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## Progress in Chronic Disease Prevention

## Survey of Chronic Disease Activities in State and Territorial Health Agencies

In February 1987, the Association of State and Territorial Health Officials (ASTHO) conducted a survey to gather information on current chronic disease activities in state and territorial health agencies. Ninety-five percent (52) of the 55 member agencies responded.

Forty-nine state and territorial agencies reported having a formal, written health plan. The chronic disease portion of 40 of these plans cite prevention and control activities specifically. The activities most frequently targeted hypertension, followed by heart disease and cancer (Table 1). Fourteen states reported having a cancer control plan separate from the state health plan.

Most states have a unit that administers chronic disease activities. Within such units, the disease most frequently addressed was cancer, with hypertension,

TABLE 1. Chronic disease activities cited in state and territorial health plans United States, 1987

| Activity | Number of health <br> plans in which cited |
| :--- | :---: |
| Hypertension | 39 |
| Heart Disease | 35 |
| Cancer | 34 |
| Smoking Cessation/Prevention | 32 |
| Dietary Modification | 29 |
| Alcoholism Prevention | 29 |
| Stroke | 28 |
| Diabetes | 26 |
| Chronic Obstructive Pulmonary Disease | 14 |
| Arthritis | 10 |
| Liver Disease and Cirrhosis | 9 |
| Osteoporosis | 6 |
| Other | 8 |

Chronic Disease Activities - Continued
diabetes, and heart disease following in close order (Table 2). The survey also investigated the degree of collaboration between state and territorial health agencies and voluntary associations. Forty-one health agencies communicate formally or informally with the American Cancer Society; 36, with the American Heart Association; 33, with the American Diabetes Association; and 25, with the Juvenile Diabetes Foundation. Three agencies have initiated joint projects with the American Cancer Society; eight, with the American Heart Association; ten, with the American Diabetes Association; and two, with the Juvenile Diabetes Foundation.

Risk-reduction activities occur in most states and territories. Forty-four respondents reported sponsoring diet-modification activities; 33 have smoking cessation programs; and 27 promote alcohol-abuse prevention programs. Twenty-eight respondents sponsor exercise programs, and 27 sponsor stress reduction activities. All 52 respondents indicated that cigarettes are taxed above the federal excise tax. Taxes range from 2 to 38 cents per pack, with the majority of states taxing within a range of 15 to 25 cents per pack (Figure 1).

TABLE 2. Disease areas addressed by state and territorial chronic disease units United States, 1987

| Area | Number of units <br> in which addressed |
| :--- | :---: |
| Cancer | 40 |
| Hypertension | 39 |
| Diabetes | 33 |
| Heart Disease | 32 |
| Stroke | 25 |
| Osteoporosis | 11 |
| Alzheimer's Disease | 11 |
| Arthritis | 7 |
| Chronic Obstructive Pulmonary Disease | 6 |
| Liver Disease and Cirrhosis | 5 |
| Other | 22 |

FIGURE 1. Cigarette tax per 20-count pack, by state - Association of State and Territorial Health Officials Survey, 1987


Chronic Disease Activities - Continued
In order to determine which data sources are most useful to state and territorial agencies, the survey included questions about their availability and frequency of use. Agencies indicated that hospital discharge data, mortality statistics, cancer registry data, and population-based survey data are frequently utilized (Table 3). Where private insurance or workmen's compensation data are available, fewer than half the states and territories use these sources.

Screening programs are available in over half the states and territories surveyed (Table 4). Hypertension screening is the program most frequently cited, followed by screening for cervical cancer and breast cancer. Twenty-four of the states with hypertension screening programs perform cholesterol screening as well. Nine of the states with cervical cancer screening programs have cytology laboratories that read Papanicolaou smears. Twenty-five states require licensing for cytology laboratories. Mammography is performed in nine of the states and territories with breast cancer screening programs, and breast palpation is performed in 28 of them. Thirty-seven health agencies provide education for breast self-examination. Many of these programs are conducted in conjunction with other agencies.

TABLE 3. Data sources available to state and territorial health agencies, by availability and usage - United States, 1987

|  | Number of agencies in which |  |
| :--- | :---: | :---: |
| Source | Available | Used |
| Mortality Statistics | 52 | 51 |
| Cancer Registry | 39 | 36 |
| Hospital Discharge, Population-Based | 38 | 31 |
| Survey Data | 37 | 35 |
| Special Surveillance Studies | 34 | 34 |
| Medicaid Reimbursement Data | 33 | 22 |
| Workmen's Compensation | 19 | 7 |
| Chronic Disease Registries | 15 | 14 |
| Private Insurance Data | 14 | 7 |
| Other | 7 | 6 |

TABLE 4. Screening activities performed by state and territorial health agencies United States, 1987

| Area | Number of agencies <br> performing screening |
| :--- | :---: |
| Hypertension/Heart | 42 |
| Cervical Cancer | 33 |
| Breast Cancer | 30 |
| Diabetes | 25 |
| Glaucoma | 23 |
| Colon Cancer | 19 |
| Oral Cancer | 12 |
| Testicular Cancer | 9 |
| Skin Cancer | 7 |
| Other | 6 |

Chronic Disease Activities - Continued
The needs most frequently mentioned in the comments section of the questionnaire were for a mechanism to exchange information among states; for additional funding for chronic disease control programs; for assistance in collecting and analyzing morbidity and mortality data; for national leadership in developing model programs and screening standards and in training staff; and for assistance in efforts to develop legislation related to chronic disease.
Reported by the Association of State and Territorial Health Officials; Div of Chronic Disease Control, Center for Environmental Health and Injury Control, CDC.
Editorial Note: This survey represents an initial attempt to determine the extent of chronic disease activities in state and territorial public health agencies. The results suggest that the majority of states and territories have begun to establish a structure for the development and delivery of chronic disease programs. To better understand the level of effort and comparability of program activity, ASTHO will continue monitoring state and territorial activity.

## Topics in Minority Health

## Tuberculosis Among Hispanics - United States, 1985

In 1985, 22,201 tuberculosis cases were reported to CDC, for a rate of 9.3/100,000 U.S. population (1). Fourteen percent $(3,134)$ of the 22,067 patients with known ethnicity were Hispanic. Ninety-seven percent $(3,032)$ of these Hispanics were white. The rate among Hispanics was $18.1 / 100,000$, which is 4 times the rate of $4.5 / 100,000$ for the non-Hispanic white population.

Tuberculosis cases among Hispanics were reported from 11\% (337) of the nation's 3,138 counties (Figure 1). California reported $40 \%(1,239)$ of the cases among Hispanics; Texas, 23\% (731); New York, 13\% (394); and all other states combined, 25\% (770).

FIGURE 1. Counties reporting tuberculosis among Hispanics - United States, 1985


Tuberculosis - Continued
Thirty-four percent $(1,064)$ of the 3,134 Hispanic patients were born in the United States, including 5\% (169) from Puerto Rico. Forty-two percent $(1,306)$ were foreignborn. There was no information on place of birth for $24 \%$ (764). Country of origin was known for 1,284 of the foreign-born patients. Of these, $62 \%$ (799) were from Mexico; $6 \%$ ( 81 ) were from Cuba; $5 \%$ (70) were from El Salvador; and $26 \%$ (334) were from 29 other countries. Twenty-three percent (219) of the 944 foreign-born patients with known year of arrival developed tuberculosis within their first year of residence in the United States; 11\% developed it within their second year of residence.

Forty-eight percent $(1,503)$ of the 3,132 patients with known age were $<35$ years of age, and $11 \%(350)$ were $<15$ years. Foreign-born patients were even younger. Of these, $57 \%$ (535) were $<35$ years of age when tuberculosis was reported, and an additional $17 \%$ (157) were $<35$ years of age when they arrived in the United States.
Reported by: Div of Tuberculosis Control, Center for Prevention Svcs, CDC.
Editorial Note: All states are currently submitting information on the ethnicity of tuberculosis patients. The difficulty of accurately estimating population sizes within this group between censuses makes it impossible, however, to reliably determine rates of tuberculosis among Hispanics by geographic area. However, a large proportion of Hispanics live in California, Texas, and New York, and three-quarters of the tuberculosis cases among Hispanics were reported from these areas.

