MWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Progress in Chronic Disease Prevention

Cigarette Smoking in the United States, 1986

In August 1986, the Office on Smoking and Health, Center for Health Promotion and Education, CDC, initiated the Adult Use of Tobacco Survey to study the U.S. adult population's knowledge, attitudes, and practices regarding the use of tobacco. Data for this telephone survey, which was conducted primarily during the fourth quarter of 1986, were collected from a national probability sample of 13,031 respondents representing the noninstitutionalized, civilian adult population (≥17 years of age) in the United States. The Mitofsky-Waksberg random-digit-dialing procedure (1) was used to generate a sample of households selected for screening. From the screening data, current and former cigarette smokers* were oversampled to ensure sufficient sample size for analysis within these two subgroups.

To compensate for nonresponse, for the oversampling of current and former smokers, and for the exclusion of nontelephone households, the sample estimates were weighted (ratio-adjusted) to 1986 Current Population Survey (CPS) counts of the U.S. adult population. This adjustment controlled for sex, age, race and ethnic (Hispanic) origin, education, and region of the country. Standard errors were computed to derive the 95% confidence intervals (CI) about the sample estimates by using software based on the procedure developed by Morganstein and Hanson (2).

The survey's overall response rate was 74.3%, which represents the product of the 85.5% response rate for the household screening sample and the 87.0% response rate for those individuals selected for an extended interview. The unadjusted racial composition of the respondents was 88.7% white, 8.4% black, and 2.9% all other racial groups combined.

Compared with the findings of other national surveys conducted during the past 40 years (Table 1), the results of the Adult Use of Tobacco Survey show the lowest prevalence of current cigarette smoking among adults ever recorded in the United States: 29.5% for men (95% CI, 28.4 to 30.6), 23.8% for women (95% CI, 22.7 to 24.9), and 26.5% overall (95% CI, 25.8 to 27.3). An estimated 24.6% of the U.S. adult population are former smokers, including 30.4% of men and 19.3% of women. The overall smoking rate by race was 28.4% for blacks (95% CI, 25.0 to 31.8) and 26.4% for whites (95% CI, 25.5 to 27.2).

^{*}Current cigarette smokers are defined as persons who have smoked at least 100 cigarettes in their lifetime and who are currently smoking cigarettes. Former smokers are defined as those who have smoked at least 100 cigarettes in their lifetime but who are no longer smoking.

The prevalence of smoking was higher among black men (32.5%) than among white men (29.3%) (Table 2). For men, the highest rate by age group was 37.1%, which occurred among men 35-44 years old. The highest age- and race-specific smoking rate occurred among black men 25-34 years old (45.9%), whereas the lowest rate occurred among black men 17-24 years old (14.3%). Among men who currently smoke, the mean number of cigarettes smoked per day was 22.8 (23.9 among white men, 14.8 among black men).

The prevalence of smoking was slightly higher among black women (25.1%) than among white women (23.7%) (Table 2). For women, the highest rates by age group were 29.2%, which occurred among women 25-34 years old, and 28.7%, which occurred among women 35-44 years old. The highest age- and race-specific smoking rate occurred among black women aged 35-44 years (36.4%), whereas the lowest rate (excluding those ≥65 years old) occurred among black women aged 17-24 years (16.0%). Among women who currently smoke, the mean number of cigarettes smoked per day was 19.1 (19.8 among white women, 14.6 among black women). Reported by: Office on Smoking and Health, Center for Health Promotion and Education, CDC.

TABLE 1. Percentage of current cigarette smoking among adults, by year and survey — United States, 1944-1986*

| | | A | Curre | Current Cigarette Smoking (%) | | | | |
|------|---------------------|----------------|-------|-------------------------------|-------|--|--|--|
| Year | Survey [†] | Age (years) | Men | Women | Total | | | |
| 1944 | GP | ≥18 | 48.0 | 36.0 | 41.0 | | | |
| 1949 | GP | ≥18 | 54.0 | 33.0 | 44.0 | | | |
| 1955 | CPS | ≥18 | 54.2 | 24.5 | 37.6 | | | |
| 1964 | NCSH | ≥21 | 52.9 | 31.5 | 40.3 | | | |
| 1965 | NHIS | ≥17 | 51.1 | 33.3 | 41.7 | | | |
| 1966 | CPS | ≥17 | 50.0 | 32.3 | 40.6 | | | |
| | NCSH | ≥21 | 51.9 | 33.7 | 42.2 | | | |
| 1967 | CPS | ≥17 | 49.1 | 32.1 | 40.1 | | | |
| 1968 | CPS | ≥17 | 47.0 | 31.2 | 38.6 | | | |
| 1970 | NHIS | ≥17 | 43.5 | 31.1 | 36.9 | | | |
| | NCSH | ≥21 | 42.3 | 30.5 | 36.2 | | | |
| 1974 | NHIS | ≥17 | 42.7 | 31.9 | 37.0 | | | |
| 1975 | NCSH | ≥21 | 39.3 | 28.9 | 33.8 | | | |
| 1976 | NHIS | ≥20 | 41.9 | 32.0 | 36.7 | | | |
| 1978 | NHIS | ≥17 | 37.5 | 29.6 | 33.2 | | | |
| 1980 | NHIS | ≥20 | 38.3 | 29.4 | 33.6 | | | |
| 1983 | NHIS | ≥20 | 35.7 | 29.4 | 32.4 | | | |
| 1985 | CPS | ≥16 | 31.8 | 25.4 | 28.4 | | | |
| | NHIS | ≥20 | 33.2 | 27.9 | 30.4 | | | |
| 1986 | OSH | ≥17 | 29.5 | 23.8 | 26.5 | | | |

^{*}Sources: Office on Smoking and Health, CDC (3, unpublished data); Gallup Poll (4); National Center for Health Statistics, CDC (5).

[†]GP = Gallup Poll; CPS = Current Population Survey (Supplement); NCSH = National Clearinghouse for Smoking and Health (Adult Use of Tobacco Survey); NHIS = National Health Interview Survey; OSH = Office on Smoking and Health (Adult Use of Tobacco Survey). NHIS data presented here are not age-adjusted.

Editorial Note: In 1979, the first Surgeon General's Report on Health Promotion and Disease Prevention was released (6). This report, entitled *Healthy People*, identified cigarette smoking as "the single most important preventable cause of death," responsible for an estimated 320,000 premature deaths a year in the United States and for debilitating chronic diseases in another 10 million Americans. These conclusions were based on extensive research summarized in the annual Surgeon General's reports on the health consequences of smoking, 18 of which have been issued since 1964. A year after publication of *Healthy People*, the Public Health Service established health objectives for the nation for the year 1990 (7,8). These objectives include 17 specific goals related to smoking and health.

The primary objective for 1990 is for the proportion of adults who smoke to be below 25%. The results of the Adult Use of Tobacco Survey show that this objective has almost been met. The overall prevalence of smoking in this survey (26.5%) is the lowest ever recorded in the United States (Table 1). In comparing these results with those of previous surveys, however, it must be noted that these surveys differ in sampling techniques, sample size, possible inclusion of proxy respondents, eligible respondent age, response rate, definition of "current regular smoker," and use of telephone versus personal interviews (3,9). These factors may affect measurements of smoking prevalence.

