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Fluoroquinolone Resistance in *Neisseria gonorrhoeae* — Colorado and Washington, 1995

The fluoroquinolones ciprofloxacin and ofloxacin are among the antimicrobial agents recommended by CDC for treating gonorrhea (*1*). In the United States, decreased susceptibility or resistance of strains of *Neisseria gonorrhoeae* to the fluoroquinolones has been reported only sporadically, and treatment failure associated with in vitro resistance has not been described (*2*). However, the recent occurrence of resistant cases in Denver and Seattle suggests that clinically important resistance to the fluoroquinolones may be emerging. This report describes the findings of the investigations of these cases.

Denver

On May 24, 1995, a 35-year-old man presented to the Denver Public Health Sexually Transmitted Diseases Clinic with a history of dysuria and urethral discharge of approximately 1 month's duration. On March 11, he had returned from a "dating tour" of the Philippines during which he had had sexual contact with seven or eight female sex workers (i.e., prostitutes); he denied sexual contact since returning to the United States. He was treated with 400 mg ofloxacin orally in a single dose and was given 100 mg doxycycline to take orally twice a day for 7 days. A ß-lactamase–positive strain of *N. gonorrhoeae* was isolated from a urethral specimen. On June 7, when the patient returned to the clinic with continuing symptoms, gram-negative intracellular diplococci were detected in a smear of urethral discharge. He denied sexual contact since the previous visit but reported he had not completed the prescribed doxycycline regimen. He was again treated with 400 mg ofloxacin and given 500 mg erythromycin to take orally four times a day for 7 days. A ß-lactamase–negative strain of *N. gonorrhoeae* was isolated from a urethral specimen.

Because of suspected quinolone-resistant *N. gonorrhoeae* infection, the patient was recalled to the clinic on June 16 and treated with 250 mg ceftriaxone intramuscularly, even though his symptoms had resolved. He reported taking erythromycin for 3–4 days. Both a gram-stained smear and culture were negative for *N. gonorrhoeae*.

The susceptibilities of *N. gonorrhoeae* isolates from the patient's first and second visits were determined by agar dilution and disk diffusion tests (*3*). The minimum inhibitory concentrations (MICs) of the ß-lactamase–positive isolate from the first visit were 1.0 μg/mL and 2.0 μg/mL of ciprofloxacin and ofloxacin, respectively (Table 1);

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the corresponding disk diffusion susceptibilities (inhibition zone diameters) were 21 mm to ciprofloxacin (5-μg disk) and 20 mm to ofloxacin (5-μg disk). This isolate possessed a 3.2-megadalton ß-lactamase plasmid. The MICs of the ß-lactamase–negative isolate from the second visit were 4.0 μg/mL and 8.0 μg/mL of ciprofloxacin and ofloxacin, respectively; corresponding inhibition zone diameters were 11 mm to ciprofloxacin and 12 mm to ofloxacin. Both isolates were susceptible to ceftriaxone (MICs, 0.004 μg/mL and 0.015 μg/mL); the second isolate was resistant to tetracycline-hydrochloride (HCl) (2.0 μg/mL). The isolates were further characterized by auxotype/serovar (A/S) class; both belonged to the same A/S class, Pro/IB-8 (Table 1) (*4*).

Seattle

From late May through early August 1995, fluoroquinolone-resistant strains of *N. gonorrhoeae* were isolated from eight residents of Seattle-King County, Washington. These strains represented eight (4%) of 225 gonorrhea cases from which isolates were available for testing during this period. Of the eight cases, five occurred among women. Five (63%) of the eight patients infected with this strain were commercial sex workers or sex partners of sex workers compared with 14 (11%) of 126 of a random sample of patients infected with other *N. gonorrhoeae* strains ($p<0.01$). None of the patients infected with a fluoroquinolone-resistant strain had been treated with a quinolone or had a history of international travel; all had been treated with a broad-spectrum cephalosporin (cefixime or ceftriaxone). Despite expanded laboratory surveillance in King and adjacent counties, no additional cases have been identified since August 10.

These strains had ciprofloxacin and ofloxacin MICs of 8.0 μg/mL; inhibition zone diameters to ciprofloxacin and ofloxacin were 12 mm–14 mm and 10 mm–12 mm, respectively. All isolates had a 3.05 megadalton ß-lactamase plasmid and were resistant to tetracycline-HCl (2.0 μg/mL) but were susceptible to ceftriaxone, cefixime, and

TABLE 1. Laboratory findings for isolates of fluoroquinolone-resistant *Neisseria gonorrhoeae*, by patient visit — Denver and Seattle, 1995

Strain characteristics	Denver		Seattle*
	Visit 1	Visit 2	
ß-Lactamase production	positive	negative	positive
ß-lactamase plasmid (megadalton)	3.2	—	3.05
MICs† (μg/mL)			
Ciprofloxacin	1.0	4.0	8.0
Ofloxacin	2.0	8.0	8.0
Tetracycline-hydrochloride (HCl)	0.5	2.0	2.0
Ceftriaxone	0.004	0.015	0.01
Cefixime	0.015	0.03	0.03
Erythromycin	0.06	0.5	2.0
Spectinomycin	<128.0	<128.0	<128.0
Inhibition zone diameter (mm)			
Ciprofloxacin (5-μg disk)	21	11	12–14
Ofloxacin (5-μg disk)	20	12	10–12
Auxotype/serovar class	Pro§/IB-8	Pro/IB-8	Proto¶/IB-1

*Eight visits by eight different patients.
†Minimum inhibitory concentration.
§Proline-requiring.
¶Prototrophic.

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spectinomycin (Table 1). All isolates belonged to the same A/S class, Proto/IB-1, and had indistinguishable antimicrobial susceptibility profiles (Table 1), suggesting the spread of a single strain of *N. gonorrhoeae*.

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Editorial Note: The confirmation of the resistant strains in Colorado and Washington has at least four important epidemiologic and clinical implications. First, the infection in the patient from Denver failed to respond to therapy with the CDC-recommended dose of ofloxacin, and the susceptibilities of the infecting strains were consistent with fluoroquinolone resistance (5). Despite reports of sporadic therapy failures in Australia, Hong Kong, and the United Kingdom *(6–8*), this case report is the first documentation in the United States of a gonococcal infection caused by a strain with in vitro resistance failing to respond to fluoroquinolone therapy. Second, the report from Seattle is the first documentation of sustained transmission of this resistant phenotype in the United States. Third, both the case in Denver and the outbreak in Seattle were associated with commercial sex workers. The isolation of resistant strains from persons who may have large numbers of anonymous sexual contacts suggests the possibility of rapid spread of these strains. Finally, the fluoroquinolone MICs of these strains (Table 1) are substantially higher than those of other fluoroquinolone-resistant strains (ciprofloxacin MIC, 2.0 μg/mL) previously isolated in the United States (*2*).

The MICs of the strains isolated in both Denver and Seattle suggest that infections caused by such strains often would fail to respond to treatment with the CDC-recommended doses of these fluoroquinolones. Although doxycycline is used to treat patients with gonorrhea for possible coexisting chlamydial infection, one of the strains isolated from the patient in Denver and all the isolates from Seattle were resistant to tetracycline (Table 1) (*3*). Thus, infections caused by such strains that fail to respond to treatment with a fluoroquinolone also may fail to respond to doxycycline.

The patient in Denver probably acquired his fluoroquinolone-resistant gonococcal infection in the Philippines—an exposure that is consistent with a recent report of high-level fluoroquinolone-resistant *N. gonorrhoeae* among commercial sex workers in the Philippines (*9*). No international link has been identified for the cluster of cases in Seattle.