Hispanics, 17.3 million of whom resided in the United States in 1985, are the second largest minority in the United States (2). They are also the youngest minority population in the United States (2). Similarly, Hispanics reported to have tuberculosis in 1985 were younger than tuberculosis patients among other minorities (3-5). They were considerably younger than non-Hispanic whites with tuberculosis (6). Almost half were younger than 35 years of age.

Foreign-born Hispanics accounted for $40 \%$ of all Hispanic tuberculosis patients and were younger than Hispanic tuberculosis patients born in the United States. Threequarters of foreign-born Hispanic patients were younger than 35 years of age when they arrived in the United States. Furthermore, over $30 \%$ of these patients developed tuberculosis within their first 2 years of residence in the United States.

These data indicate that a large proportion of tuberculosis among Hispanics is potentially preventable. Preventive chemotherapy should be offered to infected persons according to current guidelines (7).

References

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2. Spencer G. Projections of the Hispanic population: 1983 to 2080. Washington, DC: Bureau of the Census, 1986. (Current Population Reports; series P-25, no. 995).
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4. CDC. Tuberculosis among Asians/Pacific Islanders. MMWR 1987;36:331-4.
5. CDC. Tuberculosis among American Indians and Alaskan Natives-United States, 1985. MMWR 1987;36:493-5.
6. CDC. Tuberculosis in Minorities - United States. MMWR 1987;36:77-80.
7. American Thoracic Society, CDC. Treatment of tuberculosis and tuberculosis infection in adults and children. Am Rev Respir Dis 1986;134:355-63.

## Epidemiologic Notes and Reports

## Enterovirus Surveillance - United States, 1987

Since 1970, CDC has requested reports on enterovirus serotypes isolated by state health department laboratories. These reports are submitted to CDC on a monthly basis approximately 6 to 8 weeks after a specimen is submitted to the state virology laboratory. Since 1985, reports from early in the enterovirus season (March-May) have been tabulated and used to predict the types likely to be commonly isolated during the peak of the season (usually July-October).

This year, CDC has received reports of 47 nonpolio enterovirus (NPEV) isolates identified by state virology laboratories from March through May. Echovirus 11 was isolated most frequently (nine isolates), followed by echovirus 6 (eight isolates),
(Continued on page 575)
TABLE I. Summary - cases specified notifiable diseases, United States

| Disease | 34th Week Ending |  |  | Cumulative, 34th Week Ending |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { August 29, } \\ 1987 \end{gathered}$ | $\begin{gathered} \hline \text { August 23, } \\ 1986 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Median } \\ 1982-1986 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { August 29, } \\ 1987 \\ \hline \end{gathered}$ | $\begin{gathered} \text { August 23, } \\ 1986 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Median } \\ 1982-1986 \\ \hline \end{gathered}$ |
| Acquired Immunodeficiency Syndrome (AIDS) | $529$ | $170$ | $N$ | $12,301$ | $8,118$ | $N$ |
| Aseptic meningitis | $528$ | $587$ | 400 | $6,239$ | $5,407$ | $4,641$ |
| Encephalitis: Primary (arthropod-borne \& unspec) Post-infectious | 62 | 40 | 40 | 747 | 656 75 | 697 75 |
| Gonorrhea: Civilian | 14,661 | 18,862 | 18,959 | 508,128 | 569,880 | 569,880 |
| Military | 333 | 412 | 431 | 10,863 | 10,869 | 14,032 |
| Hepatitis: Type A | 416 | 400 | 429 | 15,977 | 14,234 | 14,095 |
| Type B | 500 | 546 | 527 | 16,823 | 16,959 | 16,400 |
| Non A, Non B | 49 | 72 | N | 2,007 | 2,384 | N |
| Unspecified | 82 | 54 | 110 | 2,071 | 2,969 | 3,715 |
| Legionellosis | 25 | 27 | N | 560 | 446 | N |
| Leprosy | 6 | 6 | 2 | 126 | 182 | 163 |
| Malaria | 41 | 24 | 21 | 557 | 659 | 659 |
| Measles: Total* | 15 | 64 | 18 | 3,219 | 5,225 | 2,215 |
| Indigenous | 10 | 64 | N | 2,835 | 4,961 | N |
| Imported | 5 | 27 | N | +384 | 1258 | N |
| Meningococcal infections: Total | 38 | 27 | 30 | 2,035 | 1,777 | 1,961 |
| Civilian Military | 38 | 27 | 30 | 2,034 | 1,775 2 | 1,946 6 |
| Mumps | 64 | 55 | 23 | 10,045 | 3,303 | 2,382 |
| Pertussis | 104 | 100 | 63 | 1,442 | 1,993 | 1,456 |
| Rubella (German measles) | 3 | 6 | 6 | 276 | . 408 | 502 |
| Syphilis (Primary \& Secondary): Civilian | 530 | 544 | 562 | 22,540 104 | 16,859 117 | 18,088 |
| Toxic Shock syndrome | 19 | 7 | N | 216 | 239 | N |
| Tuberculosis | 448 | 488 | 488 | 13,565 | 14,060 | 14,060 |
| Tularemia | 7 | 10 | 7 | 131 | 92 | 153 |
| Typhoid Fever | 14 | 6 | 6 | 199 | 189 | 223 |
| Typhus fever, tick-borne (RMSF) | 23 | 39 | 25 | 453 | 508 | 595 |
| Rabies, animal | 78 | 128 | 128 | 3,134 | 3,682 | 3,682 |

TABLE II. Notifiable diseases of low frequency, United States

|  | Cum. 1987 |  | Cum. 1987 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Leptospirosis | 13 |
| Botulism: Foodborne (Calif. 4) | 9 | Plague | 6 |
| Infant (Oreg. 1) | 37 | Poliomyelitis, Paralytic | - |
| Other | - | Psittacosis (Ohio 1; Calif. 1) | 60 |
| Brucellosis (Tex. 1) | 78 | Rabies, human | - |
| Cholera | 2 | Tetanus (Wash. 1; Calif. 2) | 27 |
| Congenital rubella syndrome | 4 | Trichinosis (Oreg. 1; Calif. 1) | 30 |
| Congenital syphilis, ages < 1 year Diphtheria | - | Typhus fever, flea-borne (endemic, murine) (Calif. 1) | 22 |

*Five of the 15 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 29, 1987 and August 23, 1986 (34th Week)

