 | 104 | 86 | 24 |
| Miss. | 15 | 405 | - | - | 1 | - | 5 | 408 | 11,305 | 9.918 | 15 | 244 | 166 | - |
|  | 70 | 2,190 | 32 | - | 31 | 4 | 66 | 2,845 | 81.616 | 74,684 | 65 | 2,021 | 1,758 | 610 |
| Ark. | 6 | 232 | 21 | - | 2 | 1 | 9 | 168 | 6,176 | 5,783 | - | 2.029 | 1.44 | 91 |
|  | 23 | 388 | 5 | - | 3 | - | 1 | 455 | 13,344 | 11,038 | 17 | 434 | 412 | 11 |
| Okla. | - | 219 | 3 | - | 2 | 3 | 38 | 244 | 7,674 | 7,086 | - | 58 | 51 | 131 |
| Tex. | 41 | 1,351 | 3 | - | 24 | - | 18 | 1,978 | 54,422 | 50,777 | 48 | 1,480 | 1.251 | 377 |
| MOUNTAIN | 28 | 549 | 4 | - | 14 | 2 | 6 | 897 | 22.402 | 24,072 | 4 | 258 | 253 | 44 |
| Mant. | 2 | 36 | - | - | - | - | 2 | 37 | 1,296 | 1.225 | - | 7 | 4 | 4 |
| Waho. | 1 | 22 | 2 | - | 5 | 1 | 2 | 54 | 850 | 1,138 | - | 7 | 5 | - |
| Colo. | - | 13 | 1 | - | - | 1 | 1 | 20 | 528 | 596 | - | 5 | 2 | 17 |
| N. Mex. | 6 | 53 | - | - | 3 | - | - | 256 | 6.195 | 6.213 | 3 | 75 | 75 | 17 |
| N. Mex. Ariz. | 14 | 85 268 | - | - | 2 | - | - | 98 237 | 3.237 5.804 | 3,539 | - | 60 | 48 104 | 12 |
| Utah | 14 | 268 | $\overline{1}$ | - | 1 | - | - | 237 42 | 5,804 1.194 | 6.847 1.374 | - | 61 11 | 104 | 12 |
| Nev. | 1 | 47 | - | - | 1 | - | 1 | 153 | 3,298 | 3.140 | 1 | 32 | 10 |  |
| PACIFIC | 104 | 2.E60 | 2 | 2 | 80 | - | 3 | 3.178 | 96,012 | 94.801 | 70 | 2.708 | 2.628 | 248 |
| Wash. | - | 145 | - | - | 6 | - | $-$ | 304 | 7,610 | 7,106 | - | 118 | 152 | - |
| Oreg | 2 | 122 | - | - | 1 | - | 2 | 299 | 6,717 | 4.,461 | 2 | 87 | 72 | 6 |
| Calif, | 87 | 2.193 | 2 | 7 | 66 | - | 1 | 2,405 | 76,856 | 76,133 | 68 | 2.470 | 2.361 | 234 |
| Alaska | $\overline{5}$ | 246 | - | - | - | - | - | 98 | 3,343 | 3.113 | - | 7 | 18 | 8 |
| Hawai | 15 | 354 | - | - | 7 | - | - | 72 | 1,786 | 1,988 | - | 26 | 25 | - |
| Guam | NA | 37 | - | NA | - | NA | - | NA | 119 | 137 | NA | - | 1 | - |
| P.R. | 9 | 252 | - | - | 1 | N | - | 32 | 1,303 | 1,967 | 15 | 278 | 347 | 22 |
| V.I. | - | 4 | - | - | 2 | - | - | - | 133 | 124 | - | 17 | 7 | - |

NA: Not available.
"Delayed reports received for 1977 are not shown below but are used to update last year's weekly and cumulative totals.
the following delayed reports will be reflected in next weak's cumulative totals: TB: Mich. $\mathbf{- 4}, \mathrm{N} . \mathrm{C} .-1, \mathrm{Ga} .+15$; Tularemia: Mo. +1 ; GC: N. H. +2 (mil.);
Syphilis: Mass. +1; Rahies in animals: W.Va, +4.