The findings in this report of high-level fluoroquinolone resistance are consistent with recent results from the Gonococcal Isolate Surveillance Project (GISP), a national surveillance system (*10*). During 1994, two (0.04%) of 4996 isolates from 24 sexually transmitted diseases clinics had ciprofloxacin MICs ≥1.0 μg/mL, the provisional criterion for resistance to ciprofloxacin (*5*). However, 65 (1.3%) of 4996 isolates exhibited decreased susceptibilities to ciprofloxacin (MICs, 0.125–0.5 μg/mL), an increase from 17 (0.3%) of 5238 isolates tested in 1991 ($p \leq 0.001$). Only one additional ciprofloxacin-resistant *N. gonorrhoeae* case has been detected among approximately 2500 isolates tested by GISP during 1995 (CDC, unpublished data, 1995).

Although fluoroquinolone resistance does not appear to be widespread in the United States, the cases described in this report emphasize the need for heightened

Neisseria gonorrhoeae — *Continued*

awareness about the potential for the emergence of clinically important resistance. Isolates obtained from patients whose infections fail to respond to fluoroquinolone therapy or from patients who have acquired their infections in certain parts of Asia should be tested for susceptibility to fluoroquinolones using the disk diffusion method recommended by the National Committee for Clinical Laboratory Standards (*3*). Based on theoretical predictions and a limited number of documented failures of gonococcal infections to respond to fluoroquinolones, CDC has proposed criteria for defining a resistance category of susceptibilities to ciprofloxacin and ofloxacin (*5*). Strains with MICs of ≥1.0 μg/mL ciprofloxacin or ≥2.0 μg/mL ofloxacin are interpreted as resistant to these agents. The corresponding inhibition zone diameters obtained by disk diffusion susceptibility testing are ≤29 mm to ciprofloxacin and ≤24 mm to ofloxacin (*5*).

Because fluoroquinolone-resistant *N. gonorrhoeae* strains appear to be occurring infrequently in the United States, CDC continues to recommend treating gonorrhea either with a single dose of 500 mg ciprofloxacin, 400 mg ofloxacin, 400 mg cefixime orally, or 125 mg ceftriaxone intramuscularly. Each agent should be followed by treatment with a regimen effective against possible infection with *Chlamydia trachomatis*. Lower doses of either the fluoroquinolones or cephalosporins should not be used. For patients who may have acquired infection in certain parts of Asia, clinicians should consider treatment with cefixime, ceftriaxone, or spectinomycin when treatment with a cephalosporin is contraindicated. The appropriateness of these recommendations will be reassessed based on surveillance of the prevalence of fluoroquinolone-resistant gonococci.

References

1. CDC. 1993 Sexually transmitted diseases treatment guidelines. MMWR 1993;42(no. RR-14): 4–5.
2. CDC. Decreased susceptibility of *Neisseria gonorrhoeae* to fluoroquinolones—Ohio and Hawaii, 1992–1993. MMWR 1994;43:325–7.
3. National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial disk susceptibility tests: approved standard. 5th ed. Villanova, Pennsylvania: National Committee for Clinical Laboratory Standards, 1993: NCCLS document no. M2-A5. (Vol 13, no. 24).
4. Sarafian SK, Knapp JS. Molecular epidemiology of gonorrhea. Clin Micro Rev 1989; 2(suppl):S49–S55.
5. Knapp JS, Hale JA, Neal SW, Wintersheid K, Whittington WL. Proposed criteria for the interpretation of susceptibilities of strains of *Neisseria gonorrhoeae* to ciprofloxacin, ofloxacin, enoxacin, lomefloxacin, and norfloxacin. Antimicrob Agents Chemother 1995;39 (in press).
6. Tapsall JW, Lovett R, Munro R. Failure of 500 mg ciprofloxacin therapy in male urethral gonorrhea. Med J Aust 1992;156:143.
7. Birley H, MacDonald P, Carey P, Fletcher J. High-level ciprofloxacin resistance in *Neisseria gonorrhoeae*. Genitourin Med 1994;70:292–3.
8. Kam KM, Lo KK, Ng KYH, Cheung MM. Rapid decline in penicillinase-producing *Neisseria gonorrhoeae* in Hong Kong associated with emerging 4-fluoroquinolone resistance. Genitourin Med 1995;71:141–4.
9. Manalastas R, Abellanosa IP, Melosa VP, et al. Fluoroquinolone resistance in *Neisseria gonorrhoeae* in the Republic of the Philippines [Abstract]. In: Proceedings of the IUVDT World STD/AIDS Congress 1995. Singapore: International Union Against the Venereal Diseases and the Treponematoses,1995:136.
10. Schwarcz SK, Zenilman JM, Schnell D, et al. National surveillance of antimicrobial resistance in *Neisseria gonorrhoeae*. JAMA 1990;264:1413–7.

Unintentional Carbon Monoxide Poisonings in Residential Settings — Connecticut, November 1993–March 1994

Carbon monoxide (CO) gas is an environmental hazard, and unintentional CO poisonings have occurred in multiple settings, including residences, motor vehicles, and workplaces. In 1993, exposure to CO produced by a malfunctioning natural gas furnace in a Suffield, Connecticut, home resulted in the deaths of three children and hospitalization of four other family members. Publicity resulting from this and other CO poisoning incidents prompted concern that gas furnaces have been a primary cause of residential CO poisonings in Connecticut. To determine the sources of residential CO poisonings in Connecticut, the Connecticut Department of Public Health (CDPH) surveyed persons with cases of CO poisoning during November 1993–March 1994. This report presents the survey findings.

CDPH reviewed the daily telephone logs of the Connecticut Poison Control Center (CPCC) to identify potential nonfatal CO poisonings during November 1993–March 1994. To determine whether potential cases met the case definition for a CO poisoning and whether the source of CO was residential, nurses from the CPCC collected additional details about poisonings through telephone interviews. A case was defined as two or more symptoms consistent with CO poisoning (i.e., headache, nausea, diarrhea, dizziness, dry mouth, drowsiness, or vomiting) or CO poisoning diagnosed by a physician and a carboxyhemoglobin (COHb) level >10% (normal concentration: <2% for nonsmokers, 5%–9% for smokers). A 32-item questionnaire was administered by CDPH to one adult respondent in each household to obtain information about demographics and socioeconomic status for each person in the household with CO poisoning, as well as information about symptoms, potential CO sources, details of the investigation and remediation of CO in the home, and the respondent's knowledge of CO poisoning before the incident.

A total of 197 records of potential nonfatal CO poisonings were identified; of these, 139 (71%) contained both the name and telephone number of persons with potential cases. Overall, 61 (44%) persons could be contacted, and 51 (84%) were considered to have had CO poisoning resulting from exposure to a residential source of CO. These 51 persons ranged in age from 1 to 71 years (median: 32 years); most (83%) were aged 20–49 years. Persons with CO poisoning resided in 36 households: 19 (53%) single-family dwellings, 11 (31%) multifamily dwellings, four (11%) apartments, and two (6%) dwellings classified as other.

The most common source of CO in these 36 homes was heating systems: oil heating systems (16 households), gas heating systems (11), and kerosene heaters (three). Gas appliances and fireplaces were identified as the CO source in six households.

Reported symptoms for the 51 patients included headache (88%), dizziness (83%), nausea (75%), drowsiness (75%), dry mouth (44%), diarrhea (17%), and vomiting (11%). For 28 (55%) patients, the first symptom noted was headache; for eight (16%), dizziness; for seven (13%), nausea; for five (10%), dry mouth; and for three (6%), drowsiness. Twenty-two (43%) patients consulted a physician. Of the 33 patients who suspected they were experiencing CO poisoning, 10 (30%) became concerned because of information obtained previously from television news media; eight (24%), because of prior knowledge of CO poisoning; eight (24%), because of information previously learned from others; four (12%), because of an odor from a malfunctioning

Carbon Monoxide Poisonings — Continued

appliance; two (6%), because of a CO detector; and one (4%), because of some other reason. For 32 cases, data were available about the interval between onset of symptoms and the time at which the patient first considered CO as the cause of symptoms: for 10 (31%), the interval was <1 hour; for three (9%), 1–12 hours; for five (16%), 24.1 hours–4 days; for one (3%), 4.1–7 days; and for 13 (41%), >7 days.