| Reporting Area | AIDS | Aseptic Meningitis | Encephalitis |  | Gonorrhea (Civilian) |  | Hepatitis (Viral), by type |  |  |  | Legionellosis | Leprosy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Primary | Post-infectious |  |  | A | B | NA,NB | Unspecified |  |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1986 \end{aligned}$ | 1987 | 1987 | 1987 | 1987 | 1987 | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ |
| UNITED STATES | 12,301 | 528 | 747 | 77 | 508,128 | 569,880 | 416 | 500 | 49 | 82 | 25 | 126 |
| NEW ENGLAND | 470 | 23 | 29 | 2 | 15,511 | 13,564 | 19 | 45 | 2 | 6 | 1 | 11 |
| Maine | 16 | 1 | 1 | - | 469 | 590 | - | 5 | - | - | - | - |
| N.H. | 13 | 4 | 2 | - | 269 | 353 | 4 | 1 | - | - | - | 2 |
| Vt . | 4 | 3 | 4 | - | 137 | 165 | - | 6 | 1 | - | - | - |
| Mass. | 287 | 6 | 13 | 1 | 5,698 | 5,757 | 12 | 28 | - | 6 | 1 | 8 |
| R.I. | 40 | 1 | 3 | 1 | 1,363 | 1,125 | - | - | 1 | , | . |  |
| Conn. | 110 | 8 | 6 | - | 7,575 | 5,574 | 3 | 5 | - | - | - | 1 |
| MID. ATLANTIC | 3,613 | 73 | 86 | 6 | 82,492 | 96,269 | 23 | 45 | 7 | 4 | 1 | 6 |
| Upstate N.Y. | 465 | 49 | 36 | 3 | 11,075 | 11,293 | 8 | 15 | - | - | 1 | - |
| N.Y. City | 2,161 | 3 | 7 | . | 42,879 | 55,842 | 3 | 16 | 1 | 4 | . | 6 |
| N.J. | 637 | - | 7 | - | 10,641 | 12,456 | 9 | 11 | 4 | - | - | - |
| Pa. | 350 | 21 | 36 | 3 | 17,897 | 16,678 | 3 | 3 | 2 | - | - | - |
| E.N. CENTRAL | 809 | 177 | 225 | 12 | 75,194 | 79,083 | 19 | 48 | 4 | 2 | 8 | 5 |
| Ohio | 154 | 69 | 91 | 5 | 17,251 | 19,317 | 3 | 20 | . |  | 3 | 2 |
| Ind. | 71 | 21 | 32 | - | 5,826 | 7,876 | 7 | 6 | 1 | 2 | . | - |
| III. | 391 | - | 25 | 7 | 23,020 | 20,880 | - | - | - | . | - | 1 |
| Mich. | 132 | 85 | 57 | - | 22,883 | 22,936 | 9 | 22 | 3 | - | 5 | 1 |
| Wis. | 61 | 2 | 20 | - | 6,214 | 8,074 | - | - | - | - | - | 1 |
| W.N. CENTRAL | 263 | 47 | 35 | - | 20,576 | 24,300 | 34 | 14 | 7 | - | - | - |
| Minn. | 66 | 11 | 25 | - | 3,228 | 3,436 | 4 | 4 | 1 | . | - | - |
| lowa | 19 | 7 | 3 | - | 1,978 | 2,445 | - | 2 | 3 | - | - | - |
| Mo. | 128 | 12 | - | - | 10,841 | 12,282 | 12 | 5 | 1 | $\bullet$ | - | - |
| N. Dak. | 1 | - | - | - | 183 | 219 | , |  | , | . | . | . |
| S. Dak. | 2 | 7 | - | - | 378 | 492 | - | - | - | - | - | - |
| Nebr. | 16 | , | 5 | - | 1,359 | 1,824 | - | - | - | - | - | . |
| Kans. | 31 | 10 | 2 | - | 2,609 | 3,602 | 18 | 3 | 2 | - | - | - |
| S. ATLANTIC | 1,991 | 88 | 96 | 26 | 132,609 | 147,077 | 27 | 99 | 4 | 24 | 1 | 5 |
| Del. | 15 | - | 3 | 1 | 2,173 | 2,345 | 1 | 2 | . | . | . | . |
| Md. | 244 | 21 | 15 | 5 | 15,128 | 17,555 | 6 | 20 | - | - | - | 2 |
| D.C. | 248 | , |  |  | 8,704 | 10,839 |  | 2 | - | - | - | 2 |
| Va . | 142 | 4 | 24 | 2 | 9,732 | 11,905 | 1 | 2 | - | 21 | - | $\bullet$ |
| W. Va. | 16 | 2 | 24 |  | 985 | 1,451 | - | 1 | - | 2 | - | . |
| N.C. | 101 | 9 | 17 | - | 19,690 | 22,717 | 5 | 12 | 2 | 1 | - | - |
| S.C. | 49 | 2 |  | - | 10,944 | 12,807 | 1 | 12 | 2 | - | 1 | 1 |
| Ga. | 292 | 15 | - | 18 | 22,800 | 24,802 | 6 | 25 | 1 | - | , | , |
| Fla. | 884 | 35 | 13 | 18 | 42,453 | 42,656 | 7 | 23 | 1 | 2 | - | 2 |
| E.S. CENTRAL | 153 | 35 | 43 | 6 | 38,618 | 45,985 | 5 | 33 | 2 | 1 | 2 | - |
| Ky. | 24 | 21 | 20 | 1 | 3,877 | 5,055 | 4 | 3 | - | - | . | - |
| Tenn. | 25 | 4 | 10 |  | 13,436 | 17,758 | 1 | 13 | 1 | - | - | - |
| Ala. | 86 | 9 | 13 | 1 | 12,524 | 13,156 | , | 10 | - | 1 | 1 | - |
| Miss. | 18 | 1 | - | 4 | 8,781 | 10,016 | - | 7 | 1 | - | 1 | - |
| W.S. CENTRAL | 1,202 | 25 | 93 | 4 | 57,066 | 68,050 | 49 | 64 | 2 | 9 | 6 | 4 |
| Ark. | 25 |  |  | 2 | 6,597 | 6,387 |  | 6 | 2 | - |  | 4 |
| La. | 152 | 3 | 19 | - | 10,272 | 11,993 | 7 | 19 | 1 | - | - | - |
| Okla. | 64 | 1 | 15 | 1 | 6,410 | 7,559 | 9 | 7 | , | 1 | 1 | - |
| Tex. | 961 | 21 | 59 | 1 | 33,787 | 42,111 | 33 | 38 | 1 | 8 | 5 | 4 |
|  | 315 | 6 | 26 | 4 | 13,500 | 16,570 | 61 | 45 | 7 | 7 | 2 | 2 |
| Mont. | 2 | , | - | - | 374 | 463 | 3 | - | 2 | - | - | 2 |
| Idaho | 4 | - | - | - | 475 | 536 | 7 | 7 | 2 | . | - | 1 |
| Wyo. | 3 | 2 | 1 | - | 289 | 362 | - | 7 | - | - | - | , |
| Colo. | 130 | 2 | 8 | - | 2,946 | 4,382 | 5 | 7 | 2 | 4 | - | - |
| N. Mex. | 21 |  | 4 | - | 1,443 | 1,648 | 5 | 9 | 2 | 4 | - | . |
| Ariz. | 100 | 3 | 11 | 1 | 4,691 | 5,364 | 34 | 18 | 2 | 3 | 2 | - |
| Utah | 20 | 1 | - | 3 | 422 | ,713 | 6 | 1 | 1 | 3 | 2 | - |
| Nev. | 35 | , | 2 | - | 2,860 | 3,102 | 1 | 3 | , | - | - | 1 |
| PACIFIC | 3,485 | 54 | 114 | 17 | 72,562 | 78,982 | 179 | 107 | 14 | 29 | 4 | 93 |
| Wash. | $153$ | - | 10 | 3 | 5,208 | 6,135 | 41 | 18 | 2 | 2 |  | 4 |
| Oreg. | 87 | 5 | - | - | 2,689 | 3,273 | 17 | 10 | 1 | 2 | - | . |
| Calif. <br> Alaska | 3,174 | 35 | 99 | 14 | 62,958 | 66,897 | 120 | 75 | 11 | 26 | 4 | 70 |
| Alaska Hawaii | 12 59 | 14 | 2 | - | 1,135 572 | 1,808 | 1 | 3 | 1 | 1 | - | 19 |
| Hawaii | 59 | 5 | 3 | - | 572 | 869 | - | 1 | - | - | - | 19 |
| Guam | - | - | - | - | 151 | 122 | - | - | - | - | . | - |
| P.R. | 84 | - | 1 | 1 | 1,392 | 1,539 | 1 | 2 | 1 | 14 | - | 5 |
| V.I. | - | - | - | - | 175 | +185 | 1 | 2 | 1 | , |  | . |
| Pac. Trust Terr. Amer. Samoa | - | - | - | - | 287 | 285 | - | - | - | - | $\stackrel{-}{-}$ | 44 |
| Amer. Samoa | $\bullet$ | - | - | - | 59 | 30 | - | - | - | $\cdot$ | - | - |