To evaluate the potential effect of the type of interview on measurements of smoking prevalence, state-specific smoking prevalence data for persons ≥18 years old from two surveys were compared: the supplement to the 1985 CPS (a personal-interview survey) and the 1985 Behavioral Risk Factor Surveillance System (BRFSS) (a telephone survey) (10). For the 22 jurisdictions included in the BRFSS (21 states and the District of Columbia), the median difference between the data on overall smoking prevalence from the CPS and the BRFSS was +2.5 percentage points (Office on Smoking and Health, CDC, unpublished data). The exclusion of households lacking telephones appears to account for an underestimate of about one percentage point in telephone surveys (sampling bias), because persons living in households where there are no telephones have a higher smoking prevalence than those in households with telephones (National Center for Health Statistics, CDC, unpublished data). In addition, there may be a greater response bias in telephone surveys than in personal-interview surveys, because the former usually have lower response rates. Although the differences between data from the CPS and the BRFSS suggest that smoking rates

TABLE 2. Percentage of current cigarette smoking among adults, by age, sex, and race — Adult Use of Tobacco Survey, United States, 1986

| Age (years) | | Men (%) | | | Women (%) | |
|----------------|-------|---------|--------|-------|-----------|--------|
| | White | Black | Total* | White | Black | Total* |
| 17-24 | 26.0 | 14.3 | 24.4 | 22.7 | 16.0 | 21.5 |
| 25-34 | 32.4 | 45.9 | 33.6 | 29.1 | 30.9 | 29.2 |
| 35-44 | 37.4 | 36.4 | 37.1 | 27.6 | 36.4 | 28.7 |
| 45-64 | 30.0 | 35.6 | 30.5 | 25.2 | 26.7 | 25.1 |
| ≥65 | 16.0 | 26.6 | 16.7 | 12.4 | 8.3 | 12.0 |
| Total | 29.3 | 32.5 | 29.5 | 23.7 | 25.1 | 23.8 |

^{*}Includes racial category "other," which includes Hispanics.

may vary slightly depending on the type of interview used in a survey, data on the prevalences of various health conditions obtained by telephone and personal interviews are generally similar (11-15).

Certain rates, such as the prevalence of smoking among all black men, young black men, and young black women, are markedly lower in the Adult Use of Tobacco Survey than the rates obtained by the National Health Interview Survey (16). Because of the smaller sample sizes for blacks overall and for specific age groups among blacks, the prevalence figures for blacks from the Adult Use of Tobacco Survey should be interpreted with caution. These results should be compared with those of future surveys using larger sample sizes to determine the extent to which the prevalence of smoking among blacks may have declined.

Despite the uncertainty in comparing data from surveys using different methodologies, longitudinal surveys using the same methodology show a steady decline in smoking prevalence. For instance, data from the National Health Interview Surveys from 1974 to 1985 show a consistent mean annual reduction in smoking prevalence of 0.6 percentage points (Table 1). These data parallel the per capita consumption of cigarettes (for persons ≥18 years of age) in the United States, which has declined each year since 1973 (17).

Although much progress has been achieved, the results of the Adult Use of Tobacco Survey show that an estimated 46.8 million Americans (≥17 years old) still smoke cigarettes. To maintain momentum toward the goal of a smoke-free society, government agencies, private organizations, health-care providers, and others must work together to support programs and policies that encourage nonsmoking behavior. There should be an emphasis on reducing the prevalence of smoking among high-risk populations such as adolescents, minorities, blue-collar workers, and pregnant women. Smoking prevention and cessation programs should be offered in schools, worksites, health-care facilities, and other institutions. Public officials, state and local legislatures, employers, and insurance companies should support policies that discourage tobacco use and protect nonsmokers from exposure to environmental tobacco smoke. These policies include banning or restricting smoking in public places and worksites, prohibiting the sale of tobacco products to minors, prohibiting the distribution of free samples of tobacco products, providing reduced premiums for health and life insurance to nonsmokers, and providing third-party reimbursement for smoking-cessation programs.

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Epidemiologic Notes and Reports

Sentinel Surveillance System for Antimicrobial Resistance in Clinical Isolates of *Neisseria gonorrhoeae*

Infections caused by strains of *Neisseria gonorrhoeae* that are resistant to recommended antimicrobials continue to be a growing public health problem. Over the past 3 years, the incidence of plasmid-mediated, penicillinase-producing *N. gonorrhoeae* (PPNG) has increased, and it now accounts for 2% of all reported gonococcal infections in the United States (1). However, the proportions of infections caused by organisms with chromosomally mediated resistance to penicillin, tetracycline, and spectinomycin and by gonococci with plasmid-mediated tetracycline resistance (TRNG) have been determined for only a limited number of localities (2.3).

The procedures for laboratory diagnosis and reporting of PPNG have been standardized, and over 90% of public health laboratories routinely test every gonococcal isolate for production of β -lactamase (CDC, unpublished data). However, ascertainment and reporting of other types of antimicrobial resistance have been inconsistent. Whereas PPNG can be detected by a rapid diagnostic test, laboratory diagnosis of chromosomally mediated resistance and TRNG requires relatively expensive antimicrobial susceptibility determination procedures on subcultures of primary isolates. Until recently, surveillance of these strains had been based on a passive reporting system; consequently, geographical areas performing more susceptibility tests than other areas may appear to have higher incidences of these strains.

Because recommendations for therapy should be based on accurate and timely surveillance of antimicrobial resistance in *N. gonorrhoeae*, the Division of Sexually Transmitted Diseases, Center for Prevention Services, CDC, in cooperation with the Sexually Transmitted Diseases Laboratory Program, Center for Infectious Diseases, CDC, and state and local health departments, has organized the Gonococcal Isolate Surveillance Project (GISP).

In this project, each of four regionally based laboratories chosen for their expertise in performing antimicrobial susceptibility determinations processes a prospective consecutive sample of isolates from five sexually transmitted disease clinics. Each month, the first 25 urethral isolates from male patients in each clinic are submitted to the regional laboratories where a test for β -lactamase is performed and minimum inhibitory concentrations (MICs) to penicillin, tetracycline, spectinomycin, cefoxitin, and ceftriaxone are determined. Classification of the isolates is based on the CDC

(Continued on page 591)

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

| | 35 | ith Week Endi | ng | Cumulati | ve, 35th Wee | k Ending |
|---|----------------|----------------|----------------|----------------------|----------------------|----------------------|
| Disease | Sept. 5, | August 30, | Median | Sept. 5 , | August 30, | Median |
| | 1987 | 1986 | 1982-1986 | 1987 | 1986 | 1982-1986 |
| Acquired Immunodeficiency Syndrome (AIDS) Aseptic meningitis Encephalitis: Primary (arthropod-borne | 368 | 246 | N | 12,671 | 8,364 | N |
| | 388 | 447 | 371 | 6,708 | 5,854 | 4,998 |
| & unspec) | 39 | 28 | 31 | 791 | 684 | 728 |
| Post-infectious | | 4 | 1 | 77 | 79 | 79 |
| Gonorrhea: Civilian | 9,872 | 17,629 | 17,629 | 519,473 | 587,509 | 587,509 |
| Military | 239 | 311 | 353 | 11,262 | 11,180 | 14,385 |
| Hepatitis: Type A | 270 | 475 | 420 | 16,271 | 14,709 | 14,581 |
| Type B | 314 | 532 | 506 | 17,177 | 17,491 | 16,906 |
| Non A, Non B Unspecified | 28 22 17 | 61 91 10 | N 98 | 2,040 2,098 | 2,445 3,060 | 3,806 |
| Legionellosis Leprosy Malaria | 12 | 65 | N 5 16 | 578 128 571 | 456 182 724 | N 169 680 |
| Measles: Total* Indigenous | 13 | 91 84 | 29 N | 3,234 2,840 | 5,316 5,045 | 2,244 N |
| Imported | 7 | 7 | N | 394 | 265 | N |
| Meningococcal infections: Total | 25 | 31 | 31 | 2.064 | 1,808 | 1,986 |
| Civilian Military | 25 | 31 | 31 | 2,063 1 | 1,806 | 1,971 |
| Mumps Pertussis Rubella (German measies) | 98 95 | 53 75 8 | 30 69 | 10,153 1,546 | 3,356 2,068 | 2,407 1,525 |
| Syphilis (Primary & Secondary): Civilian Military | 290 | 593 4 | 11 585 4 | 276 23,153 104 | 416 17,452 121 | 541 18,709 225 |
| Toxic Shock syndrome | 5 | 6 | N | 223 | 245 | N |
| Tuberculosis | 37 <u>1</u> | 46 <u>5</u> | 449 | 14,041 | 14,525 | 14,525 |
| Tularemia | 7 4 | 5 | 5 | 138 | 97 | 163 |
| Typhoid Fever | | 11 | 11 | 203 | 200 | 226 |
| Typhus fever, tick-borne (RMSF) | 10 | 34 | 34 | 464 | 542 | 635 |
| Rabies, animal | 40 | 96 | 124 | 3,194 | 3,778 | 3,778 |