TABLE IV. Deaths in 121 U.S. cities,* week ending
August 12, 1978 (32nd week)

| REPORTING AREA |  |  |  |  |  | $P \& l^{* *}$TOTAL | heporting area | all causes, gy age (years) |  |  |  |  | $\left\lvert\, \begin{array}{l\|l\|l} \text { P\& \& } \\ \text { TOTAL } \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { ALL } \\ \text { AGES } \end{gathered}$ | 5 P5 | 45.64 | 25-44 | $<1$ |  |  | ALL AGES | $>65$ | 45.64 | 25.44 | $<1$ |  |
| NEW ENGLAND <br> Boston, Mass. <br> Bridgaport, Conn. <br> Cambridge. Mass. <br> Fall River, Mass. <br> Hartford, Conn. <br> Lowell, Mass. <br> Lynn, Mass. <br> Naw Bedford, Mass. <br> New Haven, Cann. <br> Providence, R.I. <br> Somerville, Mass. <br> Springfield, Mass. <br> Waterbury, Conn. <br> Worcaster, Mass. | 559 | 373 | 132 | 20 | 23 | 35 | S. ATLANTIC | 1,187 | 631 | 346 | 92 | 64 | 50 |
|  | 149 | 52 | 37 | 9 | 8 | 9 | Atlanta, Ga. | 119 | 59 | 35 | 16 | 5 | 3 |
|  | 39 | 22 | 14 | 1 | 2 | 2 | Baltimore, Md. | 295 | 159 | 88 | 19 | 10 | 5 |
|  | - | - | - | - | - | $\underline{-}$ | Charlotte, N.C. | 62 | 26 | 22 | 5 | 9 | 3 |
|  | 26 | 20 | 4 | - | - | - | Jacksonvilla, Fla. | 60 | 25 | 23 | 4 | 4 | 1 |
|  | 37 | 23 | 10 | 1 | 1 | 2 | Miami. Fia. | 97 | 55 | 27 | 6 | 3 | 4 |
|  | 25 | 24 | 1 | - | - | 5 | Norfolk, Va. | 58 | 26 | 16 | 4 | 6 | 4 |
|  | 20 | 13 | 5 | - | 1 | 1 | Richmond, Vs. | 61 | 34 | 17 | 5 | - | 4 |
|  | 25 | 18 | 6 | 1 | - | - | Savannah, Ga. | 23 | 10 | 6 | 2 | 4 | 1 |
|  | 48 | 33 | 10 | 3 | 1 | 3 | St. Petarsburg, Fla. | 72 | 54 | 14 | 2 | 2 | 4 |
|  | 65 | 39 | 17 | 2 | 7 | 7 | Tampa, Fla. | 65 | 34 | 23 | 2 | 4 | 8 |
|  | 7 | 4 | 2 | 1 | - | - | Washington, D.C. | 240 | 125 | 68 | 25 | 16 | 12 |
|  | 37 | 24 | 10 | 1 | 2 | 3 | Wilmington, Del. | 35 | 24 | 7 | 2 | 1 | 1 |
|  | 28 | 19 | 6 | 1 | - | 3 |  |  |  |  |  |  |  |
|  | 53 | 42 | 10 | - | 1 | - |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | E.S. CENTRAL | 681 | 385 | 184 | 41 | 37 | 29 |
|  |  |  |  |  |  |  | Birmingham, Ala | 107 | 60 | 30 | 5 | 8 | - |
| MID. ATLANTIC | 2,576 1 | 1,557 | 661 | 165 | 79 | 106 | Chattanooga, Tenn. | 48 | 30 | 14 | 2 |  | 3 |
| Albany. N.Y. | 37 | 19 | 9 | 2 | 5 | - | Knoxville, Tenn. | 51 | 35 | 10 | 5 | - | , |
| Allantown, Pa | 24 | 13 | 6 | 4 | - | - | Louisville, Ky. | 89 | 62 | 18 | 4 | 2 | 9 |