The 36 respondents also were asked about possible methods to prevent CO exposure: 22 (61%) provided one method, eight (22%) provided two, and one (3%) provided three; five (14%) were unable to list any method. Prevention methods included appropriate maintenance of appliances (16), use of a CO detector (14), proper ventilation of the room (five), public education (three), and other actions (three).

Sources of CO were identified primarily by heating-system technicians (48%) or a resident (38%). Sources also were identified by fire department personnel (10%) or building officials (3%). Methods of identification were visual inspection of the furnace or heating system (63%), process of elimination (18%), CO meters (11%), and other (7%). Actions taken to correct the CO emissions included replacing the furnace; ventilating the room; and/or cleaning, repairing, or discontinuing use of the malfunctioning appliance.

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Editorial Note: Unintentional CO poisonings result in approximately 600 deaths annually in the United States (*1*). A surveillance system implemented by the Colorado Department of Health in 1985 has helped to characterize the epidemiology of fatal and nonfatal CO poisonings (*2*). Findings from this system indicate that, during 1986–1991, the primary sources of 1149 CO poisonings in Colorado were furnaces in residential settings (40%), automobile exhaust (24%), and fires (12%). Furnaces were the source of CO in 46% of nonfatal CO poisonings but only 10% of fatal poisonings, suggesting that the primary sources of CO associated with nonfatal poisonings differ from those for fatal cases. In addition, findings from the Colorado surveillance system indicate that mortality data may underestimate the importance of furnaces as a source of CO in residential settings.

Other studies also have documented that furnaces are important sources of CO in residential CO poisonings. For example, of the 38 residential CO-related episodes investigated in West Virginia during 1978–1984, furnaces or space heaters were implicated in most (89%) incidents (*3*); 94% of the faulty units were fueled by methane or butane. In Connecticut, although most (75%) CO poisonings were caused by faulty furnaces, oil-fueled furnaces were the source of CO more often than natural gas—possibly reflecting a higher percentage of oil- or kerosene-fueled furnaces in homes in New England (51% in homes in New England compared with 6% in the Midwest, 7% in the South, and 2% in the West) (*4*). In addition, based on the 1990 census, the distribution of furnace types identified as sources of CO in this survey is representative of the distribution throughout Connecticut (gas furnaces, 28%, and oil or kerosene furnaces, 54%) (*4*).

CDPH is using the findings in this report to educate the public about sources of CO and strategies to prevent CO poisoning. Prevention of CO poisoning requires that 1) homeowners and renters recognize that all combustion appliances must be

Carbon Monoxide Poisonings — Continued

professionally installed to ensure both complete combustion of the fuel and adequate ventilation of combustion products (*4*); 2) combustion appliances be maintained and inspected annually; 3) fuels not be burned in confined spaces (e.g., tightly closed rooms); 4) public education efforts highlight the early manifestations of CO intoxication; 5) homeowners and renters be informed about the availability of low-cost CO detectors and public health agencies document the effectiveness of these devices; and 6) health-care providers—particularly emergency department personnel—consider the possibility of poisoning from residential exposure to CO in patients reporting typical symptoms (e.g., headache, nausea, vomiting, and malaise). Additional information about CO detectors is available from the Consumer Product Safety Commission hotline (800) 638-2772 or (301) 504-0220.

References

1. Cobb N, Etzel RA. Unintentional carbon monoxide-related deaths in the United States, 1979–1988. JAMA 1991;266:659–63.
2. Cook M, Simon PA, Hoffman RE. Unintentional carbon monoxide poisoning in Colorado, 1986 through 1991. Am J Public Health 1995;85:988–90.
3. Baron RC, Backer RC, Sopher IM. Fatal unintended carbon monoxide poisoning in West Virginia from nonvehicular sources. Am J Public Health 1989;79:1656–8.
4. Bureau of the Census. 1990 Census of population and housing: summary of social, economic, and housing characteristics—United States. Washington, DC: US Department of Commerce, Economic and Statistics Administration, Bureau of the Census, 1992; document no. 1990 CPH-5-1.

HIV Risk Practices of Male Injecting-Drug Users Who Have Sex with Men — Dallas, Denver, and Long Beach, 1991–1994

As of June 1995, a total of 31,024 cases of acquired immunodeficiency syndrome (AIDS) had been reported in the United States among male injecting-drug users (IDUs) who also reported sexual contact with other men (*1*). Although male IDUs who report male sex partners have accounted for 7% of all AIDS cases and for 21% of cases reported among IDUs, the characteristics and risk practices of male IDUs who have sex with men (MSM) have not been clearly determined *(2–4)*. To better characterize this group of men with multiple risk factors for human immunodeficiency virus (HIV) infection, data collected during February 1991 through June 1994 from three sites—Dallas; Denver; and Long Beach, California—were analyzed as part of the CDC-sponsored AIDS Community Demonstration Projects (*5,6*). This report summarizes results of that analysis.

The Community Demonstration Projects included interviews of male IDUs conducted in neighborhoods with a high prevalence of drug use. Trained interviewers approached potential respondents on the street to administer a screening interview that assessed recent HIV risk practices (i.e., needle sharing during the preceding 60 days or vaginal or anal intercourse during the preceding 30 days). At-risk persons also completed a second interview about perceived risk for HIV infection, drug-injection practices, and sexual behavior. A cash incentive or grocery vouchers were provided for completing each interview. This report presents data for men who reported injecting drugs during the preceding 30 days.

HIV Risk Practices — Continued

Nearly all (1697 [93%] of 1820) of the sexually active male IDUs who were screened completed the second interview. Of these, 297 (18%) reported having had one or more male sex partners during the preceding 30 days. The percentage of MSM IDUs varied by city (Denver, 28%; Dallas, 22%; and Long Beach, 10%). Nearly two thirds (178 [60%] of 297) of MSM IDUs self-identified as bisexual, 97 (33%) as heterosexual, and 15 (5%) as homosexual; seven (2%) were undecided about their sexual identity. Most MSM IDUs in this sample were black (192 [65%] of 297), aged ≥30 years (224 [75%]), and recruited at the Denver site (167 [56%]).

A total of 224 (75%) MSM IDUs had traded sex for money or drugs during the preceding 30 days. Almost all (283 [95%]) had had more than one sex partner during the preceding 30 days. The mean number of male partners during the preceding 30 days was 3.8 (range: 1–41; standard deviation [SD]: ±5.6). Most (263 [89%]) reported having one or more (mean: 4.5, range: 0–61, SD: ±6.4) female sex partners. A total of 148 (50%) reported having had a partner whom they identified as their main or primary sex partner. Of those with a main partner, 110 (74%) of 148 indicated this partner was female.

Nearly all MSM IDUs (290 [98%]) reported having ever had vaginal intercourse. During the preceding 30 days, 267 (90%) had had vaginal intercourse with main and/or other partners. Of those with a female main partner, 13 (12%) of 105 reported using a condom the last time they had vaginal intercourse; of those who had had vaginal sex with someone they did not consider to be their main partner (i.e., non-main partner), 30 (13%) of 233 had used a condom at last intercourse.