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 29, 1987 and August 23, 1986 (34th Week)

| Reporting Area | Malaria | Measles (Rubeola) |  |  |  |  | Meningococcal Infections | Mumps |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Indigenous |  | Imported* |  | Total <br> Cum. <br> 1986 |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum. } \\ & 1987 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum. } \\ & 1987 \end{aligned}$ |  | Cum. 1987 | 1987 | Cum. 1987 | 1987 | $\begin{aligned} & \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1986 \end{aligned}$ | 1987 | $\begin{aligned} & \hline \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1986 \end{aligned}$ |
| UNITED STATES | 557 | 10 | 2,835 | 5 | 384 | 5,225 | 2,035 | 64 | 10,045 | 104 | 1,442 | 1,993 | 3 | 276 | 408 |
| NEW ENGLAND | 37 | 1 | 104 | 1 | 151 | 85 | 173 | 1 | 34 | 28 | 90 | 113 | - | 1 | 9 |
| Maine | - | - | 3 | - | - | 10 | 10 | - | - | 9 | 17 | 2 | - | 1 | - |
| N.H. | 1 | - | 53 | - | 101 | 42 | 16 | - | 8 | 4 | 17 | 58 | - | . | 1 |
| Vt. | - | - | 10 | - | 15 | - | 12 | - | 3 | - | 4 | 3 | . | . | 1 |
| Mass. | 13 | 1 | 22 | $1 \dagger$ | 28 | 28 | 85 | - | 8 | 13 | 37 | 28 | - | - | 4 |
| R.I. | 7 | - | 1 | - | 1 | 2 | 14 | - | 2 | - | 1 | 4 | - | . | 2 |
| Conn. | 16 | - | 15 | - | 6 | 3 | 36 | 1 | 13 | 2 | 14 | 18 | - | - | 1 |
| MID. ATLANTIC | 61 | 3 | 513 | 3 | 51 | 1,627 | 248 | 5 | 175 | 1 | 153 | 135 | - | 11 | 31 |
| Upstate N.Y. | 24 | - | 26 | - | 13 | 83 | 86 | 3 | 82 | - | 107 | 87 | - | 9 | 23 |
| N.Y. City | 5 | 3 | 434 | $3 \dagger$ | 18 | 617 | 20 |  | 10 | - | . | 3 | - | 1 | 5 |
| N.J. | 15 | - | 32 | - | 3 | 905 | 48 | 2 | 41 | 1 | 9 | 11 | . | 1 | 3 |
| Pa . | 17 | - | 21 | - | 17 | 22 | 94 | - | 42 | - | 37 | 34 | - | - | . |
| E.N. CENTRAL | 38 | 4 | 280 | - | 24 | 1,015 | 300 | 27 | 5,864 | 4 | 156 | 275 | 1 | 33 | 64 |
| Ohio | 10 | - | 1 | - | 4 | 10 | 100 | 1 | 82 | - | 51 | 108 | - | - | 1 |
| Ind. | 4 | - | - | - | - | 17 | 33 | - | 866 | - | 13 | 22 | - | - | - |
| III. | 6 | 4 | 114 | - | 18 | 641 | 75 | 3 | 2,457 | - | 9 | 31 | 1 | 25 | 54 |
| Mich. | 14 | - | 29 | - | - | 56 | 77 | 22 | 873 | 2 | 41 | 24 | - | 8 | 8 |
| Wis. | 4 | - | 136 | - | 2 | 286 | 15 | 1 | 1,586 | 2 | 42 | 90 | - | - | 1 |
| W.N. CENTRAL | 19 | - | 208 | - | 22 | 339 | 90 | 15 | 1,311 | 1 | 88 | 160 | - | 1 | 10 |
| Minn. | 7 | - | 19 | - | 20 | 49 | 26 | 4 | 759 | - | 11 | 39 | - | - | - |
| lowa | 4 | - | - | - | - | 134 | 3 | 7 | 385 | 1 | 32 | 13 | - | 1 | 1 |
| Mo. | 4 | - | 188 | - | 1 | 31 | 26 | - | 22 | - | 24 | 12 | - | - | 1 |
| N. Dak. | - | - | 1 | - | - | 25 | 1 | - | 6 | - | 5 | 4 | - | - | 1 |
| S. Dak. | - | - | - | - | - | - | 2 | 2 | 89 | - | 3 | 14 | - | - |  |
| Nebr. | 3 | - | - | - | - | 1 | 5 | - | 3 | - | 1 | 5 | - | - | - |
| Kans. | 1 | - | - | - | 1 | 99 | 27 | 2 | 47 | - | 12 | 73 | - | - | 7 |
| S. ATLANTIC | 88 | - | 118 | 1 | 12 | 585 | 333 | 2 | 231 | 7 | 238 | 623 | 1 | 14 | 4 |
| Del. | 1 | - | 32 | - | - | 1 | 5 | - | - | - | 5 | 222 | - | 2 | . |
| Md. | 21 | - | 3 | $\bullet$ | 2 | 31 | 31 | - | 22 | 3 | 11 | 156 | - | 2 | - |
| D.C. | 9 | - | - | - | 1 | 2 | 6 | - | 1 | - | - | - | - | - | - |
| Va . | 15 | - | 1 | $\bullet$ | - | 59 | 56 | - | 68 | - | 44 | 30 | - | 1 | - |
| W. Va. | 2 | - | - | - | - | 2 | 2 | - | 30 | - | 44 | 23 | - | - | - |
| N.C. | 9 | - | 2 | - | 3 | 3 | 42 | - | 16 | 3 | 93 | 41 | - | 1 | - |
| S.C. | 4 | - | 2 | - | - | 301 | 33 | - | 12 | - | - | 13 | - | - | - |
| Ga. | 3 | - | - | - | 1 | 93 | 64 | - | 40 | - | 23 | 102 | - | 1 | $\cdot$ |
| Fla. | 24 | - | 78 | $1 \dagger$ | 5 | 93 | 94 | 2 | 42 | 1 | 18 | 36 | 1 | 7 | 4 |
| E.S. CENTRAL | 11 | - | 5 | - | - | 64 | 96 | 1 | 1,219 | 3 | 30 | 43 | - | 3 | 4 |
| Ky. | 1 | - | - | - | - | 6 | 16 | - | 212 | - | 1 | 5 | - | 2 | 4 |
| Tenn. | 1 | - | - | - | - | 55 | 38 | - | 950 | 1 | 9 | 16 | - | 1 | . |
| Ala. | 4 | - | 3 | - | - | 1 | 34 | 1 | 57 | 2 | 15 | 22 | - | . |  |
| Miss. | 5 | - | 2 | - | - | 2 | 8 | N | N | - | 5 | - | - | - | - |
| W.S. CENTRAL | 36 | 2 | 405 | - | 4 | 624 | 141 | 4 | 714 | 26 | 148 | 165 | 1 | 11 | 55 |
| Ark. | 1 | - | - | - | - | 283 | 17 | - | 278 | - | 9 | 11 | - | 2 | 5 |
| La. | - | - | - | - | - | 4 | 13 | 2 | 209 | 1 | 30 | 11 | - | 2 | . |
| Okla. | 4 | - | 2 | - | 1 | 39 | 17 | N | N | 25 | 109 | 89 | - | 5 | - |
| Tex. | 31 | 2 | 403 | - | 3 | 298 | 94 | 2 | 227 | - | . | 54 | 1 | 4 | 55 |
| MOUNTAIN | 24 | - | 462 | - | 19 | 320 | 71 | - | 185 | 2 | 124 | 189 | - | 24 | 21 |
| Mont. |  | - | 127 | - | 1 | 8 | 3 | - | 4 | - | 6 | 10 | - | 8 | 2 |
| Idaho | 2 | - | - | - | - | 1 | 5 | - | 4 | 2 | 37 | 33 | - | 1 | 2 |
| Wyo. | 1 | - | $\square$ | - | 2 | - | - | - | - | . | 5 | 1 | - | 1 |  |
| Colo. | 7 | - | 5 | - | 4 | 7 | 20 | - | 28 | - | 43 | 52 | - | 1 | 1 |
| N. Mex. | 1 | - | 298 | - | 9 | 37 | 7 | $N$ | N | - | 8 | 17 | - | - | 1 |
| Ariz. | 10 | - | 30 | - | 1 | 258 | 23 | N | 138 | - | 23 | 46 | - | 4 | 2 |
| Utah | 1 | - | 2 | - | 1 | 8 | 9 | - | 8 | - | 2 | 27 | - | 10 | 13 |
| Nev. | 2 | - | 2 | - | 1 | 1 | 4 | - | 3 | - | - | 3 | - | 10 | 3 |
| PACIFIC | 243 | - | 740 | - | 101 | 566 | 583 | 9 | 312 | 32 | 415 | 290 | - | 178 |  |
| Wash. | 17 | - | 34 | - | 7 | 155 | 70 | - | 44 | 1 | 64 | 82 | - | 1 | - 14 |
| Oreg. | 5 | - | 2 | - | 73 | 9 | 26 | N | N | 2 | 55 | 10 | - | 2 | 1 |
| Calif. | 217 | - | 704 | - | 17 | 380 | 474 | 9 | 247 | 15 | 150 | 190 | - | 112 | 191 |
| Alaska | 3 | - | - | - | - | 22 | 4 | - | 7 |  | 10 | 2 | - | 2 | - |
| Hawaii | 1 | - | - | - | 4 | 22 | 9 | - | 14 | 14 | 136 | 6 | - | 61 | 4 |
| Guam | 1 | - | 2 | - | - | 5 | 4 | - | 5 | - | - | - | - | 1 |  |
| P.R. | 1 | 4 | 724 | - | - | 33 | 5 | - | 8 | - | 15 | 13 | - | 2 | 60 |
| V.I. | - | - | - | - | - |  |  | - | 11 | - |  | 13 | - | 2 | 60 |
| Pac. Trust Terr. | - | - | 1 | - | - | - | 1 | - | 5 | - | 1 | - | - | 1 | 2 |
| Amer. Samoa | - | - | - | - | - | 2 |  | - | 3 | - | 1 | - | - | 1. | 2 1 |