TABLE II. Notifiable diseases of low frequency, United States

| | Cum. 1987 | | Cum. 1987 |
|--|--------------|--|---|
| Anthrax Botulism: Foodborne Infant Other Brucellosis Cholera (La. 2) Congenital rubella syndrome Congenital syphilis, ages < 1 year Diphtheria | 78 4 4 | Leptospirosis (La.2) Plague (Oreg. 1) Poliomyelitis, Paralytic Psittacosis (Ky. 1) Rabies, human Tetanus (Ind. 1) Trichinosis Typhus fever, flea-borne (endemic, murine) | 15 7 - 61 - 28 30 22 |

^{*}There were no cases of internationally imported measles reported for this week

TABLE III. Cases of specified notifiable diseases, United States, weeks ending September 5, 1987 and August 30, 1986 (35th Week)

| | T | Aseptic | Encep | halitis | | | н | epatitis | (Viral), b | v type | | |
|---------------------------|--------------|-----------------|--------------|----------------------|------------------|------------------|---------|----------|------------|------------------|--------------------|--------------|
| Reporting Area | AIDS | Menin- gitis | Primary | Post-in- fectious | | orrhea ilian) | Α | В | NA,NB | Unspeci- fied | Legionel- losis | Leprosy |
| | Cum. 1987 | 1987 | Cum. 1987 | Cum. 1987 | Cum. 1987 | Cum. 1986 | 1987 | 1987 | 1987 | 1987 | 1987 | Cum. 1987 |
| UNITED STATES | 12,671 | 388 | 791 | 77 | 519,473 | 587,509 | 270 | 314 | 28 | 22 | 17 | 128 |
| NEW ENGLAND | 520 | 33 | 32 | 2 | 15,793 | 14,071 | 13 | 16 | 2 | 4 | - | 11 |
| Maine N.H. | 16 13 | 3 | 2 2 | - | 479 274 | 606 379 | 2 1 | 1 | - | • | - | 2 |
| Vt. | 4 | 4 | 5 | - | 140 | 167 | - | 3 | 1 | - | - | - |
| Mass. R.I. | 329 41 | 4 10 | 14 3 | 1 | 5,772 1,411 | 5,998 1,146 | 2 4 | 9 | - | 4 | - | 8 |
| Conn. | 117 | 12 | 6 | - | 7,717 | 5,775 | 4 | 3 | 1 | - | - | 1 |
| MID. ATLANTIC | 3,745 | 103 | 97 | 6 | 82,913 | 98,779 | 17 | 40 | 2 | 3 | 1 | 6 |
| Upstate N.Y. N.Y. City | 467 2,257 | 59 | 38 7 | 3 | 11,371 42,879 | 11,612 56,870 | 13 1 | 20 8 | 1 | 3 | 1 | 6 |
| N.J. | 640 | - | 7 | - | 10,641 | 12,964 | - | | - | - | - | - |
| Pa. | 381 | 44 | 45 | 3 | 18,022 | ·17,333 | 3 | 12 | 1 | - | - | - |
| E.N. CENTRAL | 834 154 | 127 63 | 246 107 | 12 5 | 78,456 17,788 | 81,288 19,568 | 12 1 | 29 2 | - | 4 | 3 | 6 |
| Ohio Ind. | 71 | 3 | 34 | - | 6,390 | 8,060 | 2 | 4 | - | 4 | 1 | 2 |
| III. | 409 | 6 | 25 | 7 | 23,930 | 21,182 | 4 | 13 | - | - | - | 1 |
| Mich. | 132 68 | 55 | 59 21 | - | 23,992 | 24,107 | 5 | 10 | - | - | 2 | 2 |
| Wis. | | - | | • | 6,356 | 8,371 | | | - | - | - | 1 |
| W.N. CENTRAL Minn. | 279 75 | 23 12 | 35 25 | - | 21,124 3,282 | 25,101 3,591 | 21 1 | 23 1 | 3 1 | 3 2 | 3 | - |
| lowa | 19 | 5 | 3 | - | 2,018 | 2,576 | i | 2 | - | - | - | - |
| Mo. | 135 | 3 | - | • | 11,211 | 12,533 | 12 | 17 | 1 | 1 | - | - |
| N. Dak. S. Dak. | 1 2 | 1 | - | | 191 389 | 228 516 | - | 1 | | - | 2 | : |
| Nebr. | 16 | 1 | 5 | - | 1,369 | 1,928 | - | - | - | - | - | - |
| Kans. | 31 | 1 | 2 | - | 2,664 | 3,729 | 7 | 2 | 1 | - | 1 | - |
| S. ATLANTIC | 2,002 | 49 | 98 | 26 | 136,682 | 152,382 | 21 | 65 | 6 | 4 | 6 | 5 |
| Del. Md. | 15 243 | 2 12 | 3 15 | 1 5 | 2,216 15,300 | 2,470 18.033 | 2 | 2 13 | • | • | - | 2 |
| D.C. | 248 | 1 | - 13 | - | 9,113 | 11,255 | 2 | 13 | 1 | - | - | |
| Va. | 149 | 4 | 24 | 2 | 9,990 | 12,304 | 5 | 3 | 1 | - | - | - |
| W. Va. N.C. | 16 106 | 1 4 | 24 17 | - | 1,011 | 1,495 | 5 | 1 12 | - | | 3 | - |
| S.C. | 49 | - | '- | | 19,984 11,163 | 23,909 13,118 | - | 9 | 1 | 1 - | 1 | 1 |
| Ga. | 292 | 9 | . 1 | | 24,311 | 25,547 | 1 | 10 | 2 | 1 | - | - |
| Fla. | 884 | 16 | 14 | 18 | 43,594 | 44,251 | 6 | 15 | 1 | 2 | 2 | 2 |
| E.S. CENTRAL | 153 24 | 25 | 46 | 6 | 39,371 | 47,280 | 6 | 20 | 1 | - | 2 | - |
| Ky. Tenn. | 24 25 | 17 | 21 10 | 1 | 3,981 13,867 | 5,223 18,303 | 5 | 8 7 | 1 - | - | 1 | - : |
| Ala. | 86 | 7 | 15 | 1 | 12,524 | 13,504 | - | 4 | - | - | - | - |
| Miss. | 18 | 1 | - | 4 | 8,999 | 10,250 | 1 | 1 | - | - | - | - |
| W.S. CENTRAL | 1,210 | 9 | 93 | 4 | 58,618 | 69,579 | 16 | 28 | 3 | 1 | - | 4 |
| Ark. La. | 25 160 | 6 | 19 | 2 | 6,790 10,474 | 6,509 12,350 | 8 2 | 1 19 | 1 | i | • | - |
| Okla. | 64 | 3 | 15 | 1 | 6,545 | 7,886 | 6 | 8 | 2 | - | - | |
| Tex. | 961 | - | 59 | 1 | 34,809 | 42,834 | - | - | - | - | - | 4 |
| MOUNTAIN | 334 | 8 | 30 | 4 | 13,842 | 17,156 | 60 | 34 | 2 | - | 2 | 2 |
| Mont. Idaho | 2 4 | - | | - | 384 494 | 477 556 | 3 3 | 1 2 | - | - | - | 1 |
| Wyo. | 3 | - | 1 | - | 289 | 375 | - | - | - | - | - | |
| Colo. | 146 | 3 | 8 | - | 3,031 | 4,528 | 3 | 7 | - | - | - | - |
| N. Mex. Ariz | 24 100 | 4 | 4 13 | 1 | 1,515 4,794 | 1,709 5,602 | 1 46 | 1 13 | 1 | • | 2 | - |
| Utah | 20 | ī | - | 3 | 437 | 733 | 2 | 5 | i | - | - | - |
| Nev. | 35 | - | 4 | - | 2,898 | 3,176 | 2 | 5 | - | - | • | 1 |
| PACIFIC | 3,594 | 11 | 114 | 17 | 72,674 | 81,873 | 104 | 59 | 9 | 3 | - | 94 |
| Wash. | 153 87 | - | 10 | 3 | 5,208 | 6,315 | 76 | 48 | 7 | 2 | - | 4 |
| Oreg. Calif. | 3,280 | - | 99 | 14 | 2,769 62,958 | 3,371 69,450 | 26 | 10 | 1 | - | • | - 70 |
| Alaska | 12 | 5 | 2 | - | 1,161 | 1,842 | 2 | - | 1 | 1 | | 1 |
| Hawaii | 62 | 6 | 3 | - | 578 | 895 | - | 1 | - | - | - | 19 |
| Guam | - | - | - | - | 151 | 127 | - | - | - | • | - | - |
| P.R. V.I. | 84 | - | 1 | 1 | 1,417 | 1,567 | 1 | 12 | 1 | 1 | - | 5 |
| Pac. Trust Terr. | | | | | 181 287 | 189 298 | | | • | - | - | 44 |
| Amer. Samoa | _ | _ | _ | | 59 | 30 | - | - | - | - | - | *** |