Nearly all (282 [95%]) had ever engaged in anal intercourse; 201 (71%) had had anal intercourse with both men and women, 51 (18%) with men only, and 30 (11%) with women only. Most (250 [84%] of 297) had also had anal intercourse during the preceding 30 days. Data regarding condom use during anal intercourse during the preceding 30 days were collected for a subset of respondents. Eight (23%) of 35 of those with a male main partner and eight (20%) of 41 of those with a female main partner used a condom the last time they had anal intercourse with this partner. Among MSM IDUs with non-main partners, 53 (27%) of 200 used a condom the last time they had anal intercourse.

During the preceding 60 days, 250 (86%) of 292 MSM IDUs reported having shared syringes or other paraphernalia used to prepare or inject illicit drugs. Less than one third (73 [29%] of 248) indicated that the last time they shared injection equipment they used bleach to clean their needle or syringe.

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Editorial Note: Approximately 18% of male IDUs interviewed at the three sites in this study reported having had sex with another male during the previous 30 days—a rate higher than that reported for a national sample of men aged 20–39 years (*7*), but consistent with previous studies of male IDUs (*2,4*). Although these previous studies were based on convenience samples and the estimates probably were not representative of the total population of IDUs, the range for the prevalence of MSM activity among IDUs is similar to that documented in the three sites in this report.

HIV Risk Practices — Continued

In this study, the prevalences of drug-injection and sexual practices associated with the transmission of HIV infection were high among MSM IDUs, including recent sharing of injection equipment, trading of sex for money or drugs, engaging in anal sex, and having had multiple sex partners. Because such practices increase the risk for acquiring and/or transmitting HIV infection to needle-sharing and sex partners, intervention programs for MSM IDUs should address both drug-related and sexual risk factors.

The findings in this report also indicate that sexual self-identification as heterosexual or homosexual may not correspond with sexual practices. Assessment of risk for HIV infection should be based on behavior, regardless of self-identification. Self-identification as heterosexual or bisexual, however, may be useful in planning and conducting intervention activities (*8*). For example, efforts to provide preventive measures to MSM IDUs who do not self-identify as homosexual may need to be directed through a variety of settings because such men may ignore or resist messages that appear to be targeted toward men who are homosexual.

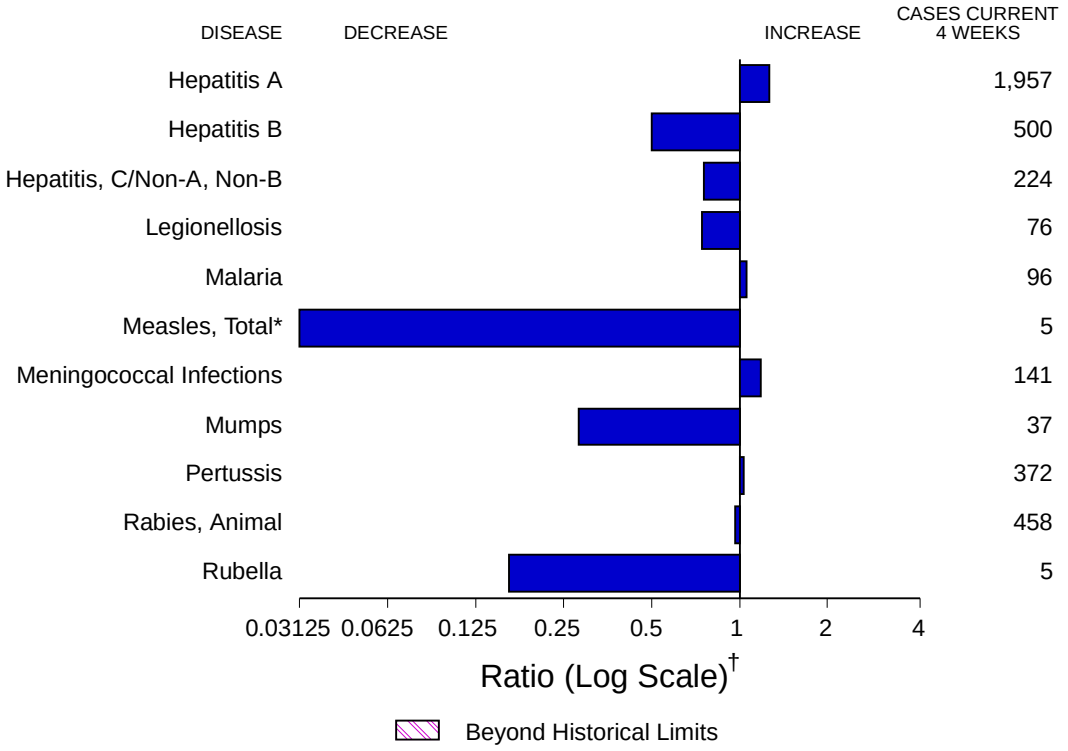
The use of neighborhood-based samples in Dallas, Denver, and Long Beach may have resulted in some biases. For example, some important subgroups (e.g., amphetamine users and men who self-identify as homosexual) probably were undersampled, while other groups (e.g., men who traded sex for money or drugs) may have been oversampled. Although these potential sampling biases may have influenced the patterns of HIV risk in this study, the extent to which these biases affected the estimates of HIV risk among MSM IDUs could not be assessed.

The development of programs for preventing HIV transmission among MSM IDUs requires that public health agencies and local community-planning groups characterize the risk for this group and examine available data from AIDS case reports, HIV counseling and testing sites, and behavioral surveillance surveys. Determinants for risk that may vary by location include demographic characteristics, patterns of sexual practices and of substance use, and access to HIV-prevention services.

References

1. CDC. HIV/AIDS surveillance report. Atlanta: US Department of Health and Human Services, Public Health Service, 1995:1. (Vol. 6, no. 7).
2. Lewis DK, Watters JK. Sexual behavior and sexual identity in male injection drug users. J Acquir Immune Defic Syndr 1994;7:190–8.
3. Paul JP, Stall R, Davis F. Sexual risk for HIV transmission among gay/bisexual men in substance abuse treatment. AIDS Education and Prevention 1993;5:11–24.
4. Ross MW, Wodak A, Gold J, Miller ME. Differences across sexual orientation on HIV risk behaviors in injecting drug users. AIDS Care 1992;4:139–48.
5. CDC. Community-level prevention of HIV infection among high-risk populations: methodology and preliminary findings from the AIDS Community Demonstration Projects. MMWR Supplement (in press).
6. O'Reilly KR, Higgins DL. AIDS Community Demonstration Projects for HIV prevention among hard-to-reach groups. Public Health Rep 1991;106:714–20.
7. Billy JO, Tanfer K, Grady WR, Klepinger DH. The sexual behavior of men in the United States. Fam Plann Perspec 1993;25:52–60.
8. Doll LS, Beeker C. Male bisexual behavior and HIV risk in the United States: synthesis of research with implications for behavioral interventions. AIDS Educ Prev (in press).