[^0]N : Not notifiable U : Unavailable ${ }^{\dagger}$ International ${ }^{\text {'Out-of-state }}$

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 29, 1987 and August 23, 1986 (34th Week)

| Reporting Area | Syphilis (Civilian) (Primary \& Secondary) |  | Toxicshock Syndrome | Tuberculosis |  | Tularemia <br> Cum. 1987 | Typhoid <br> Fever <br> Cum. <br> 1987 | Typhus Fever <br> (Tick-borne) <br> (RMSF) <br> Cum. <br> 1987 | Rabies, Animal <br> Cum. 1987 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1986 \end{aligned}$ | 1987 | $\begin{aligned} & \text { Cum. } \\ & 1987 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1986 \end{aligned}$ |  |  |  |  |
| UNITED STATES | 22,540 | 16,859 | 19 | 13,565 | 14,060 | 131 | 199 | 453 | 3,134 |
| NEW ENGLAND | 393 | 306 | - | 422 | 453 | 1 | 21 | 7 | 6 |
| Maine | 1 | 15 | - | 18 | 32 | - | 1 | - | 2 |
| N.H. | 3 | 10 | - | 12 | 20 | - | - | - | - |
| Vt . | 2 | 7 | - | 9 | 13 | - | 1 | - | - |
| Mass. | 188 | 165 | - | 238 | 228 | 1 | 11 | 4 | - |
| R.I. | 8 | 16 | - | 35 | 35 | - | 3 | - | 1 |
| Conn. | 191 | 93 | - | 110 | 125 | - | 5 | 3 | 3 |
| MID. ATLANTIC | 4,296 | 2,424 | 2 | 2,339 | 2,864 | - | 21 | 11 | 264 |
| Upstate N.Y. | 141 | 118 | 2 | 340 | 416 | - | 8 | 7 | 41 |
| N.Y. City | 3,119 | 1,383 | - | 1,109 | 1,498 | - | 1 | - | - |
| N.J. | 453 | 434 | - | 442 | 496 | - | 12 | 1 | 13 |
| Pa. | 583 | 489 | - | 448 | 454 | $\bullet$ | - | 3 | 210 |
| E.N. CENTRAL | 595 | 660 | - | 1,579 | 1,640 | 3 | 24 | 44 | 117 |
| Ohio | 77 | 85 | - | 298 | 298 | 1 | 6 | 32 | 10 |
| Ind. | 42 | 78 | - | 144 | 178 | - | 4 | - | 13 |
| III. | 316 | 351 | - | 679 | 728 | - | 8 | 5 | 35 |
| Mich. | 110 | 117 | - | 388 | 357 | - | 3 | 5 | 20 |
| Wis. | 50 | 29 | - | 70 | 79 | 2 | 3 | 2 | 39 |
| W.N. CENTRAL | 113 | 150 | 2 | 407 | 409 | 44 | 9 | 45 | 694 |
| Minn. | 13 | 27 | 1 | 85 | 101 | - | 4 | - | 171 |
| lowa | 19 | 6 | 1 | 29 | 32 | 3 | 2 | 1 | 195 |
| Mo. | 62 | 80 | - | 222 | 208 | 28 | 3 | 16 | 41 |
| N. Dak. | - | 5 | - | 5 | 5 | 1 | - | - | 86 |
| S. Dak. | 8 | 3 | - | 21 | 16 | 7 | - | 1 | 151 |
| Nebr. | 7 | 12 | - | 16 | 7 | 2 | - | 1 | 16 |
| Kans. | 4 | 17 | - | 29 | 40 | 3 | - | 26 | 34 |
| S. ATLANTIC | 7,572 | 5,118 | - | 2,883 | 2,698 | 4 | 19 | 165 | 848 |
| Del. | 51 | 35 | - | 31 | 30 | 1 | - | 2 | 8 |
| Md. | 400 | 291 | - | 264 | 209 | - | 3 | 36 | 273 |
| D.C. | 233 | 204 | - | 99 | 87 | - | - | - | 34 |
| Va . | 196 | 250 | - | 297 | 223 | 2 | 3 | 14 | 260 |
| W. Va. | 6 | 18 | - | 72 | 78 | - | 1 | 5 | 41 |
| N.C. | 432 | 336 | - | 315 | 356 | 1 | 2 | 55 | 14 |
| S.C. | 503 | 447 | - | 303 | 357 | - |  | 32 | 39 |
| Ga. | 1,073 | 985 | - | 455 | 408 | $\bullet$ | - | 20 | 132 |
| Fla. | 4,678 | 2,552 | - | 1,047 | 950 | - | 10 | 1 | 55 |
| E.S. CENTRAL | 1,268 | 1,151 | 1 | 1,096 | 1,208 | 5 | 2 | 66 | 224 |
| Ky. | 13 | 53 | - | 275 | 286 | 1 | 1 | 7 | 111 |
| Tenn. | 516 | 402 | - | 254 | 355 | 1 | 1 | 44 | 57 |
| Ala. | 323 | 366 | 1 | 353 | 380 | - | , | 12 | 56 |
| Miss. | 416 | 330 | - | 214 | 187 | 3 | - | 3 | 5 |
| W.S. CENTRAL | 2,714 | 3,423 | 2 | 1,619 | 1,820 | 49 | 11 | 101 | 438 |
| Ark. | 176 | 166 | - | 192 | 243 | 22 | 1 | 10 | 88 |
| La. | 493 | 567 | , | 188 | 315 | 3 | - | - | 11 |
| Okla. | 97 | 87 | 1 | 158 | 166 | 21 | 2 | 79 | 26 |
| Tex. | 1,948 | 2,603 | 1 | 1,081 | 1,096 | 3 | 8 | 12 | 313 |
| MOUNTAIN | 470 | 388 | 1 | 319 | 339 | 14 | 12 | 12 | 256 |
| Mont. | 8 | 6 | - | 9 | 17 | 2 |  | 10 | 117 |
| Idaho | 5 | 9 | 1 | 17 | 14 | 1 | - |  | 5 |
| Wyo. | 1 | 1 | , | 17 | - | - | - | 1 | 56 |
| Colo. | 78 | 98 | - | 40 | 37 | 4 | - | 1 | 6 |
| N. Mex. | 40 | 45 | - | 61 | 67 | 1 | 9 | - | 2 |
| Ariz. | 227 | 158 | - | 156 | 159 | 3 | 3 | - | 56 |
| Utah | 19 | 11 | - | 16 | 28 | 1 | 3 | 1 | 5 |
| Nev. | 92 | 60 | - | 20 | 17 | 2 | - | - | 9 |
| PACIFIC | 5,119 | 3,239 | 11 | 2,901 | 2,629 | 11 | 80 | 2 | 287 |
| Wash. | 79 | 106 | - | 173 | 123 | 4 | 6 | 2 | 287 |
| Oreg. | 193 4835 | 75 | - | 76 | 92 | 4 | 1 | - | - |
| Calif. | 4,835 | 3,033 | 11 | 2,490 | 2,250 | 2 | 69 | 2 | 284 |
| Alaska | 3 | - | , | 24 | 2,250 | 1 | 6 | 2 | $\begin{array}{r}284 \\ \hline\end{array}$ |
| Hawaii | 9 | 25 | - | 128 | 127 | 1 | 4 | - | 3 |
| Guam | 2 | 1 | - | 25 | 34 | - | - | - |  |
| P.R. | 621 | 576 | - | 195 | 210 | - | - | - | 48 |
| V.I. | 4 | - | - | 2 | 1 | - | - | - | 48 |
| Pac. Trust Terr. | 126 | 170 | - | 122 | 44 | - | 16 | - | $\cdot$ |
| Amer. Samoa | 2 | 170 | - | 122 | 4 | - | 16 | - | - |