N: Not notifiable

U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 5, 1987 and August 30, 1986 (35th Week)

| | | Ocp. | CONTRACT | JI J, | 1307 | 4114 | August . | | | | | · <i>'</i> | | | |
|-------------------------------|--------------|-------|--------------|----------|------------------|--------------|----------------------------------|---------|--------------|----------|--------------|--------------|---------|--------------|-------------|
| | Malaria | India | Meas | les (Rut | oeola) orted* | Total | Menin- gococcal Infections | М | ımps | | Pertuss | is | Rubella | | |
| Reporting Area | Cum. 1987 | 1987 | Cum. 1987 | 1987 | Cum. 1987 | Cum. 1986 | Cum. 1987 | 1987 | Cum. 1987 | 1987 | Cum. 1987 | Cum. 1986 | 1987 | Cum. 1987 | Cum 1986 |
| UNITED STATES | 571 | 6 | 2,840 | 7 | 394 | 5,316 | 2,064 | 98 | 10,153 | 95 | 1,546 | 2,068 | - | 276 | 416 |
| NEW ENGLAND | 37 | | 104 | | 151 | 85 | 176 | 1 | 35 | 5 | 95 | 114 | | 1 | 9 |
| Maine | - | - | 3 | - | - | 10 | 10 | - | - | - | 17 | 2 | - | 1 | - |
| N.H. Vt. | 1 | - : | 53 10 | - | 101 15 | 42 | 16 13 | 1 | 9 | 5 | 22 | 59 3 | - | - | 1 |
| Mass. | 13 | - | 22 | - | 28 | 28 | 86 | - | 8 | - | 37 | 28 | - | - | 4 |
| R.I. Conn. | 7 16 | • | 1 15 | : | 1 6 | 2 | 14 37 | • | 2 13 | - | 1 14 | 4 18 | - | - | 2 1 |
| | | 4 | 517 | 5 | 56 | 1,662 | | - | | - | | | • | | |
| MID. ATLANTIC Upstate N.Y. | 68 27 | 4 | 26 | 5 1§ | 56 14 | 87 | 256 88 | 3 2 | 178 84 | 43 12 | 196 119 | 138 89 | - | 11 9 | 31 23 |
| N.Y. City | 5 | 4 | 438 | - | 18 | 646 | 20 | | 10 | - | - | 3 | - | 1 | 5 |
| N.J. Pa. | 16 20 | - | 32 21 | 49 | 7 17 | 905 24 | 48 100 | 1 | 42 42 | 1 30 | 10 | 11 35 | - | 1 | 3 |
| | | _ | | - | | | | | | | 67 | | • | | - |
| E.N. CENTRAL Ohio | 38 10 | 2 | 282 1 | - | 24 4 | 1,018 10 | 305 102 | 70 1 | 5,940 83 | 3 2 | 166 53 | 286 117 | - | 33 | 66 1 |
| Ind. | 4 | - | - | - | - | 17 | 34 | 49 | 915 | - | 13 | 22 | - | - | |
| III. | 6 | 2 | 116 | - | 18 | 644 | 77 | 17 | 2,474 | - | 14 | 32 | - | 25 | 56 |
| Mich. Wis. | 14 4 | - | 29 136 | | 2 | 56 286 | 77 15 | 1 2 | 874 1,594 | 1 | 41 45 | 24 91 | - | 8 | 8 1 |
| W.N. CENTRAL | | | 208 | | 22 | 339 | 91 | | | | | | | | |
| Minn. | 19 7 | : | 19 | : | 20 | 49 | 26 | 12 | 1,323 759 | 3 2 | 92 13 | 176 40 | - | 1 | 10 |
| lowa | 4 | - | - | - | - | 134 | 3 | 12 | 397 | - | 32 | 13 | - | 1 | 1 |
| Mo. | 4 | - | 188 | - | 1 | 31 | 26 | - | 22 | - | 24 | 12 | - | - | 1 |
| N. Dak. S. Dak. | - | - | 1 | - | - | 25 | 1 2 | - | 6 89 | - | 6 3 | 4 14 | - | - | 1 |
| Nebr. | 3 | - | - | - | - | 1 | 5 | - | 3 | - | 1 | 7 | - | - | - |
| Kans. | 1 | - | - | - | 1 | 99 | 28 | - | 47 | 1 | 13 | 86 | - | - | 7 |
| S. ATLANTIC | 94 | - | 118 | - | 12 | 620 | 336 | - | 231 | 6 | 244 | 630 | - | 14 | 4 |
| Del. Md. | 1 21 | - | 32 3 | - | 2 | 1 34 | 5 31 | - | 22 | - | 5 | 226 | - | 2 | - |
| D.C. | 12 | - | | : | 1 | 2 | 6 | | 1 | - | 11 | 156 | - | 2 | - |
| Va. | 16 | - | 1 | - | - | 60 | 56 | - | 68 | | 44 | 30 | - | 1 | - |
| W. Va. | 2 | - | - | • | - | 2 | 2 | - | 30 | 1 | 45 | 23 | - | - : | - |
| N.C. S.C. | 9 4 | - | 2 | - | 3 | 301 | 42 34 | | 16 12 | 5 | 98 | 41 13 | - | 1 | - |
| Ga. | 4 | - | - | - | 1 | 93 | 65 | - | 40 | - | 23 | 102 | - | 1 | - |
| Fla. | 25 | - | 78 | - | 5 | 124 | 95 | - | 42 | - | 18 | 39 | - | 7 | 4 |
| E.S. CENTRAL | 11 | - | 2 | - | 3 | 65 | 101 | 2 | 1,221 | 2 | 32 | 44 | - | 3 | 4 |
| Ky. Tenn. | 1 | - | • | • | - | 6 55 | 17 41 | 2 | 212 952 | - | 1 9 | 5 17 | - | 2 | 4 |
| Ala. | 4 | - | | - | 3 | 2 | 35 | - | 57 | 2 | 17 | 22 | - | 1 | - |
| Miss. | 5 | - | 2 | - | - | 2 | 8 | N | N | - | 5 | - | - | - | - |
| W.S. CENTRAL | 36 | - | 405 | - | 4 | 637 | 146 | 6 | 723 | 9 | 158 | 169 | - | 11 | 57 |
| Ark. La. | 1 | - | - | - | - | 283 | 19 | - | 281 | - | 10 | 11 | - | 2 | - |
| Okla. | 4 | - | 2 | - | 1 | 4 39 | 15 18 | 6 N | 215 N | 9 | 39 109 | 11 93 | - | 5 | - |
| Tex. | 31 | - | 403 | - | 3 | 311 | 94 | | 227 | | - | 54 | - | 4 | 57 |
| MOUNTAIN | 25 | - | 464 | - | 19 | 321 | 70 | 4 | 190 | 5 | 129 | 200 | _ | 24 | 22 |
| Mont. | • | - | 127 | - | 1 | 8 | 3 | - | 4 | - | 6 | 12 | - | 8 | 2 |
| Idaho Wyo. | 2 1 | • | - | - | 2 | 1 | 5 | 1 | 5 | - | 37 | 33 4 | - | 1 | - |
| Colo. | ż | - | 5 | | 4 | 7 | 20 | - | 28 | 5 | 5 48 | 53 | - | 1 | 1 |
| N. Mex. | 2 | - | 300 | - | 9 | 37 | 6 | N | N | - | 8 | 19 | - | - | - |
| Ariz. Utah | 10 1 | - | 30 | - | 1 | 258 9 | 23 9 | 3 | 141 9 | - | 23 | 47 | - | 4 | 2 |
| Nev. | ż | - | 2 | | i | 1 | 4 | - | 3 | - | 2 | 29 3 | - | 10 | 13 3 |
| PACIFIC | 243 | | 740 | 2 | 103 | 569 | 583 | | 312 | 19 | 434 | 311 | _ | 178 | |
| Wash. | 17 | - | 34 | - | 7 | 155 | 70 | - | 44 | 1 | 65 | 83 | | 1/8 | 213 14 |
| Oreg. Calif. | 5 | - | 2 | 2§ | 75 | 9 | 26 | N | N | 1 | 56 | 10 | - | 2 | 1 |
| Alaska | 217 3 | - | 704 | - | 17 | 383 | 474 4 | - | 247 7 | - | 150 10 | 210 2 | - | 112 | 194 |
| Hawaii | 1 | - | - | | 4 | 22 | 9 | - | 14 | 17 | 153 | 6 | : | 2 61 | 4 |
| Guam | - | | 2 | | | 5 | 4 | | 5 | _ | | - | _ | 1 | 3 |
| P.R. | 1 | - | 728 | - | - | 33 | 5 | - | 8 | 1 | 16 | 13 | - | 2 | 60 |
| V.I. Pac. Trust Terr. | - | - | ; | • | • | - | : | - | 11 | - | - | - | - | - | - |
| Amer. Samoa | - | : | 1 | : | : | 2 | 1 | - | 5 3 | - | 1 | - | - | 1 | 2 |
| | - | | | | | - 4 | | - | 3 | - | - | - | • | - | 1 |