| Buffalo, N.Y. | 106 | 60 | 29 | 11 |  | 8 | Memphis, Tenn. | 173 | 92 | 45 | 10 | 17 | 2 |
| Camden, N.J. | 34 | 21 | 9 | 3 | 1 | 4 | Mobile, Als. | 59 | 35 | 15 | 4 | 2 | 2 |
| Elizabeth, N.J. | 23 | 13 | 7 | 2 | - | - | Montgomery, Ala. | 33 | 18 | 7 | 1 | 3 | 5 |
| Erie, Pa. | 38 | 26 | 10 | 2 | 2 | 1 | Nashville, Tenn. | 121 | 53 | 45 | 10 | 5 | 7 |
| Jersay City, N.J. | 62 | 41 | 14 | 4 | 3 | 3 |  |  |  |  |  |  |  |
| Nowark, N.J. | 51 | 22 | 15 | 8 | 5 | 2 |  |  |  |  |  |  |  |
| N.Y. City, N.Y. | 1,335 | 815 | 345 | 90 | 40 | 51 | W.S. CENTRAL | 1.222 | 657 | 329 | 102 | 61 | 39 |
| Patarson, N.J. | 40 | 27 | 9 | 1 | 1 | 5 | Austin, Tex. | 42 | 27 | 10 | 2 | - | 2 |
| Philadelphia, Pa. | 393 | 235 | 114 | 24 | 10 | 10 | Baton Rouga, La. | 34 | 17 | 9 | 2 | 4 | 4 |
| Pittsburgh, Pa. | 70 | 41 | 22 | 5 | 1 | 1 | Corpus Christi, Tex. | 21 | 10 | 5 | 4 | 1 | 1 |
| Reading, Pa, | 44 | 31 | 10 | 1 | 1 | - | Dallas, Tex. | 176 | 106 | 40 | 14 | 5 | 4 |
| Rochester, N.Y. | 106 | 78 | 21 | 4 | 2 | 10 | El Paso, Tax. | 46 | 26 | 9 | 5 | 2 | 2 |
| Schanectady, N. Y. | 18 | 16 | 2 | - | - |  | Fort Worth, Tex. | 88 | 52 | 20 | 7 | 6 | 1 |
| Scranton, Pa. | 26 | 18 | 7 | - | $\overline{5}$ | 1 | Hauston, Tex. | 321 | 154 | 96 | 37 | 12 | 5 |
| Syracuse, N.Y. | 75 | 47 | 18 | 2 | 5 | 3 | Little Rack, Ark. | 50 | 29 | 16 | 1 | 3 | 6 |
| Tranton, N.J. | 38 | 29 | 6 | 2 | 1 | 2 | New Orleans, La. | 146 | 74 | 42 | 9 | 9 | - |
| Utica, N.Y. | 29 | 24 | 3 | 1 | 1 | 3 | San Antonio, Tex. | 157 | 83 | 43 | 13 | 12 | , |
| Yonkers, N.Y. | 27 | 21 | 5 | 1 | - | 2 | Shreveport, La | 71 | 39 | 20 | $2$ | 6 | 4 |
|  |  |  |  |  |  |  | Tulsa, Okla. | 72 | 40 | 19 | 6 | 1 | 5 |
| E.N. CENTRAL | 2,085 1 | 1,212 | 584 | 146 | 71 | 57 |  |  |  |  |  |  |  |
| Akron, Ohio | 50 | 32 | 14 | 2 | - | - | MOUNTAIN | 530 | 287 | 138 | 43 | 23 | 10 |
| Canton, Ohio | 45 | 27 | 15 | 3 | 3 | 1 | Albuquerque, N. Mex. | 54 | 29 | 15 | 5 | 1 | 2 |
| Chicago. 111. | 483 | 252 | 158 | 39 | 19 | 11 | Colo. Springs, Colo. | 39 | 25 | 6 | 4 | 1 | 3 |
| Cincinnari, Ohio | 137 | 86 | 34 | 6 | 5 | 4 | Denver, Colo. | 117 | 61 | 33 | 9 | 6 | , |
| Cleveland, Ohio | 160 | 84 | 49 | 15 | 8 | 2 | Las Vegas, Ney. | 36 | 18 | 13 | 2 | 1 | $?$ |
| Columbus, Ohio | 137 | 79 | 38 | 9 | 8 | 9 | Ogden, Utah | 17 | 10 | 4 | 1 | - | 1 |