U: Unavailable

## TABLE IV. Deaths in 121 U.S. cities,* week ending August 29, 1987 (34th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\left\lvert\, \begin{aligned} & \text { P\&I }{ }^{* *} \\ & \text { Total } \end{aligned}\right.$ | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\left\{\begin{array}{l} \text { P\&I* * } \\ \text { Total } \end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{\|c\|} \hline \text { All } \\ \text { Ages } \end{array}$ | $\geqslant 65$ | 45-64 | 25-44 | 1-24 | <1 |  |  | All Ages | $\geqslant 65$ | 45-84 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 620 | 432 | 122 | 38 | 14 | 13 | 40 | S. ATLANTIC | 1,237 | 734 | 261 | 139 | 48 | 52 | 37 |
| Boston, Mass. | 155 | 93 | 38 | 12 | 5 | 7 | 16 | Atlanta, Ga.§ | 131 | 81 | 28 | 16 | 4 | 2 | 1 |
| Bridgeport, Conn. | 28 | 18 | 7 | 2 | 1 | - | 2 | Baltimore, Md. | 193 | 125 | 35 | 21 | 6 | 6 | 6 |
| Cambridge, Mass. | 29 | 24 | 4 | - | 1 | - | 3 | Charlotte, N.C. | 78 | 48 | 19 | 8 | 1 | 2 | 2 |
| Fall River, Mass. | 20 | 17 | 3 |  |  |  | 1 | Jacksonville, Fla. | 107 | 70 | 21 | 9 | 3 | 4 | . |
| Hartford, Conn. | 61 | 39 | 12 | 5 | 1 | 3 | 1 | Miami, Fla. | 120 | 70 | 24 | 16 | 5 | 5 |  |
| Lowell, Mass. | 32 | 26 | 6 | - | - |  | 1 | Norfolk, Va. | 63 | 23 | 15 | 13 | 7 | 5 | 3 |
| Lynn, Mass. | 14 | 11 | 2 | 1 | - | - | - | Richmond, Va. | 97 | 57 | 25 | 5 | 6 | 4 | 8 |
| New Bedford, Mass. | 35 | 30 | 2 | 2 | - | 1 | - | Savannah, Ga. | 57 | 32 | 13 | 4 | 3 | 5 | 3 |
| New Haven, Conn. $\$$ | 57 | 42 | 10 | 4 | 1 | - | 1 | St. Petersburg, Fla. | 78 | 62 | 10 | 2 | - | 4 | 5 |
| Providence, R.I. | 50 | 33 | 13 | 2 | 1 | 1 | 2 | Tampa, Fla. | 69 | 46 | 10 | 6 | 2 | 4 | 6 |
| Somerville, Mass. | 4 | 1 | 1 | 1 | 1 | - |  | Washington, D.C. | 226 | 109 | 60 | 38 | 6 | 11 | 3 |
| Springfield, Mass. | 49 | 31 | 11 | 6 | - | 1 | 4 | Wilmington, Del. | 18 | 11 | 1 | 1 | 5 | 1 | . |
| Waterbury, Conn. | 29 | 23 | 5 | 1 | 3 | - | 4 | ES CENTRAL | 708 | 443 | 152 | 54 | 28 | 31 |  |
| Worcester, Mass. | 57 | 44 | 8 | 2 | 3 | - | 5 | E.S. CENTRAL | 708 | 443 | 152 | 54 | 28 | 31 | 30 |
| MID. ATLANTIC | 2,489 | 1,633 | 484 | 249 | 67 | 56 | 131 | Birmingham, Ala. Chattanooga, Tenn. | 134 | 82 43 | 29 16 | 12 | 3 1 | 8 | 2 |
| Albany, N.Y. | 55 | 35 | 14 | 6 | - | - | - | Knoxville, Tenn. | 65 | 44 | 12 | 3 | 1 | 5 | 5 |
| Allentown, Pa. | 15 | 12 | 3 |  |  |  | 2 | Louisville, Ky. | 105 | 71 | 23 | 8 | 3 | - | 2 |
| Buffalo, N.Y. | 99 | 68 | 20 | 7 | 3 | 1 | 10 | Memphis, Tenn. | 133 | 77 | 32 | 8 | 5 | 11 | 13 |
| Camden, N.J. | 35 | 26 | 4 | 5 | - | - | - | Mobile, Ala. | 23 | 17 | 5 | 8 | 1 | 1 | 3 |
| Elizabeth, N.J. | 21 | 13 | 4 | 2 | 1 | 1 | 4 | Montgomery, Ala. | 46 | 32 | 6 | 3 | 3 | 2 | 2 |
| Erie, Pa.t | 34 | 26 | 4 | 1 | 2 | 1 | 4 | Nashville, Tenn. | 139 | 77 | 29 | 17 | 11 | 5 | 2 |
| Jersey City, N.J. | - 54 | 37 | 5 | 7 | 1 | 4 | 64 | W.S. CENTRAL | 1,301 | 792 | 282 | 123 | 58 | 46 | 46 |
| N.Y. City, N.Y. | 1,394 | 894 | 272 | 154 | 40 | 34 | 64 | W.S. CENTRAL | 1,301 | 792 45 | 282 | 123 | 58 | 46 | 46 |
| Newark, N.J. | 65 | 28 | 15 | 19 | 1 | 2 | 4 | Austin, Tex. | 68 | 45 | 6 | 8 | 6 | 3 | 2 |
| Paterson, N.J. | 32 | 20 | 3 | 6 | 2 | 1 | 2 | Baton Rouge, La. | 45 | 30 | 7 | 5 | 1 | 2 | 1 |
| Philadelphia, Pa. | 300 | 194 | 71 | 20 | 8 | 7 | 18 | Corpus Christi, Tex. | 45 | 29 | 11 | 4 | 1 | - | 1 |
| Pittsburgh, Pa. $\dagger$ | 55 | 37 | 12 | 5 | . | 1 | 3 | Dallas, Tex. | 169 | 88 | 39 | 21 | 10 | 11 | 2 |
| Reading, Pa. | 25 | 21 | 3 | 1 | - | - | 1 | El Paso, Tex. | 50 | 31 | 11 | 4 | 1 | 3 | 3 |
| Rochester, N.Y. | 94 | 70 | 12 | 9 | 2 | 1 | 8 | Fort Worth, Tex | 94 | 68 | 15 | 1 | 9 | 1 | 4 |
| Schenectady, N.Y. | 24 | 19 | 4 | - | 1 | - | 1 | Houston, Tex.§ | 308 | 176 | 74 | 34 | 13 | 11 | 7 |
| Scranton, Pa. $\dagger$ | 19 | 17 | - | 1 | - | 1 | 1 | Little Rock, Ark. | 82 | 53 | 12 | 11 | 3 | 3 | 7 |
| Syracuse, N.Y. | 90 | 59 | 22 | 2 | 6 | 1 | 6 | New Orleans, La. | 117 | 73 | 22 | 14 | 6 | 2 | - |
| Trenton, N.J. | 29 | 22 | 4 | 2 | . | 1 | 2 | San Antonio, Tex. | 183 | 106 | 50 | 16 | 6 | 5 | 10 |
| Utica, N.Y. | 23 | 14 | 8 | 1 | - | - | 5 | Shreveport, La. | 43 | 28 | 10 | 1 | - | 4 | 4 |
| Yonkers, N.Y. | 26 | 21 | 4 | 1 | - | - |  | Tulsa, Okla. | 97 | 65 | 25 | 4 | 2 | 1 | 5 |
| E.N. CENTRAL | 2,249 | 1,470 | 463 | 170 | 64 | 82 | 81 | MOUNTAIN | 721 | 425 | 154 | 74 | 47 | 20 | 33 |
| Akron, Ohio | 66 | 47 | 14 | 3 | 2 | - |  | Albuquerque, N. Mex | 86 | 48 | 15 | 10 | 11 | 2 | 6 |
| Canton, Ohio | 27 | 16 | 5 | 3 | 1 | 2 | 2 | Colo. Springs, Colo. | 63 | 42 | 11 | 6 | 3 | 1 | 11 |
| Chicago, III. 5 | 564 | 362 | 125 | 45 | 10 | 22 | 16 | Denver, Colo. | 106 | 66 | 18 | 13 | 8 | 1 | 2 |
| Cincinnati, Ohio | 154 | 101 | 38 | 10 | 3 | 2 | 17 | Las Vegas, Nev. | 134 | 74 | 34 | 16 | 6 | 3 | 6 |
| Cleveland, Ohio | 150 | 93 | 34 | 12 | 5 | 6 | 1 | Ogden, Utah | 27 | 16 | 7 | 1 | 2 | 1 | 2 |
| Columbus, Ohio | 131 | 76 | 34 | 9 | 4 | 8 | 2 | Phoenix, Ariz. | 129 | 68 | 33 | 10 | 9 | 9 | 2 |
| Dayton, Ohio | 108 | 73 | 21 | 9 | 4 | 1 | 6 | Pueblo, Colo. | 25 | 20 | 5 | 6 | 3 | 1 | 1 |
| Detroit, Mich. | 238 | 129 | 55 | 33 | 10 | 11 | 2 | Salt Lake City, Utah | 44 | 24 | 10 | 6 | 3 | 1 | - |
| Evansville, Ind. | 49 | 38 | 4 | 2 | 3 | 2 | 2 | Tucson, Ariz. | 107 | 67 | 21 | 12 | 5 | 2 | 3 |
| Fort Wayne, Ind. | 45 | 31 | 9 | 1 | 3 | 1 | - | PACIFIC | 1,865 | 1,194 | 370 | 185 | 75 | 35 | 76 |
| Gary, Ind. | 11 | 7 | 4 | - | - | - | - | Berkeley, Calif. | 12 | 11 | 1 | - | - | - | - |
| Grand Rapids, Mich. | 79 | 60 | 11 | 2 | 1 | 5 | 8 | Fresno, Calif. | 97 | 67 | 9 | 9 | 9 | 3 | 7 |
| Indianapolis, Ind. | 154 | 102 | 31 | 9 | 4 | 8 | - | Glendale, Calif. | 24 | 19 | 2 | 1 | 2 | - | 1 |
| Madison, Wis. | 43 | 31 | 7 | 3 | 2 | - | 2 | Honolulu, Hawaii | 72 | 50 | 13 | 4 | 2 | 3 | 7 |
| Milwaukee, Wis. | 123 | 89 | 20 | 8 | 4 | 2 | 6 | Long Beach, Calif. | 62 | 32 | 17 | 8 | 3 | 2 | 5 |
| Peoria, III. | 42 | 20 | 13 | 3 | 1 | 5 | 3 | Los Angeles Calif. | 562 | 352 | 115 | 62 | 23 | 6 | 8 |
| Rockford, III. | 48 | 34 | 4 | 3 | 3 | 4 | 2 | Oakland, Calif. | 59 | 34 | 17 | 5 | 3 |  | 4 |
| South Bend, Ind. | 50 | 36 | 7 | 5 | 1. | 1 | 3 | Pasadena, Calif.§ | 30 | 23 | 5 | 1 | 1 | - | 1 |
| Toledo, Ohio | 98 | 73 | 15 | 7 | 2 | 1 | 9 | Portland, Oreg. | 116 | 76 | 17 | 12 | 4 | 7 | 4 |
| Youngstown, Ohio | 69 | 52 | 12 | 3 | 1 | 1 | - | Sacramento, Calif. | 131 | 78 | 29 | 10 | 10 | 4 | 12 |
| W.N. CENTRAL | 863 | 586 | 165 | 55 | 31 | 26 | 44 | San Diego, Calif. | 154 | 102 | 33 | 12 | 3 | 2 | 3 |
| Des Moines, lowa | 67 | 46 | 12 | 4 | 1 | 4 | 5 | San Francisco, Calif. | 161 | 96 | 33 | 28 | 2 | 2 | 1 |
| Duluth, Minn. | 25 | 17 | 4 | - | 3 | 1 | 1 | San Jose, Calif. | 157 | 112 | 32 | 8 | 4 | 1 | 10 |
| Kansas City, Kans. | 34 | 25 | 6 | 3 | 3 | , | , | Seattle, Wash. | 125 | 68 | 34 | 12 | 7 | 4 | 1 |
| Kansas City, Mo. | 126 | 88 | 25 | 5 | 3 | 5 | 6 | Spokane, Wash. | 66 | 50 24 | 7 | 6 | 2 | 1 | 9 3 |
| Lincoln, Nebr. | 45 | 31 | 8 | 3 | 2 | 1 | 6 | Tacoma, Wash. | 37 | 24 | 6 | 7 | - | - | 3 |
| Minneapolis, Minn. | 202 | 144 | 33 | 13 | 6 | 6 | 13 | TOTAL 1 | $12,053^{\dagger t}$ | 7,709 | 2,453 | 1,087 | 432 | 361 | 518 |
| Omaha, Nebr. | 78 | 49 | 20 | 3 | 3 | 3 | 1 |  |  |  |  |  |  |  |  |
| St. Louis, Mo. | 143 | 85 | 33 | 14 | 8 | 3 | 3 |  |  |  |  |  |  |  |  |
| St. Paul, Minn. | 68 | 53 | 5 | 7 | 2 | 1 | - |  |  |  |  |  |  |  |  |
| Wichita, Kans. | 75 | 48 | 19 | 3 | 3 | 2 | 9 |  |  |  |  |  |  |  |  |