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending October 14, 1995, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.
†Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending October 14, 1995 (41st Week)

	Cum. 1995		Cum. 1995
Anthrax	-	Psittacosis	51
Brucellosis	72	Rabies, human	1
Cholera	14	Rocky Mountain Spotted Fever	476
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year†	280
Diphtheria	-	Tetanus	23
*Haemophilus influenzae**	915	Toxic shock syndrome	143
Hansen Disease	107	Trichinosis	26
Plague	7	Typhoid fever	253
Poliomyelitis, Paralytic	-		

*Of 896 cases of known age, 215 (24%) were reported among children less than 5 years of age.
†Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through second quarter 1995.
-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending October 14, 1995, and October 15, 1994 (41st Week)

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		C/NA,NB			
	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	54,704	274,727	317,670	21,950	19,225	7,447	8,978	3,024	3,232	979	1,229
NEW ENGLAND	2,653	4,663	6,590	237	236	167	269	93	123	28	64
Maine	81	66	72	23	21	7	11	-	-	5	4
N.H.	77	91	89	8	16	18	23	12	9	1	-
Vt.	30	48	27	5	9	1	6	1	12	-	-
Mass.	1,137	2,251	2,528	103	88	67	154	73	82	18	44
R.I.	192	417	373	28	20	8	7	7	20	4	16
Conn.	1,136	1,790	3,501	70	82	66	68	-	-	N	N
MID. ATLANTIC	14,696	26,830	34,987	1,300	1,346	984	1,160	331	372	155	194
Upstate N.Y.	1,736	3,846	8,093	348	455	310	305	185	177	42	47
N.Y. City	7,624	9,775	13,353	605	515	294	256	1	1	4	6
N.J.	3,575	3,324	3,985	173	232	232	300	108	163	21	37
Pa.	1,761	9,885	9,556	174	144	148	299	37	31	88	104
E.N. CENTRAL	4,122	59,734	63,451	2,272	1,945	736	934	220	269	255	352
Ohio	852	17,515	16,921	1,486	735	88	137	9	20	127	160
Ind.	429	6,377	6,923	135	308	183	166	6	8	63	36
Ill.	1,736	16,774	19,568	217	483	94	246	33	74	13	32
Mich.	825	14,473	13,893	296	233	327	307	172	167	25	69
Wis.	280	4,595	6,146	138	186	44	78	-	-	27	55
W.N. CENTRAL	1,266	15,337	17,533	1,480	974	479	524	101	69	99	83
Minn.	285	2,238	2,549	157	188	50	48	4	14	6	2
Iowa	71	1,192	1,200	55	54	43	24	13	9	20	28
Mo.	564	8,901	9,643	1,055	495	321	397	57	18	47	30
N. Dak.	6	20	33	23	5	4	-	8	1	4	4
S. Dak.	15	131	173	49	31	2	2	1	-	3	1
Nebr.	84	757	1,059	35	109	23	24	6	11	12	13
Kans.	241	2,098	2,876	106	92	36	29	12	16	7	5
S. ATLANTIC	14,155	80,200	85,085	1,039	996	1,123	1,636	274	341	172	299
Del.	241	1,771	1,543	7	21	2	12	1	1	2	31
Md.	2,250	7,471	14,828	171	145	210	285	4	17	27	67
D.C.	827	3,668	5,767	20	18	15	40	-	1	4	6
Va.	1,082	8,350	10,536	169	141	93	104	16	21	18	8
W. Va.	86	543	638	21	17	45	33	43	25	4	3
N.C.	816	19,208	21,998	89	111	224	227	47	51	31	20
S.C.	766	9,844	10,552	40	32	40	25	16	8	31	15
Ga.	1,784	13,038	U	55	26	63	516	15	173	23	103
Fla.	6,303	16,307	19,223	467	485	431	394	132	44	32	46
E.S. CENTRAL	1,763	33,021	37,214	1,524	491	651	910	783	748	43	72
Ky.	221	3,893	4,031	36	133	54	67	22	24	10	8
Tenn.	709	10,908	12,047	1,261	214	512	779	759	709	24	36
Ala.	484	13,242	12,400	71	82	85	64	2	15	6	12
Miss.	349	4,978	8,736	156	62	-	-	-	-	3	16
W.S. CENTRAL	4,691	27,091	38,768	3,488	2,498	1,087	1,020	246	259	16	35
Ark.	209	2,757	5,323	369	156	37	22	4	7	1	6
La.	785	8,779	9,671	102	128	154	141	140	145	3	12
Okla.	206	4,550	3,742	819	278	134	114	35	48	5	11
Tex.	3,491	11,005	20,032	2,198	1,936	762	743	67	59	7	6
MOUNTAIN	1,716	6,833	7,916	3,166	3,794	626	524	344	357	96	73
Mont.	17	55	72	118	18	19	18	13	11	4	14
Idaho	38	99	69	248	278	67	67	41	64	2	1
Wyo.	12	85	68	98	24	20	22	136	129	12	4
Colo.	523	2,290	2,741	433	417	101	81	54	58	35	15
N. Mex.	137	799	801	677	891	244	169	39	44	4	3
Ariz.	545	2,591	2,540	895	1,533	92	58	37	22	9	9
Utah	112	131	199	568	434	54	62	10	15	14	6
Nev.	332	783	1,426	129	199	29	47	14	14	16	21
PACIFIC	9,642	21,018	26,126	7,444	6,945	1,594	2,001	632	694	115	57
Wash.	717	2,181	2,334	649	873	146	187	156	202	20	10
Oreg.	347	249	826	1,610	808	64	127	29	35	-	-
Calif.	8,328	17,578	21,652	5,013	5,040	1,362	1,650	408	452	90	45
Alaska	60	565	730	46	180	9	12	1	-	-	-
Hawaii	190	445	584	126	44	13	25	38	5	5	2
Guam	-	65	105	5	22	1	4	-	-	1	1
P.R.	1,925	470	395	81	52	455	293	18	140	-	-
V.I.	27	6	25	-	3	2	7	-	1	-	-
Amer. Samoa	-	24	25	6	8	-	-	-	-	-	-
C.N.M.I.	-	23	45	15	8	7	1	-	-	-	-

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update September 28, 1995.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 14, 1995, and October 15, 1994 (41st Week)