^{*}For measles only, imported cases includes both out-of-state and international importations.

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 5, 1987 and August 30, 1986 (35th Week)

| Reporting Area | | s (Civilian) k Secondary) | Toxic- shock Syndrome | Tuber | culosis | Tula- remia | Typhoid Fever | Typhus Fever (Tick-borne) (RMSF) | Rabies, Animal |
|---------------------------------|--------------|------------------------------|-----------------------------|--------------|--------------|----------------|------------------|--|-------------------|
| | Cum. 1987 | Cum. 1986 | 1987 | Cum. 1987 | Cum. 1986 | Cum. 1987 | Cum. 1987 | Cum. 1987 | Cum. 1987 |
| UNITED STATES | 23,153 | 17,452 | 5 | 14,041 | 14,525 | 138 | 203 | 464 | 3,194 |
| NEW ENGLAND | 403 | 321 | 1 | 434 | 474 | 1 | 22 | 7 | 6 |
| Maine | 1 | 15 | 1 | 21 | 32 | • | 1 | - | 2 |
| N.H. Vt. | 3 2 | 10 8 | - | 15 9 | 20 | - | 1 | - | |
| Mass. | 189 | 173 | | 243 | 13 247 | 1 | 12 | 4 | - |
| R.I. Conn. | 8 200 | 18 97 | - | 35 111 | 35 127 | | 3 | 3 | 1 3 |
| MID. ATLANTIC | 4,304 | 2,507 | _ | 2,415 | 2.951 | | 21 | 12 | 269 |
| Upstate N.Y. | 149 | 121 | - | 357 | 424 | - | 8 | 7 | 41 |
| N.Y. City | 3,119 | 1,419 | • | 1,135 | 1,536 | • | 1 | - | - |
| N.J. Pa. | 453 583 | 446 521 | • | 459 464 | 505 486 | : | 12 | 1 4 | 13 215 |
| E.N. CENTRAL | 635 | 677 | - | 1,654 | 1,722 | 3 | 25 | 44 | 120 |
| Ohio Ind. | 77 44 | 92 80 | - | 312 | 304 | 1 | 6 | 32 | 10 |
| III. | 335 | 351 | | 145 729 | 181 751 | : | 4 8 | 5 | 13 36 |
| Mich. | 129 | 123 | - | 395 | 406 | - | 4 | 5 | 21 |
| Wis. | 50 | 31 | - | 73 | 80 | 2 | 3 | 2 | 40 |
| W.N. CENTRAL | 114 | 152 | • | 422 | 425 | 49 | 9 | 48 | 722 |
| Minn. Iowa | 13 19 | 27 6 | | 85 30 | 104 34 | 4 | 4 2 | 1 | 171 |
| Mo. | 63 | 81 | - | 236 | 211 | 31 | 3 | 17 | 204 41 |
| N. Dak. | | 5 | - | 5 | 5 | 1 | - | • | 89 |
| S. Dak. | 8 7 | 4 | - | 21 | 18 | 7 | - | 1 | 166 |
| Nebr. Kans. | 4 | 12 17 | : | 16 29 | 8 45 | 2 4 | | 3 26 | 16 35 |
| S. ATLANTIC | 7,988 | 5,270 | 2 | 3,052 | 2,750 | 5 | 19 | 167 | 859 |
| Del. | 52 | 36 | - | 31 | 33 | ĭ | - | 2 | - |
| Md. D.C. | 412 244 | 297 | • | 283 | 213 | - | 3 | 35 | 273 |
| Va. | 244 197 | 208 257 | - | 101 307 | 94 227 | 2 | 3 | 15 | 34 261 |
| W. Va. | 6 | 18 | - | 76 | 82 | - | ĭ | 5 | 41 |
| N.C. S.C. | 453 | 341 | 2 | 326 | 356 | 2 | 2 | 56 | 13 |
| Ga. | 515 1,127 | 456 1,014 | | 316 528 | 358 422 | - | : | 32 21 | 40 142 |
| Fla. | 4,982 | 2,643 | - | 1,084 | 965 | - | 10 | -i | 55 |
| E.S. CENTRAL | 1,273 | 1,170 | - | 1,146 | 1,257 | 5 | 2 | 69 | 225 |
| Ky. Tenn. | 13 516 | 54 410 | - | 280 | 298 | 1 | 1 | . 8 | 111 |
| Ala. | 323 | 376 | - | 285 353 | 370 393 | 1 | 1 | 46 12 | 57 57 |
| Miss. | 421 | 330 | - | 228 | 196 | 3 | - | 3 | - |
| W.S. CENTRAL | 2,841 | 3,520 | 2 | 1,675 | 1,876 | 50 | 11 | 103 | 443 |
| Ark. La. | 182 498 | 166 595 | • | 197 188 | 252 | 22 3 | 1 | 11 | 89 |
| Okla. | 99 | 95 | 2 | 159 | 320 175 | 22 | 2 | 80 | 11 26 |
| Tex. | 2,062 | 2,664 | | 1,131 | 1,129 | 3 | 8 | 12 | 317 |
| MOUNTAIN | 471 | 416 | - | 327 | 348 | 14 | 12 | 12 | 263 |
| Mont. Idaho | 8 5 | 6 10 | - | 10 17 | 17 16 | 2 1 | | 10 | 120 |
| Wyo. | 1 | 1 | | '. | 16 | | - | 1 | 5 56 |
| Colo. | 78 | 100 | - | 40 | 39 | 4 | - | - | 6 |
| N. Mex. Ariz. | 40 227 | 51 167 | • | 64 160 | 69 162 | 1 3 | 9 3 | : | 2 |
| Utah | 20 | 11 | - | 16 | 28 | 1 | | i | 58 6 |
| Nev. | 92 | 70 | - | 20 | 17 | ż | - | - | 10 |
| PACIFIC | 5,124 | 3,419 | - | 2,916 | 2,722 | 11 | 82 | 2 | 287 |
| Wash. Oreg. | 79 198 | 108 | - | 173 | 128 | 4 | 7 | • | |
| Calif. | 4,835 | 75 3,211 | - | 79 2,490 | 95 2,333 | 4 2 | 1 69 | 2 | 284 |
| Alaska | 3 | - | - | 2,450 44 | 2,333 37 | 1 | - | - | 284 3 |
| Hawaii | 9 | 25 | - | 130 | 129 | ÷ | 5 | • | - |
| Guam | 2 | 1 | - | 25 | 34 | | - | - | - |
| P.R. V.I. | 641 4 | 592 | - | 195 2 | 225 1 | | - | - | 48 |
| Pac. Trust Terr. Amer. Samoa | 126 | 196 | - | 122 | 44 | - | 16 | - | - |
| | 2 | | | | | | 1 | | - |