[^1]$\dagger \dagger$ Total includes unknown ages.
§Data not available. Figures are estimates based on average of past 4 weeks.

## Enterovirus - Continued

coxsackieviruses B4 and A9 (five each), and coxsackievirus B3 and echoviruses 9 and 14 (three each). In 1986, the six most common NPEV isolates were echovirus 11 (184 of the 1,192 isolates), echovirus 4 (162), echovirus 7 (155), echovirus 18 (98), coxsackieviruses B4 and B5 (92 each). These six NPEV types represented 66\% of the total enterovirus isolates reported for 1986.
Reported by: State Virology Laboratory Directors. Respiratory and Enterovirus Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.
Editorial Note: A retrospective study of CDC's NPEV surveillance data shows that isolates from March through May predict the types likely to be isolated from July through December, which includes the peak enterovirus season (1). In the past, the six most common isolates from March through May have accounted for an average of $59 \%$ of the isolates from July through December. In 1986, they accounted for $52 \%$ of the isolates from July through December. The reports of early 1987 isolates suggest that echoviruses 6, 9, 11, and 14 and coxsackieviruses A9, B3, and B4 are likely to be common NPEV isolates this year. Six of the top seven isolates reported from March through May this year and all of the top six isolates reported in 1986 were among the top 15 most frequently isolated NPEVs for the period 1970-1983 (1).

## Reference

1. Strikas RA, Anderson LJ, Parker RA. Temporal and geographic patterns of isolates of nonpolio enterovirus in the United States, 1970-1983. J Infect Dis 1986;153:346-51.