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps	
					Indigenous		Imported*		Total					
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	6,638	9,803	967	855	-	247	1	25	272	866	2,365	2,169	629	1,156
NEW ENGLAND	1,587	2,305	38	63	-	6	-	2	8	27	108	101	10	19
Maine	25	18	5	4	-	-	-	-	-	5	8	19	4	3
N.H.	19	25	1	3	-	-	-	-	-	1	20	8	1	4
Vt.	8	14	1	3	-	-	-	-	-	3	8	2	-	-
Mass.	154	153	13	29	-	1	-	1	2	7	39	45	2	3
R.I.	285	347	4	8	-	5	-	-	5	7	-	-	1	2
Conn.	1,096	1,748	14	16	-	-	-	1	1	4	33	27	2	7
MID. ATLANTIC	4,124	5,891	257	168	-	7	-	5	12	213	276	234	94	93
Upstate N.Y.	2,107	3,702	53	44	-	1	-	-	1	18	85	77	24	27
N.Y. City	168	20	137	61	-	2	-	3	5	14	39	30	13	7
N.J.	870	1,196	50	38	-	4	-	2	6	173	73	52	12	13
Pa.	979	973	17	25	-	-	-	-	-	8	79	75	45	46
E.N. CENTRAL	67	471	89	92	-	7	1	4	11	102	324	320	116	199
Ohio	45	36	12	15	-	1	1	1	2	17	96	93	41	52
Ind.	14	15	14	12	-	-	-	-	-	1	59	41	4	7
Ill.	3	23	32	40	-	-	-	2	2	56	71	104	32	92
Mich.	5	5	18	22	-	4	-	1	5	25	61	47	39	37
Wis.	-	392	13	3	-	2	-	-	2	3	37	35	-	11
W.N. CENTRAL	193	248	23	39	-	2	-	-	2	170	158	139	30	62
Minn.	129	129	4	12	-	-	-	-	-	-	26	12	2	4
Iowa	11	13	3	5	-	-	-	-	-	7	28	18	-	15
Mo.	34	93	7	12	-	1	-	-	1	160	64	68	22	38
N. Dak.	-	-	1	1	-	-	-	-	-	-	1	1	1	4
S. Dak.	-	-	2	-	U	-	U	-	-	-	5	8	-	-
Nebr.	1	3	3	4	-	-	-	-	-	2	14	12	4	1
Kans.	18	10	3	5	-	1	-	-	1	1	20	20	1	-
S. ATLANTIC	437	670	205	176	-	11	-	1	12	65	436	317	90	166
Del.	7	102	1	3	-	-	-	-	-	-	6	5	-	-
Md.	267	215	55	65	-	-	-	1	1	4	32	28	20	50
D.C.	2	7	16	12	-	-	-	-	-	-	4	4	-	-
Va.	47	119	47	27	-	-	-	-	-	3	55	58	20	38
W. Va.	22	20	3	-	-	-	-	-	-	37	8	12	-	3
N.C.	49	72	15	10	-	-	-	-	-	3	68	44	16	35
S.C.	16	7	1	4	-	-	-	-	-	-	53	22	10	7
Ga.	13	113	26	29	-	2	-	-	2	3	86	67	8	9
Fla.	14	15	41	26	-	9	-	-	9	15	124	77	16	24
E.S. CENTRAL	41	39	20	30	-	-	-	-	-	28	148	155	13	20
Ky.	9	22	2	10	-	-	-	-	-	-	47	34	-	-
Tenn.	20	11	7	10	-	-	-	-	-	28	37	29	-	7
Ala.	7	6	8	9	-	-	-	-	-	-	34	61	4	5
Miss.	5	-	3	1	-	-	-	-	-	-	30	31	9	8
W.S. CENTRAL	94	101	49	39	-	26	-	3	29	17	292	256	42	203
Ark.	5	8	3	3	-	2	-	-	2	1	22	39	3	5
La.	4	1	5	7	-	17	-	1	18	1	43	31	12	24
Okla.	43	56	1	6	-	-	-	-	-	-	29	26	-	23
Tex.	42	36	40	23	-	7	-	2	9	15	198	160	27	151
MOUNTAIN	8	14	52	27	-	67	-	1	68	164	163	143	25	146
Mont.	-	-	3	-	-	-	-	-	-	-	2	6	1	-
Idaho	-	3	1	2	-	-	-	-	-	1	7	15	3	7
Wyo.	3	3	-	1	-	-	-	-	-	-	7	7	-	2
Colo.	-	1	23	11	-	26	-	-	26	19	43	28	2	4
N. Mex.	1	5	5	3	-	30	-	1	31	-	31	13	N	N
Ariz.	1	-	10	4	-	10	-	-	10	1	51	49	2	95
Utah	1	1	6	4	-	-	-	-	-	134	15	18	11	25
Nev.	2	1	4	2	-	1	-	-	1	9	7	7	6	13
PACIFIC	87	64	234	221	-	121	-	9	130	80	460	504	209	248
Wash.	10	1	19	25	-	16	-	4	20	3	76	75	10	16
Oreg.	5	6	11	14	-	-	-	1	1	2	73	112	N	N
Calif.	72	57	191	166	-	105	-	3	108	61	299	310	179	212
Alaska	-	-	3	2	-	-	-	-	-	10	8	2	13	3
Hawaii	-	-	10	14	-	-	-	1	1	4	4	5	7	17
Guam	-	-	-	-	U	-	U	-	-	228	3	-	3	6
P.R.	-	-	1	4	-	11	-	-	11	11	23	7	2	2
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	2	4
Amer. Samoa	-	-	-	-	U	-	U	-	-	-	-	-	-	2
C.N.M.I.	-	-	1	1	U	-	U	-	-	29	-	-	-	2

*For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 14, 1995, and October 15, 1994 (41st Week)

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	95	3,097	3,104	2	119	208	11,734	16,807	15,370	17,239	5,553	6,048
NEW ENGLAND	8	413	350	-	34	128	131	173	393	390	1,246	1,481
Maine	-	28	18	-	1	-	2	4	12	23	45	-
N.H.	3	44	66	-	1	-	1	4	15	13	125	123
Vt.	-	61	40	-	-	-	-	-	3	6	148	112
Mass.	4	255	190	-	7	124	48	76	217	199	369	566
R.I.	1	3	5	-	-	2	3	12	40	35	269	40
Conn.	-	22	31	-	25	2	77	77	106	114	290	640
MID. ATLANTIC	14	269	475	-	12	6	667	1,103	3,199	3,551	1,032	1,615
Upstate N.Y.	9	137	198	-	4	5	43	143	407	445	392	1,201
N.Y. City	2	26	93	-	7	-	318	496	1,692	2,053	-	-
N.J.	-	13	13	-	1	1	136	174	610	615	284	220
Pa.	3	93	171	-	-	-	170	290	490	438	356	194
E.N. CENTRAL	10	287	460	1	5	9	2,067	2,478	1,506	1,621	70	54
Ohio	6	121	123	-	-	-	709	946	215	274	10	4
Ind.	-	19	52	1	1	-	219	199	178	146	12	12
Ill.	2	71	93	-	1	1	771	845	743	801	3	18
Mich.	2	64	56	-	3	8	232	232	315	354	37	12
Wis.	-	12	136	-	-	-	136	256	55	46	8	8
W.N. CENTRAL	4	222	145	-	-	2	618	971	459	447	266	178
Minn.	4	122	51	-	-	-	34	37	106	102	19	14
Iowa	-	1	17	-	-	-	38	50	48	46	91	72
Mo.	-	49	39	-	-	2	509	819	180	197	19	20
N. Dak.	-	8	4	-	-	-	-	1	3	8	24	10
S. Dak.	U	11	16	U	-	-	-	1	20	21	72	32
Nebr.	-	9	8	-	-	-	11	11	20	16	5	-
Kans.	-	22	10	-	-	-	26	52	82	57	36	30
S. ATLANTIC	11	296	281	-	26	15	2,996	4,363	2,608	3,038	1,757	1,596
Del.	-	10	2	-	-	-	14	22	41	36	74	47
Md.	4	33	62	-	-	-	137	247	241	264	265	440
D.C.	1	6	8	-	-	-	91	179	86	97	11	2
Va.	4	19	35	-	-	-	486	639	202	255	350	324
W. Va.	-	-	4	-	-	-	9	8	58	63	96	61
N.C.	-	110	58	-	1	-	894	1,348	335	383	390	135
S.C.	-	22	13	-	1	-	472	643	253	293	105	147
Ga.	2	28	24	-	1	2	589	672	326	534	228	305
Fla.	-	68	75	-	23	13	304	605	1,066	1,113	238	135
E.S. CENTRAL	2	258	120	-	-	-	3,029	3,086	1,203	1,229	236	160
Ky.	2	16	58	-	-	-	166	164	240	255	24	20
Tenn.	-	204	19	-	-	-	697	835	336	404	78	34
Ala.	-	35	31	-	-	-	520	541	324	346	125	102
Miss.	-	3	12	N	N	N	1,646	1,546	303	224	9	4
W.S. CENTRAL	-	246	178	-	7	13	1,552	3,681	1,960	2,225	524	548
Ark.	-	30	27	-	-	-	82	389	135	204	21	25
La.	-	15	10	-	-	-	803	1,408	6	15	25	62
Okla.	-	27	24	-	-	4	151	123	146	199	28	31
Tex.	-	174	117	-	7	9	516	1,761	1,673	1,807	450	430
MOUNTAIN	11	442	390	-	5	5	201	208	499	426	152	126
Mont.	-	3	7	-	-	-	4	3	10	9	41	15
Idaho	7	88	45	-	-	-	-	1	12	11	3	3
Wyo.	-	1	-	-	1	-	-	1	3	7	22	17
Colo.	-	84	189	-	-	-	98	107	37	52	9	12
N. Mex.	3	92	20	-	-	-	33	18	66	43	5	6
Ariz.	-	149	98	-	3	-	34	39	257	172	49	52
Utah	1	20	28	-	1	4	4	11	31	38	15	12
Nev.	-	5	3	-	-	1	28	28	83	94	8	9
PACIFIC	35	664	705	1	30	30	473	744	3,543	4,312	270	290
Wash.	3	216	97	-	2	-	12	29	197	211	7	15
Oreg.	1	30	89	-	1	4	7	31	36	90	-	10
Calif.	30	372	503	1	24	22	453	678	3,114	3,758	259	232
Alaska	-	-	-	-	-	-	1	3	59	58	4	33
Hawaii	1	46	16	-	3	4	-	3	137	195	-	-
Guam	U	1	2	U	-	1	8	3	35	69	-	-
P.R.	-	12	2	-	-	-	245	253	195	167	44	68
V.I.	U	-	-	U	-	-	2	25	-	-	-	-
Amer. Samoa	U	-	1	U	-	-	-	1	4	4	-	-
C.N.M.I.	U	-	-	U	-	-	4	1	13	28	-	-