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending September 5, 1987 (35th Week)

| | 1 | 367 (35th Weel | | AII 0 | | | /V- · | | | | | | | | |
|---------------------------------------|-------------|----------------|-----------|------------|---------|----------|---------|---|---------------------|-------------|-----------|----------|---------|---------|---------|
| Reporting Area | | All Ca | uses, B | y Age | (Years) | <u> </u> | P&I** | ReportingArea | | All Cau | ises, B | y Age | (Years) | | P&I** |
| Reporting Area | Ali Ages | ≥65 | 45-64 | 25-44 | 1-24 | <1 | Total | NeportingArea | All Ages | ≥65 | 45-84 | 25-44 | 1-24 | <1 | Total |
| NEW ENGLAND | 613 | 411 | 130 | 38 | 20 | 14 | 45 | S. ATLANTIC | 1,154 | 709 | 253 | 107 | 41 | 44 | 41 |
| Boston, Mass. Bridgeport, Conn. | 196 26 | 116 16 | 50 9 | 18 | 7 1 | 5 | 21 3 | Atlanta, Ga.§ | 133 | 84 | 26 | 18 | 3 | 2 | 1 |
| Cambridge, Mass. | 25 | 21 | 3 | 1 | | | 4 | Baltimore, Md. Charlotte, N.C. | 154 85 | 87 49 | 31 24 | 18 4 | 9 5 | 9 | 7 5 |
| Fall River, Mass. | 26 | 20 | 6 | - | - | - | | Jacksonville, Fla. | 111 | 73 | 26 | 5 | 3 | 4 | 1 |
| Hartford, Conn. | 50 | 37 | 9 | 2 | 1 | 1 | 4 | Miami, Fla. | 119 | 73 | 30 | 14 | 2 | - | 2 |
| Lowell, Mass. Lynn, Mass. | 22 13 | 17 10 | 4 | 1 | : | - | 1 2 | Norfolk, Va. | 47 | 33 | 8 | 3 | 2 | 3 | 2 |
| New Bedford, Mass. | 19 | 15 | 3 | 1 | | - | 1 | Richmond, Va. Savannah, Ga. | 56 48 | 33 27 | 13 12 | 5 3 | 2 | 3 4 | 6 1 |
| New Haven, Conn. | 34 | 24 | 4 | 3 | 2 | 1 | 1 | St. Petersburg, Fla. | 81 | 61 | 13 | 2 | - | 5 | 5 |
| Providence, R.I. Somerville, Mass. | 72 4 | 48 3 | 14 | 1 | 5 | 4 | 2 | Tampa, Fla. | 78 | 52 | 16 | 6 | 3 | _ 1 | 8 |
| Springfield, Mass. | 47 | 28 | 11 | 5 | 2 | 1 | 5 | Washington, D.C. Wilmington, Del. | 214 28 | 122 15 | 46 8 | 26 3 | 10 2 | 10 | 3 |
| Waterbury, Conn. | 24 | 19 | 3 | 1 | ī | - | 1 | | | | _ | | | | - |
| Worcester, Mass. | 55 | 37 | 11 | 4 | 1 | 2 | - | E.S. CENTRAL Birmingham, Ala. | 823 109 | 533 67 | 188 27 | 55 10 | 32 3 | 15 2 | 43 1 |
| MID. ATLANTIC | 2,255 | 1,471 | 421 | 247 | 61 | 54 | 114 | Chattanooga, Tenn. | 53 | 37 | 8 | 2 | 3 | 3 | i |
| Albany, N.Y. Allentown, Pa. | 39 16 | 27 15 | 7 | 3 | 1 | 1 | 2 | Knoxville, Tenn. | 82 | 55 | 22 | 1 | 4 | - | 7 |
| Buffalo, N.Y. | 118 | 85 | 1 20 | 6 | 3 | 4 | 12 | Louisville, Ky. | 86 | 50 | 24 | 6 | 4 9 | 2 | 4 |
| Camden, N.J. | 30 | 16 | -8 | 5 | ĭ | - | 1 | Memphis, Tenn. Mobile, Ala. | 188 97 | 132 66 | 35 22 | 12 4 | 4 | 1 | 18 3 |
| Elizabeth, N.J.§ | 20 | 15 | 3 | 2 | • | - | 1 | Montgomery, Ala. | 48 | 31 | 11 | 5 | - | i | - |
| Erie, Pa.† Jersey City, N.J. | 33 49 | 20 33 | 11 | 1 | 1 | - | 4 | Nashville, Tenn. | 160 | 95 | 39 | 15 | 5 | 6 | 9 |
| N.Y. City, N.Y. | 1,257 | 795 | 10 232 | 5 163 | 34 | 33 | 54 | W.S. CENTRAL | 1,277 | 750 | 305 | 132 | 41 | 46 | 53 |
| Newark, N.J. | 97 | 40 | 32 | 17 | 4 | 4 | 3 | Austin, Tex. | 48 | 29 | 11 | 4 | 4 | : | 2 |
| Paterson, N.J. | 25 | 15 | 5 | 5 | - | : | - | Baton Rouge, La. Corpus Christi, Tex. | 25 27 | 13 13 | 4 10 | 7 2 | - | 1 2 | 2 |
| Philadelphia, Pa. Pittsburgh, Pa.† | 183 10 | 123 | 39 3 | 16 | 4 | 1 | 15 | Dallas, Tex. | 203 | 106 | 54 | 32 | 5 | 6 | 3 |
| Reading, Pa. | 34 | 29 | 2 | 2 | 1 | - | 3 | El Paso, Tex. | 50 | 25 | 17 | 2 | ž | 4 | 6 |
| Rochester, N.Y. | 121 | 97 | 8 | 9 | 3 | 4 | 11 | Fort Worth, Tex | 92 | 57 | 22 | 10 | . 2 | 1 | 6 |
| Schenectady, N.Y. Scranton, Pa.† | 24 | 18 | 6 | - | : | : | : | Houston, Tex.§ Little Rock, Ark. | 308 70 | 176 37 | 74 17 | 34 6 | 13 1 | 11 6 | 7 8 |
| Syracuse, N.Y. | 26 90 | 23 58 | 1 15 | 7 | 1 6 | 1 | 1 | New Orleans, La. | 120 | 75 | 25 | 14 | 3 | 3 | 1 |
| Trenton, N.J. | 33 | 18 | 11 | 2 | 1 | 1 | | San Antonio, Tex. | 186 | 116 | 37 | 17 | 9 | 7 | 7 |
| Utica, N.Y. | 26 | 21 | 3 | 1 | - | 1 | 2 | Shreveport, La. Tulsa, Okla. | 60 88 | 42 61 | 13 21 | 1 3 | 2 | 2 | 5 6 |
| Yonkers, N.Y. | 24 | 16 | 4 | 3 | 1 | - | 4 | * | | | | | - | | |
| | 2,171 | 1,385 | 477 | 155 | 73 | 81 | 79 | MOUNTAIN Albuquerque, N. Mex | 592 . 68 | 341 43 | 136 11 | 63 7 | 20 4 | 32 3 | 30 4 |
| Akron, Ohio Canton, Ohio | 72 27 | 47 24 | 15 3 | - | 4 | 6 | 1 | Colo. Springs, Colo. | 37 | 24 | 6 | 4 | 2 | 1 | 2 |
| Chicago, III.§ | 564 | 362 | 125 | 45 | 10 | 22 | 16 | Denver, Colo. | 95 | 55 | 21 | 13 | 1 | 5 | 5 |
| Cincinnati, Ohio | 133 | 98 | 20 | 5 | 6 | 4 | 11 | Las Vegas, Nev. Ogden, Utah | 69 14 | 41 8 | 16 3 | 8 1 | 1 1 | 3 1 | 1 2 |
| Cleveland, Ohio Columbus, Ohio | 140 127 | 82 76 | 38 31 | 15 9 | 2 7 | 3 4 | 1 | Phoenix, Ariz. | 151 | 79 | 46 | 15 | 4 | ż | 4 |
| Dayton, Ohio | 102 | 67 | 17 | 10 | 6 | 2 | 5 | Pueblo, Colo. | 21 | 17 | 3 | 1 | - | - | 2 |
| Detroit, Mich. | 243 | 130 | 52 | 29 | 13 | 19 | 5 | Salt Lake City, Utah | 41 | 15 | 12 | 2 | 4 | 8 | 2 |
| Evansville, Ind. Fort Wayne, Ind. | 30 50 | 18 35 | 6 10 | 4 | 1 | 1 | 1 | Tucson, Ariz. | 96 | 59 | 18 | 12 | 3 | 4 | 8 |
| Gary, Ind. | 11 | 5 | 5 | | 3 | 1 | | PACIFIC Berkeley, Calif. | 1,755 20 | 1,162 14 | 337 4 | 145 1 | 54 1 | 53 | 74 |
| Grand Rapids, Mich. | 69 | 41 | 21 | 3 | 3 | 1 | 11 | Fresno, Calif. | 53 | 40 | 2 | ż | 1 | 3 | 1 |
| Indianapolis, Ind. | 177 | 116 | 36 | 11 | 9 | 5 | 5 | Glendale, Calif.§ | 22 | 17 | 4 | 1 | - | - | 1 |
| Madison, Wis. Milwaukee, Wis. | 38 121 | 22 72 | 12 34 | 3 7 | 2 | 1 6 | 4 6 | Honolulu, Hawaii | 69 | 48 | 17 | 1 | 1 | 2 | 8 |
| Peoria, III. | 56 | 42 | 10 | <i>'</i> - | 2 | 2 | 3 | Long Beach, Calif. Los Angeles Calif.§ | 91 508 | 64 326 | 12 103 | 5 48 | 5 21 | 5 6 | 6 12 |
| Rockford, III. | 33 | 24 | 6 | 1 | 2 | - | 4 | Oakland, Calif. | 65 | 35 | 13 | 10 | - 3 | 4 | 4 |
| South Bend, Ind. | 24 | 19 | 4 | 1 | 3 | 2 | 1 | Pasadena, Calif. | 34 | 25 | 6 | - | 1 | 2 | 1 |
| Toledo, Ohio Youngstown, Ohio | 102 52 | 64 41 | 25 7 | 8 2 | 3 | 2 | 5 | Portland, Oreg. Sacramento, Calif. | 121 125 | 76 74 | 28 30 | 4 | 7 | 6 4 | 3 10 |
| W.N. CENTRAL | 724 | 484 | 152 | 45 | 24 | 19 | 43 | San Diego, Calif. | 125 | 87 | 28 | 16 7 | 1 | 3 | 11 |
| Des Moines, Iowa | 77 | 484 38 | 23 | 13 | 3 | 19 | 43 | San Francisco, Calif. | 132 | 81 | 27 | 17 | 2 | 5 | 3 |
| Duluth, Minn. | 28 | 19 | 3 | 2 | 3 | 1 | - | San Jose, Calif. | 155 | 104 | 31 | 12 | 2 | 6 | 8 |
| Kansas City, Kans. | 32 | 18 | 10 | 2 | 1 | 1 | 1 | Seattle, Wash. Spokane, Wash. | 150 41 | 106 30 | 23 3 | 11 4 | 6 1 | 4 | 1 4 |
| Kansas City, Mo. Lincoln, Nebr. | 112 25 | 73 21 | 27 2 | 6 1 | 3 1 | 3 | 10 1 | Tacoma, Wash. | 43 | 35 | 6 | i | i | - | 1 |
| Minneapolis, Minn. | 95 | 76 | 14 | 4 | i | - | 2 | | 1,364 ^{††} | | | 987 | 366 | 358 | 522 |
| Omaha, Nebr. | 96 | 71 | 16 | 4 | 2 | 3 | 6 | · - · · · · · | .,004 | .,240 | _,555 | 507 | 550 | 550 | 022 |
| St. Louis, Mo. | 151 | 97 | 35 | 10 | 2 | 7 | 16 | | | | | | | | |
| St. Paul, Minn. Wichita, Kans. | 58 50 | 39 32 | 8 14 | 3 | 6 2 | 2 | 1 | | | | | | | | |
| TTICING, Kalls. | 30 | 52 | | - | - | - | ~ | | | | | | | | |