Perspectives in Disease Prevention and Health Promotion

## Community Oral Health Surveillance - Columbus, Ohio

During 1986, the Columbus Health Department in Columbus, Ohio, conducted a survey to collect data on the oral health status of local schoolchildren. Their purpose was to gather information for program planning. The survey was designed using the World Health Organization's Pathfinder methodology (1). A sample of students from two cohorts (grades one and two and grades six and seven) were given oral examinations. Examination sites were randomly selected from among public schools, which were stratified according to the percentage of children eligible for free and reduced cost meals. Each student's dental status was assessed using the Decayed, Missing, and Filled Surface Index for permanent teeth ( 2,3 ) and the decayed and filled surface index for primary teeth $(3,4)$. Portable dental chairs and lights were used in the examinations, and the findings were entered directly into a data management system.

Data from the survey were tabulated according to the percentage of children with dental caries experience and untreated caries, the various degrees of urgency of need for dental treatment, and the presence of pit and fissure sealants. Caries experience in the permanent dentition was classified according to the types of teeth and tooth surfaces affected.

Sixty percent of the 640 children examined had either decayed, missing, or filled teeth (Table 1). Approximately $30 \%$ of the children examined had an obvious need for dental treatment, generally for untreated carious lesions. One-third of these had large lesions requiring early treatment, and $1 \%$ had pain or infection requiring immediate care. The remaining two-thirds of the children with obvious treatment needs had

Oral Health - Continued
small carious lesions or needed professional cleanings. Approximately $90 \%$ of the children with untreated caries had lesions in up to three teeth.

The caries experience in permanent teeth was evaluated to determine the appropriateness of a pit and fissure dental sealant program. Forty-four percent of the children examined had decayed, missing, or filled permanent teeth. Most caries experience in permanent teeth was on surfaces with pits and fissures rather than on smooth tooth surfaces. Eighty-seven percent of carious permanent tooth surfaces had pit or fissure lesions, while only $4 \%$ of children had preventive pit and fissure sealants on one or more teeth. First and second permanent molar teeth accounted for $94 \%$ of caries (Table 2). Furthermore, $91 \%$ of carious lesions on permanent molars were found on surfaces with pits and fissures (Table 3). Twenty-six percent of first and second graders had decayed, missing, or filled first permanent molar teeth, while 62\% of sixth and seventh graders had similar experience.
Reported by: M Siegal, DDS, MPH, Columbus Health Dept, R Kuthy, DDS, MPH, Ohio State Univ College of Dentistry, B Martin, RDH, MS, Ohio Dept of Health. S Eklund, DDS, DrPH, Univ of Michigan School of Public Health. Dental Disease Prevention Activity, Office of the Director, Center for Prevention Svcs, CDC.
Editorial Note: Local oral health status data are important for the proper planning and evaluation of local dental programs. National oral health surveys (5-7) provide useful information on trends in the prevalence and distribution of oral diseases. Their sampling methodologies, however, do not permit extrapolation of their findings to specific communities. By thoughtfully selecting purposive samples, local dental programs can collect community-specific data in a timely fashion with limited resources. The cluster sampling technique used in the Columbus survey provided data that were sufficiently precise for planning purposes. Since school programs would be targeted by grade level, grade level rather than age was chosen as a basis for cohort selection.

TABLE 1. Oral health status of surveyed schoolchildren, by grade level - Columbus, Ohio, 1986

| Oral Health Indicators | Grades |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline 1 \& 2 \\ (n=339) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \& 7 \\ (n=301) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,2,6,87 \\ & (n=640) \\ & \hline \end{aligned}$ |
| Caries Experience |  |  |  |
| None | 46\% | 34\% | 40\% |
| 1-3 Teeth | 29\% | 38\% | 34\% |
| $\geqslant 4$ Teeth | 25\% | 28\% | 26\% |
| Untreated Caries |  |  |  |
| None | 69\% | 74\% | 71\% |
| 1-3 Teeth | 26\% | 25\% | 26\% |
| $\geqslant 4$ Teeth | 5\% | 1\% | 3\% |
| Need for Dental Care |  |  |  |
| No Obvious Need | 68\% | 72\% | 69\% |
| Nonurgent | 20\% | 19\% | 20\% |
| Early | 11\% | 8\% | 10\% |
| Immediate | 1\% | 1\% | 1\% |

## Oral Health - Continued

The Columbus survey of schoolchildren demonstrated that dental caries in permanent teeth were concentrated on the molar tooth surfaces that have pits and fissures. It also revealed that few children were protected by sealants, which have been demonstrated to be an effective means of preventing such carious lesions (8). Columbus has had optimally fluoridated water since 1973. It is, therefore, not surprising that only a small percentage of carious lesions were found on smooth surfaces.

The data from the survey were reported to the local board of health and shared with the local dental society and the media. They were also incorporated into several grant proposals that resulted in the implementation of a school-based sealant program in the Columbus public schools. Some of the findings of the survey were used in planning the sealant program and were incorporated into the long-range plans of the city's dental program. The data will serve as a baseline for evaluation of the school-based sealant program and other efforts of the dental community to increase the use of pit and fissure sealants. Future oral health surveys are planned at 3 - to 5 -year intervals.

TABLE 2. Distribution of decayed or filled permanent teeth among surveyed schoolchildren, by type of tooth and grade level of student - Columbus, Ohio, 1986

| Decayed or | Grades |  |  |
| :--- | :---: | :---: | :---: |
| Filled Permanent <br> Molar Teeth* | $\mathbf{1} \& \mathbf{2}$ <br> $(\mathbf{n}=339)$ | $\mathbf{6} \& \mathbf{7}$ <br> $(\mathbf{n}=\mathbf{3 0 1 )}$ | $\mathbf{1 , 2 , 6 , 8 7}$ <br> $(\mathbf{n}=640)$ |
| Total Number | 162 | 600 | 762 |
| First Molars (\%) | $(98)$ | $(77)$ | $(82)$ |
| Second Molars (\%) | $(<1)$ | $(15)$ | $(12)$ |
| Bicuspids (\%) | $(<1)$ | $(6)$ | $(4)$ |
| Other Teeth (\%) | $(1)$ | $(2)$ | $(2)$ |

*Missing teeth are not included. Of the 12 missing teeth found among sixth and seventh graders, seven were first molars, one was a bicuspid, and four were other teeth. No missing teeth were found among first and second grade students.

TABLE 3. Distribution of decayed and filled permanent molar tooth surfaces among surveyed schoolchildren, by tooth surface and grade level of student - Columbus, Ohio, 1986

| Decayed or Filled Permanent Molar Tooth Surfaces* | Grades |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1 \& 2 \\ (n=339) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \& 7 \\ (n=301) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,2,6,87 \\ & (n=640) \\ & \hline \end{aligned}$ |
| Total Number | 232 | 891 | 1,123 |
| Buccal of Mandibular (\%) | (19) | (18) | (18) |
| Palatal of Maxillary (\%) | (13) | (16) | (15) |
| Occlusal (\%) | (58) | (57) | (58) |
| Smooth Surfaces (\%) | (10) | (9) | (9) |

[^2]Errata: Vol. 36, Nos. 29 and 33
p. 489 The second sentence in the first paragraph on page 489 should have read, "Three of them were female."
p. 552 In the figure accompanying the article entitled "Imported and Indigenous Dengue Fever - United States, 1986", Zone 1 of the breeding season for the mosquito Aedes Aegypti was misrepresented. The figure should have appeared as follows:

FIGURE 1. Number of confirmed cases of dengue, by state, and distribution of Aedes aegypti and Aedes albopictus - United States, 1986


FIGURE I. Reported measles cases - United States, weeks 30-33


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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, Morbidity and Mortality Weekly Report, Centers for Disease Control, Atlanta, Georgia 30333.

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[^0]:    *For measles only, imported cases includes both out-of-state and international importations.

[^1]:    *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
    tBecause of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week Complete counts will be available in 4 to 6 weeks.

[^2]:    *Missing teeth are not included. Seven of the 12 missing permanent teeth found among sixth and seventh graders were first molars. No permanent molars were found missing among first and second grade students.