| Dayton, Ohio | 58 | 67 | 21 | 5 | 2 | 1 | Phoanix, Ariz. | 121 | 64 | 36 | 10 | 4 | 1 |
| Detroit, Mich. | 245 | 136 | 10 | 22 | 5 | 8 | Puabia, Colo. | 10 | 6 | 3 |  | 1 | 1 |
| Evanswille, Ind. | 46 | 34 | 9 | 2 | - | 2 | Salt Lake City, Uzah | 54 | 26 | 9 | 7 | 5 |  |
| Fort Wayne, Ind. | 52 | 36 | 11 | 4 | - | 1 | Tueson, Ariz. | 82 | 48 | 19 | 5 | 4 |  |
| Gary, Ind. | 14 | 7 | 5 | - | 1 | - |  |  |  |  |  |  |  |
| Grand Rapids, Mich. | . 50 | 36 | 7 | 5 | 2 | 2 |  |  |  |  |  |  |  |
| Indianapolis, Ind. | 137 | 71 | 43 | 10 | 6 | - | PACIFIC | 1,539 | 965 | 367 | 87 | 54 | 30 |
| Madison, Wis. | 34 | 16 | 14 | 1 | 2 | 2 | Berkelev, Calif. | 17 | 13 | 4 | - | - | - |
| Milwaukee, Wis. | 120 | 02 | 26 | 7 | 3 | 2 | Fresno, Calif. | 73 | 39 | 14 | 7 | 4 | 1 |
| Peoria, III. | 51 | 26 | 14 | 4 | 2 | 4 | Glendale, Calif. | 22 | 15 | 6 | 1 | - |  |
| Rockford, III. | 39 | 24 | 8 | 5 | - | 5 | Honolulu, Hawaii | 65 | 31 | 19 | 3 | 1 |  |
| South Bend, Ind. | 35 | 25 | 8 | - | 1 | 1 | Long Beach, Calif. | 98 | 52 | 26 | 5 | 2 | , |
| Toledo. Otrio | 107 | 67 | 28 | 6 | 2 | 2 | Los Angeler, Calif. | 414 | 295 | 113 | 29 | 20 | 9 |
| Youngtown, Ohio | 41 | 25 | 12 | 2 | 2 | - | Oakland, Calit. | 72 | 42 | 22 | 3 | 3 | - |
|  |  |  |  |  |  |  | Pasadena, Calif. | 29 | 23 | 5 |  | 1 | 1 |
|  |  |  |  |  |  |  | Portland, Oreg. | 96 | 64 | 22 | 2 | 4 | 1 |
| W.N. CENTRAL | 665 | 436 | 136 | 25 | 33 | 21 | Sacramento, Calif. | 62 | 44 | 11 | 5 | 4 | , |
| Das Moines, Iowa | 4 B | 35 | 9 | 2 | 1 | - | San Diago, Calit. | 120 | 73 | 26 | 7 | 7 | 2 |
| Duluth, Minn. | 35 | 29 | 4 | 1 | 1 | 3 | San Francisco, Calif. | 143 | 100 | 27 | 7 | 5 | 4 |
| Kanzas City, Kans. | 31 | 16 | 9 | 1 | 1 | 3 | San Jose, Calif. | 53 | 34 | 13 | 4 | 1 | 2 |
| Kanses City, Mo. | 116 | \%1 | 19 | 7 | 5 | $-$ | Seattle, Wash. | 132 | 14 | 39 | 8 | 4 | 4 |
| Lincoln, Nabr. | 24 | 16 | 7 | 3 | 1 | - | Spokane, Wash. | 63 | 39 | 12 | 5 | 2 | 1 |
| Minneapolis, Minn. | 90 | 51 | 22 | 3 | 7 | 3 | Tacoma, Wash. | 35 | 27 | 4 | 1 |  | 1 |
| Omaha, Nebr. | 78 | 44 | 19 | 2 | 5 | 3 |  |  |  |  |  |  |  |
| St Louis, Mo. | 132 | 08 | 25 | 5 | 9 | 4 |  |  |  |  |  |  |  |
| Se. Paul, Minn. | 60 | 37 | 13 | 4 | 1 | - | TOTAL | 11,044 | 6,543 | 2,877 | 721 | 445 | 377 |
| Wichita, Kans. | 51 | 39 | 9 | - | 2 | 5 | Expectad Number | 10.909 | 6,521 | 2,808 | 718 | 429 | 363 |