^{*}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.

Recause 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.

surveillance definitions of plasmid-mediated resistance (PPNG, TRNG) and chromosomally mediated resistance (4). This report summarizes the results from the first 15 participating clinics.

Between August 1986 and July 1987, 1,420 gonococcal isolates were evaluated. Nineteen isolates (1%) were PPNG, and 64 (5%) were TRNG (Table 1). Forty-five of the TRNG isolates were reported from Baltimore, where TRNG accounted for 15% (45/300) of gonococcal isolates. For the 1,337 non-PPNG, non-TRNG isolates, the geometric mean MIC to penicillin was 0.19μg/ml; to tetracycline, it was 0.66μg/ml; to cefoxitin, 0.33μg/ml; to spectinomycin, 16.5μg/ml; and to ceftriaxone, 0.003μg/ml. Thirteen percent of the isolates without plasmid-mediated resistance were chromosomally resistant to penicillin, and 48% of them were chromosomally resistant to tetracycline (Figure 1). No isolates were resistant to spectinomycin or ceftriaxone.

Reported by: Gonococcal Isolate Surveillance Project participants. Regional Laboratories. Sexually Transmitted Diseases Laboratory Program, Center for Infectious Diseases; Div of Sexually Transmitted Diseases, Center for Prevention Svcs, CDC.

Editorial Note: This is the first nationally based prospective survey of antimicrobial resistance in *N. gonorrhoeae* in the United States since the National Gonorrhea Therapy Monitoring Study (NGTMS) was conducted from 1972 to 1977 (5,6). Previous nationally based reports of chromosomally mediated resistance and TRNG have been limited to summaries of outbreaks and the passive reporting of sporadically occurring cases (7,8).

The preliminary GISP survey data underestimate the proportion of infections caused by PPNG strains because New York and Florida, which accounted for 58% of PPNG reported in 1986 (1), are not represented in the initial GISP survey results. The

TABLE 1. Results of the initial phase of the Gonococcal Isolate Surveillance Project, by city — United States, August 1986-July 1987

| | Number of isolates | | | | | | | | |
|----------------|--------------------|------|---|-------|--|--|--|--|--|
| City | PPNG | TRNG | Without Plasmid- Mediated Resistance | Total | | | | | |
| Albuquerque | 3 | 1 | 69 | 73 | | | | | |
| Atlanta | 0 | 2 | 63 | 65 | | | | | |
| Baltimore | 0 | 45 | 255 | 300 | | | | | |
| Birmingham | 0 | 5 | 58 | 63 | | | | | |
| Boston | 1 | 4 | 120 | 125 | | | | | |
| Cincinnati | 0 | 0 | 74 | 74 | | | | | |
| Denver | 5 | 0 | 172 | 177 | | | | | |
| Honolulu | 3 | 0 | 64 | 67 | | | | | |
| Long Beach, CA | 0 | 0 | 95 | 95 | | | | | |
| New Orleans | 0 | 5 | 99 | 104 | | | | | |
| Phoenix | 0 | 0 | 23 | 23 | | | | | |
| San Diego | 7 | 2 | 138 | 147 | | | | | |
| San Francisco | 0 | 0 | 45 | 45 | | | | | |
| St. Louis | 0 | 0 | 20 | 20 | | | | | |
| San Antonio | 0 | 0 | 42 | 42 | | | | | |
| Total | 19 | 64 | 1,337 | 1,420 | | | | | |

distribution of TRNG reflects a high prevalence of disease in Baltimore, as previously reported (9). Excluding the Baltimore cases, TRNG represents 2% (19/1,120) of the national sample.