[^2]
## Current Trends

## Measles and School Immunization Requirements - United States, 1978

Schools are commonly regarded as major sites of measles transmission in this country. Of 41,584 reported measles cases in 1977 for whom the age of patients was known, 34,163 ( $82.2 \%$ ) were in children $5-19$ years old; most ( $57 \%$ ) were in 10 - to 19 -year-olds (1).

In recent years, increasing attention has been paid to requirements for a history of measles or measles immunization for children entering school. Such requirements currently exist in 49 states and Washington, D.C. In some of these states, these requirements apply to children in upper grades. Effective enforcement of these requirements has been variable; in some cases it has been complicated by absence of a clear allocation of responsibility.

As of December 31, 1977, at least 6 states* were enforcing school measles immunization requirements or measles-related health laws for students beyond entry level, to the extent of excluding any students who could not document their immune status. Table 3 compares reported measles incidence rates in 1975-1977 and in the first 31 weeks of 1978 in these 6 states with incidence rates for the rest of the United States.
TABLE 3. Incidence of reported measles in states enforcing school immunization laws beyond the entry level prior to 1978 and in other states*,1975-first 31 weeks, 1978

|  | Reported measles cases per 100,000 population $<18$ years old* * |  |  | Reported |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Mean for } \\ & \text { 1975-1976 } \end{aligned}$ | 1977 | $\begin{gathered} 1978 \\ \text { (first } 31 \text { weeks) } \end{gathered}$ | first 31 weeks, 1978 |
| 6 states strictly enforcing laws | 47.0 | 40.6 | 2.7 | 83 |
| Remainder of nation | 50.4 | 90.3 | 35.2 | 21,856 |

*Data include Washington, D.C.
** 1976 population data
Before enforcement (1975-1976), reported measles incidence rates in these 2 groups of states were similar. During the first 31 weeks of 1978 reported measles incidence rates in the 6 states enforcing their laws ( 2.7 cases $/ 100,000$ population $<18$ years old) were $92.3 \%$ less than the rate in the rest of the United States ( 35.2 cases $/ 100,000$ population $<18$ years old).
Reported by the Immunization Div, Bur of State Services, CDC.
Editorial Note: The existence of school immunization requirements within states has previously been demonstrated to correlate with a measles incidence rate that is approximately $55 \%$ of that in states without requirements (2). The above data indicate that vigorous enforcement of such school requirements and measies-related public health laws is associated with a significant further reduction in reported measles cases. Children in areas that have enforced these requirements are therefore at lower risk of measles and its complications.

Other approaches, in addition to exclusion from school, can be used to improve Compliance with state requirements. In Tennessee, for example, the State Departments of Education and Public Health will cooperate in arranging an entorcement system whereby school children without proof of adequate immunization "will not be counted

[^3]
## Measles - Continued

in the average daily attendance of students for the distribution of state school funds" (3).

Published experience with enforcement programs in Alaska (4), Los Angeles (5), and Detroit (6) (the latter affecting primarily kindergarteners) indicates that necessary immunizations are quickly obtained by most delinquent pupils and that exclusion from school for significant periods is uncommon.

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3. Tennessee State Department of Public Health: Tennessee Communicable Disease Bulletin 8(8): August 1978
4. Middaugh JP, Zyla LD: Enforcement of school immunization law in Alaska. JAMA 239:21282130, 1978
5. Fannin S: Untitled presentation at 12th Annual Immunization Conference, Atlanta, May 23-26, 1977
6. MMWR 27:8, 1978

## Epidemiologic Notes and Reports

## Follow-up on Dengue - Puerto Rico, United States

Puerto Rico: There have been 8,413 suspected cases of dengue reported thus far in 1978 in Puerto Rico. This figure is markedly greater than that for the same time period in 1976 or 1977 (Table 4).
TABLE 4. Reported incidence of dengue-like illness, Puerto Rico, cumulative totals, 1976-1978

| Year | Number of cases <br> cumulative, week 31 | Yearly |
| :--- | :---: | ---: |
| 1976 | 266 | 412 |
| 1977 | 277 | 11,824 |
| 1978 | 8,413 | -- |

Several hundred cases in the early months of 1978 were associated with the outbreak that began in 1977, but there was a sharp increase in reported cases beginning in May, indicating a new outbreak (Figure 1). Dengue-like disease has been reported in 1978 from all Puerto Rican municipios.

The largest number of cases was reported in June $1978(3,883)$, following a period of heavy rain. During July there was little rain (less than 1 inch/week, average), and the number of reported cases fell to 2,418 . The rainy season in Puerto Rico began the week of August 7.

Dengue virus type 1 was first isolated in Puerto Rico in December 1977 toward the end of that year's outbreak. Nearly all (97/103) confirmed dengue isolates in 1978 have been the type 1 strain. Type 3 dengue virus was the major strain isolated during the Puerto Rican outbreak of 1963-64. Type 2 prevailed from 1968 through the peak of the 1977 outbreak.

Although there have been no reported cases of dengue shock syndrome, to date, in the Caribbean, there have been reports of patients with minor hemorrhagic manifestations. In Puerto Rico there are at least 7 patients (age range: 6 weeks- 63 years), with findings including one or more of the following hemorrhagic manifestations: positive tourniquet test, petechiae, epistaxis, hematuria, guaiac positive stool, and/or thrombo-

## Dengue - Continued

cytopenia $\left(<100,000 / \mathrm{mm}^{3}\right.$ ). Also, dengue virus has been isolated from at least 5 women during the first trimester of pregnancy. Follow-up on these patients and their offspring is pending.
FIGURE 1. Reported cases of dengue-like illness, by month, Puerto Rico, 1977-1978


Larval indices for Aedes aegypti, the mosquito vector of dengue, are increased over those from previous years, indicating an increased vector population in the areas examined. The Breteau index* reported from the July 1978 larval survey in Ponce was 31, the highest in that area for that month since surveying began in 1973. However, in 2 areas with active programs to clean up the environment the index from January-July 1978 was $3-60 \%$ lower than the average of those areas from 1973-1977. By contrast, the index from 2 comparable areas without such programs was $30 \%$ higher than the 1973-1977 average. Malathion spraying efforts continue throughout Puerto Rico, particularly in the San Juan metropolitan area and towns reporting large numbers of suspected cases.

- The number of positive containers $\div$ total number of houses) $\times 100$

[^4]
## Dengue - Continued

United States: I wenty-two cases of serologically confirmed dengue have been reported in 1978 in persons entering the United States from the Caribbean ( 20 cases) and Tahiti (2). Reports are from 12 different states. A secondary type serologic response (suggesting that the patients had had a previous Group B arboviral infection) was demonstrated in nearly half of the cases; there has been no report of hemorrhagic complications in any of the 22 patients. During 1977 there were a total of 70 confirmed cases of dengue imported into the United States.
Reported by J Chiriboga, MD, Environmental Health, Puerto Rico Dept of Health; San Juan Laboratories, Bur of Laboratories, Vector Biology and Control Div, Bur of Tropical Diseases, and Viral Diseases Div, Bur of Epidemiology, CDC.
Editorial Note: Dengue fever is a disease of interest throughout the Caribbean area, particularly as the peak of the rainy season approaches. Vector populations generally increase following heavy rainfall, and increased viral transmission may subsequently occur.

The large number of cases in 1978 may reflect the impact of the appearance of dengue virus type 1 infection upon a susceptible population. Also, other illnesses resembling dengue may be present, as the rate of serologic confirmation has decreased since May from $81 \%$ to $70 \%$ positive among specimens tested. During the 1977 outbreak many cases of influenza $A$ were identified among specimens negative for dengue. Currently, the CDC San Juan Laboratory is testing negative specimens for measles and influenza antibodies.
U.S. travelers to areas with known dengue activity are encouraged to take measures to prevent mosquito bites and to report to their physicians any illness with fever, headache, myalgias, and rash with onset within 4 weeks of leaving those areas.

Erratum, Vol. 27, No. 30

p 267 The article "Human Rabies - Texas" reported erroneously that 14 persons were undergoing rabies prophylaxis as a result of exposure to a recent human case of rabies. Only 10 persons actually were treated; 4 were judged not to have been exposed.

## U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE / CENTER FOR DISEASE CONTROL ATLANTA, GEORGIA 30333

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[^0]:    Reported by Bur of Smallpox Eradication and Quarantine Div, Bur of Epidemiology, CDC.

    ## Reference

    1. CDC: Health Information for International Travel. MMWR 27(suppl), August 1977. (1978 in press)
[^1]:    - Delayed reports received for calendar year 1977 are used to update last year's weekly and cumulative totals
    *"Medians for gonorrhea and syphilis are based on data for 19751977.
    $\dagger$ The following delayed reports will be reflected in next week's cumulative totals: Leprosy: Va. +1 : Psittacosis: N.H. -1 (1978), $\mathbf{- 1}$ (1977), Calo. +1

[^2]:    "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 fited. Fetal deaths are not included.
    *-Pneumonia and influenza

[^3]:    *Alaska, Colorado, Hawaii, Maryland, New Mexico, South Dakota

[^4]:    The Morbidity and Mortality Weekly Report, circulation 78,750, is published by the Center for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly teleFriphs 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. Send reports to: Center for Disease Control, Attn: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

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