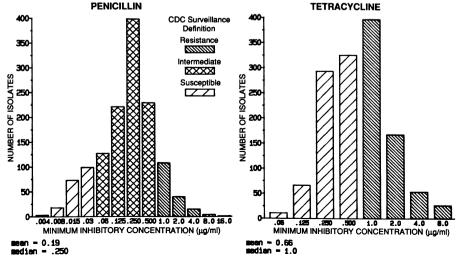
The high incidence of gonococci with chromosomally mediated resistance to penicillin and tetracycline confirms published reports of geographically limited studies in Seattle and Vancouver (2,3). Although no organisms in our sample were resistant to ceftriaxone, 27 (2%) of the isolates had MICs of 0.06-0.25µg/ml and met the criteria for intermediate susceptibility. Trends in ceftriaxone susceptibility will require continued monitoring as this and other third-generation cephalosporins are used more frequently in the treatment of gonorrhea. These results, when compared with those from the NGTMS, show a marked decrease in susceptibility to penicillin and tetracycline. Limited GISP trend data suggest that the incidence of chromosomally mediated resistant organisms will continue to increase.

In localities where the proportion of gonococcal strains meeting CDC surveillance definitions of antimicrobial resistance is ≥1% for 2 consecutive months, treatment and disease-intervention protocols may require modification. Management and treatment guidelines for infections caused by antimicrobial-resistant *N. gonorrhoeae* are being published as an *MMWR* supplement and will be available later this month.

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FIGURE 1. Distribution of minimum inhibitory concentrations of chromosomally mediated resistance —Gonorrhea Isolate Surveillance Project, August 1986-July 1987



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Epidemiologic Notes and Reports

HIV Infection and Pregnancies in Sexual Partners of HIV-Seropositive Hemophilic Men — United States

Seroprevalence rates for antibody to human immunodeficiency virus (HIV) have been reported to range from 33% to 92% for patients in the United States with hemophilia A and from 14% to 52% for those with hemophilia B (1-7). The cumulative incidence of AIDS is currently estimated at 3% (345 cases) for U.S. patients with hemophilia A and at 1% (23 cases) for those with hemophilia B. The cumulative AIDS incidence for seropositive patients varies from region to region and is reported to be as high as 18% in one hemophilia treatment center (HTC) in Pennsylvania (8). Because sexual partners of infected men are also at risk for HIV infection (9,10), the National Hemophilia Foundation (NHF) has developed extensive educational programs to inform patients with hemophilia and their sexual partners about the risks of HIV transmission.

The Division of Host Factors, Center for Infectious Diseases, CDC, and NHF conducted a survey of all U.S. HTCs and physicians known to treat patients with hemophilia. NHF estimates that those surveyed provide medical care for at least 75% of the hemophilic men in the United States. The purpose of the survey was to determine 1) whether sexual partners of known HIV-seropositive hemophilic men were being tested for HIV antibody*, 2) the HIV seroprevalence rate among those partners who had been tested, and 3) the extent of compliance with NHF and Public Health Service recommendations for preventing sexual and perinatal transmission of HIV (11,12).

Questionnaires were sent to 246 HTCs and physicians. Two hundred and thirty-seven (96%) responded, either in writing (123) or to follow-up telephone inquiries (114). Nine addressees (4%) either could not be reached or chose not to provide the requested information.

^{*}The issue of counseling was not addressed.

HIV Infection - Continued

The 237 respondents provided information concerning 2,276 spouses/sexual partners of a comparable number of HIV seropositive hemophilic patients[†] (Table 1). Seven hundred and seventy-two (34%) of the spouses/sexual partners were known to have been serologically tested for HIV antibody. Of those tested, 77 (10%) were reported to be seropositive. Among all spouses/sexual partners, 280 (12%) were reported to have been pregnant during the period January 1985 through March 1987 (Table 1). One hundred and seventy (61%) of these women had been tested for HIV antibody; 22 (13%) of those tested were seropositive for HIV prior to pregnancy, during pregnancy, or at delivery.⁵ Six hundred and two (30%) nonpregnant spouses were tested; 55 (9%) were seropositive.

Twenty children had been born to these 22 seropositive women, two of whom were pregnant twice. One of these 24 pregnancies was therapeutically aborted, and the outcomes of three others were not reported. Thirteen (65%) of the children born to HIV-seropositive women had been tested for HIV antibody. Four (31%) were seronegative, and nine (69%) were seropositive. Because the infants' ages at the time of antibody testing were not given, it was not possible to determine whether the positive results reflect passively transferred maternal antibody or infection of the infant. None of the 20 children born to seropositive mothers have yet been diagnosed as having AIDS.

Reported by: Hemophilia Treatment Centers. National Hemophilia Foundation. Div of Host Factors. Center for Infectious Diseases, CDC.

Editorial Note: The reported rate of HIV seropositivity among spouses/sexual partners of seropositive hemophilic men in this survey is consistent with findings in earlier studies (9,10). However, these rates should not be generalized to all U.S. hemophilic households because a number of limitations must be taken into account when interpreting the findings of this survey:

- The survey dealt only with spouses/sexual partners of known HIV-seropositive hemophilic patients. (NHF recommends voluntary HIV-antibody testing of hemophilic patients, along with appropriate pre- and post-test counseling.)
- A higher proportion of pregnant women than nonpregnant women had been tested (61% compared with 30%, p<0.0001). This finding suggests that some women may

TABLE 1. HIV antibody testing of spouses/sexual partners of HIV seropositive hemophilic men, by pregnancy status of spouse/sexual partner — survey of U.S. hemophilia treatment centers and physicians, 1987

| | | Pregna | | | | | |
|--------------|------|--------|--------|--------|-------|-------|--|
| | Preg | gnant | Not pr | egnant | Total | | |
| Test Results | No. | (%) | No. | (%) | No. | (%) | |
| Seropositive | 22 | (8) | 55 | (3) | 77 | (3) | |
| Seronegative | 148 | (53) | 547 | (27) | 695 | (31) | |
| Not tested* | 110 | (39) | 1,394 | (70) | 1,504 | (66) | |
| Total | 280 | (100) | 1,996 | (100) | 2,276 | (100) | |

^{*}Unknowns not included.

[†]The vast majority of hemophilic men are reported to be monogamous. Respondents were not asked to indicate the number of HIV-seropositive hemophilic male partners represented by this survey.

Respondents were not asked to indicate at what stage during pregnancy testing was performed or why these women were tested for HIV antibody.

HIV Infection - Continued

have been tested because they were pregnant or wished to become pregnant.

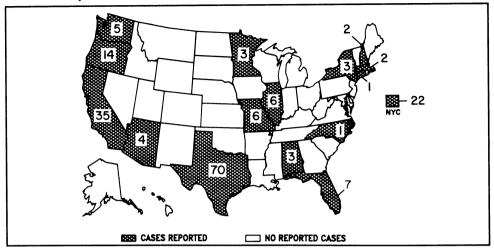
 HTCs and physicians have routine interaction with their hemophilic patients, but they may not interact as frequently or as closely with their patients' families or sexual partners. Therefore, HTCs and physicians may not be aware of the health status of their patients' family members/sexual partners. They may also be unaware of testing performed at other locations, e.g., by obstetricians.

Abstention from sexual intercourse would eliminate any risk of sexually transmitted HIV infection (13). The use of condoms, and possibly condoms in conjunction with spermicides, will reduce the risk of HIV transmission. However, even when condoms are properly used for each act of sexual intercourse, infected patients and their sexual partners should fully understand that some risk remains (14). In accordance with PHS guidelines, health-care personnel should provide hemophilic patients and their sexual partners with thorough, confidential, and individualized counseling (12).

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FIGURE I. Reported measles cases - United States, weeks 31-34, 1987



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