U: Unavailable -: no reported cases

TABLE III. Deaths in 121 U.S. cities,* week ending October 14, 1995 (41st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	584	397	109	48	11	19	30
Boston, Mass.	147	94	27	12	3	11	7
Bridgeport, Conn.	36	27	7	1	1	-	-
Cambridge, Mass.	15	12	1	2	-	-	-
Fall River, Mass.	32	27	3	2	-	-	2
Hartford, Conn.	67	37	14	10	3	3	2
Lowell, Mass.	22	16	5	1	-	-	2
Lynn, Mass.	14	11	2	1	-	-	-
New Bedford, Mass.	22	17	3	2	-	-	2
New Haven, Conn.	44	30	6	4	3	1	3
Providence, R.I.	55	39	14	2	-	-	3
Somerville, Mass.	3	2	1	-	-	-	-
Springfield, Mass.	46	27	14	3	-	2	2
Waterbury, Conn.	19	14	2	3	-	-	1
Worcester, Mass.	62	44	10	5	1	2	6
MID. ATLANTIC	2,419	1,547	477	296	51	47	112
Albany, N.Y.	47	34	7	4	-	2	3
Allentown, Pa.	15	13	1	1	-	-	-
Buffalo, N.Y.	109	81	15	11	2	-	4
Camden, N.J.	36	24	5	3	3	1	1
Elizabeth, N.J.	28	16	8	3	1	-	1
Erie, Pa.§	47	40	6	1	-	-	3
Jersey City, N.J.	52	29	13	8	1	1	-
New York City, N.Y.	1,292	819	252	180	23	18	52
Newark, N.J.	66	28	22	13	2	-	3
Paterson, N.J.	27	13	5	6	-	3	1
Philadelphia, Pa.	300	174	62	40	12	12	18
Pittsburgh, Pa.§	33	16	10	2	1	4	4
Reading, Pa.	15	6	6	2	1	-	3
Rochester, N.Y.	131	90	26	10	1	4	2
Schenectady, N.Y.	31	24	6	1	-	-	1
Scranton, Pa.§	27	25	-	2	-	-	-
Syracuse, N.Y.	117	82	20	9	4	2	10
Trenton, N.J.	31	21	10	-	-	-	4
Utica, N.Y.	15	12	3	-	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,972	1,339	365	175	47	45	122
Akron, Ohio	56	42	10	3	-	1	-
Canton, Ohio	34	26	6	2	-	-	5
Chicago, Ill.	394	249	70	45	17	12	29
Cincinnati, Ohio	84	54	19	9	1	1	9
Cleveland, Ohio	135	82	29	15	4	5	2
Columbus, Ohio	186	126	34	22	1	3	12
Dayton, Ohio	96	67	26	3	-	-	6
Detroit, Mich.	196	115	42	24	8	7	7
Evansville, Ind.	45	39	4	-	2	-	3
Fort Wayne, Ind.	51	40	8	2	1	-	2
Gary, Ind.	18	11	4	3	-	-	-
Grand Rapids, Mich.	47	33	6	5	2	1	5
Indianapolis, Ind.	209	133	47	18	2	9	8
Madison, Wis.	60	49	7	4	-	-	5
Milwaukee, Wis.	117	90	16	7	3	1	9
Peoria, Ill.	43	34	5	1	2	1	4
Rockford, Ill.	44	31	5	6	1	1	3
South Bend, Ind.	46	36	4	2	1	3	1
Toledo, Ohio	111	82	23	4	2	-	12
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	755	566	113	38	14	13	33
Des Moines, Iowa	71	58	11	1	1	-	6
Duluth, Minn.	34	25	6	2	-	1	3
Kansas City, Kans.	19	10	5	3	1	-	-
Kansas City, Mo.	81	56	8	4	-	2	1
Lincoln, Nebr.	26	24	-	2	-	-	-
Minneapolis, Minn.	178	140	27	8	-	3	7
Omaha, Nebr.	85	59	14	7	4	1	2
St. Louis, Mo.	119	85	22	6	4	2	7
St. Paul, Minn.	73	58	12	3	-	-	6
Wichita, Kans.	69	51	8	2	4	4	1

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,220	727	260	142	37	52	70
Atlanta, Ga.	122	64	32	15	6	5	2
Baltimore, Md.	159	85	37	25	5	7	13
Charlotte, N.C.	122	70	24	17	5	6	8
Jacksonville, Fla.	108	62	28	11	4	3	7
Miami, Fla.	104	55	23	25	-	1	3
Norfolk, Va.	39	24	10	2	-	2	4
Richmond, Va.	69	43	13	7	4	2	3
Savannah, Ga.	49	36	11	-	2	-	5
St. Petersburg, Fla.	62	51	8	1	1	1	4
Tampa, Fla.	143	107	24	8	1	3	15
Washington, D.C.	238	126	50	31	9	22	6
Wilmington, Del.	5	4	-	-	-	-	-
E.S. CENTRAL	800	499	171	72	27	30	54
Birmingham, Ala.	157	97	29	14	8	9	3
Chattanooga, Tenn.	53	37	9	5	2	-	3
Knoxville, Tenn.	73	46	18	6	1	2	8
Lexington, Ky.	73	38	24	7	-	4	3
Memphis, Tenn.	204	127	43	19	11	4	17
Mobile, Ala.	76	49	17	3	3	4	4
Montgomery, Ala.	53	36	10	3	2	2	5
Nashville, Tenn.	111	69	21	15	-	5	11
W.S. CENTRAL	1,415	900	256	156	56	47	85
Austin, Tex.	71	47	12	9	2	1	2
Baton Rouge, La.	50	30	5	8	4	3	4
Corpus Christi, Tex.	39	22	5	10	-	2	3
Dallas, Tex.	177	110	35	21	7	4	5
El Paso, Tex.	76	55	12	5	3	1	7
Ft. Worth, Tex.	92	62	11	8	5	6	5
Houston, Tex.	315	186	64	41	14	10	28
Little Rock, Ark.	71	44	15	8	2	2	9
New Orleans, La.	162	102	26	16	7	11	-
San Antonio, Tex.	188	125	34	17	8	4	10
Shreveport, La.	58	38	10	7	2	1	5
Tulsa, Okla.	116	79	27	6	2	2	7
MOUNTAIN	870	575	143	101	33	17	58
Albuquerque, N.M.	107	72	15	16	4	-	2
Colo. Springs, Colo.	48	32	9	3	3	1	3
Denver, Colo.	105	68	17	14	3	3	11
Las Vegas, Nev.	146	103	26	13	3	1	5
Ogden, Utah	26	19	3	4	-	-	1
Phoenix, Ariz.	179	101	34	22	15	6	15
Pueblo, Colo.	32	25	2	5	-	-	3
Salt Lake City, Utah	111	75	21	9	4	2	9
Tucson, Ariz.	116	80	16	15	1	4	9
PACIFIC	1,274	830	217	151	41	34	112
Berkeley, Calif.	27	18	3	5	-	1	3
Fresno, Calif.	89	57	9	13	6	4	6
Glendale, Calif.	U	U	U	U	U	U	U
Honolulu, Hawaii	67	43	14	6	3	1	7
Long Beach, Calif.	88	49	21	12	5	1	9
Los Angeles, Calif.	U	U	U	U	U	U	U
Pasadena, Calif.	U	U	U	U	U	U	U
Portland, Oreg.	137	95	20	16	1	5	4
Sacramento, Calif.	171	112	35	16	4	4	17
San Diego, Calif.	138	96	24	10	5	2	18
San Francisco, Calif.	135	77	30	25	2	1	15
San Jose, Calif.	151	97	29	17	3	5	15
Santa Cruz, Calif.	32	25	5	2	-	-	8
Seattle, Wash.	117	76	14	17	7	3	-
Spokane, Wash.	64	44	7	5	1	7	8
Tacoma, Wash.	58	41	6	7	4	-	2
TOTAL	11,309¶	7,380	2,111	1,179	317	304	676

*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.

§Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

U: Unavailable -: no reported cases

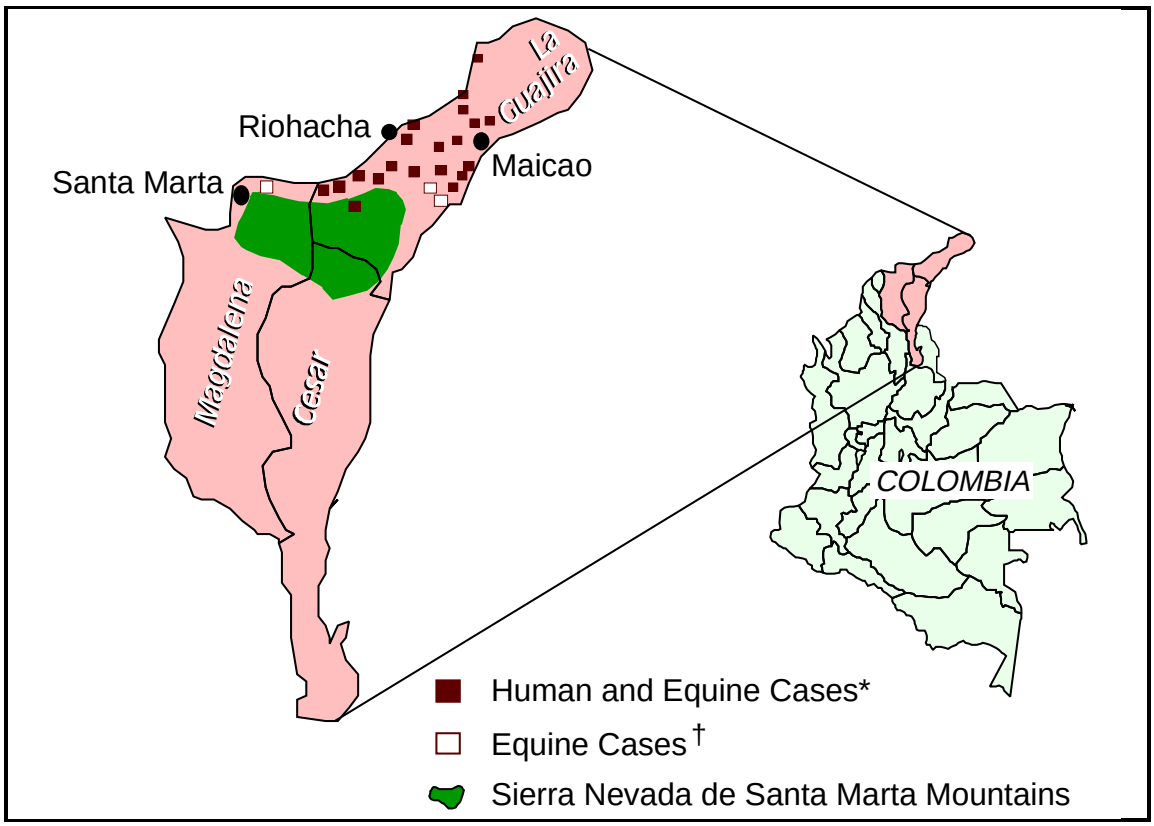
Update: Venezuelan Equine Encephalitis — Colombia, 1995

During September 1–October 12, 1995, a total of 12,403 patient visits for Venezuelan equine encephalitis (VEE) were reported from La Guajira state, Colombia. The actual number of incident cases, estimated from epidemiologic surveys, may exceed 45,000. This report updates the ongoing investigation of this outbreak (*1*).

Household surveys in urban areas of Manaure, Maicao, Riohacha, and Uribia during September 26–October 3 indicated an overall attack rate of 18%, ranging from 13% in Riohacha (the largest of the towns) to 57% in Manaure. In 101 patients in Manaure, Maicao, and Riohacha who sought medical care within 3 days of onset of acute febrile illness, the point prevalence of VEE-specific immunoglobulin M antibody was 45%, providing a minimum estimate of the specificity of the clinical case definition. Of the 18 VEE virus strains isolated from humans, three were identified antigenically as IC-subtype viruses, which have been the principal cause of epizootics in northern South America. Partial nucleotide sequencing of the strains indicated they were closely related to strains isolated from Venezuela earlier in 1995.

The outbreak has spread southwest along the coastline at a rate of approximately 3 miles (5 km) each day (Figure 1). In the coastal towns of Manaure, Mayapo, El Pajaro, and Dibulia, entomologic surveys have detected large populations of the vector mosquito *Aedes taeniorhynchus*. The initiation of mosquito-control programs was

FIGURE 1. Areas with epidemic Venezuelan equine encephalitis — Colombia, through October 12, 1995



*Confirmed cases.
†Confirmed and unconfirmed cases.

Venezuelan Equine Encephalitis — Continued

followed by declines in emergency department visits for acute febrile illness in Manaure, Maicao, Riohacha, and Uribia. In addition, entomologic surveys indicated 99%–100% declines in *Ae. taeniorhynchus* larval densities after breeding sites were treated with *Bacillus sphaericus* (a larvicide).

In the inland region south of Maicao, the outbreak has extended to the municipality of Riohacha, near El Cerrejon coal mine in Hatonuevo. Surveys in Maicao and the south of La Guajira Department have identified extensive breeding habitats for *Psorophora confinnis* and abundant larvae.

Households in Maicao, Riohacha, and Uribia that had more than one case were studied to determine whether secondary person-to-person transmission had occurred. A secondary case was defined as onset of acute febrile illness 1–5 days after onset of illness in the first case(s) in the household. Primary cases occurring within 5 days of the interview were excluded. The apparent secondary attack rate was 5% (50 of 992).

Public health efforts have focused on limiting the spread of the outbreak from La Guajira peninsula to the Magdalena Valley to the south at passes formed by the Sierra Nevada de Santa Marta Mountains (Figure 1). Ongoing active surveillance of all hospitals in La Guajira through October 12 indicated no evidence of human cases in the southern part of the state. Unconfirmed equine cases were reported near Santa Marta, but no human cases acquired in Magdalena have been confirmed. Sporadic equine deaths in Cordoba, Cesar, and Magdalena states have been confirmed serologically as cases of eastern equine encephalitis. In the area beyond the advance of the outbreak (Figure 1), approximately 5000 equines in La Guajira have been vaccinated with TC-83 vaccine; in neighboring Magdalena and Cesar states, 20,000 and 70,000 equines, respectively, have been vaccinated.

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Editorial Note: Although the VEE outbreak has spread rapidly through La Guajira, control measures have contained the outbreak within this northern-most state of Colombia, with no evidence of human cases in adjoining Magdalena and Cesar states. Equine vaccination creates an immune barrier against the spread of the virus by removing the most important vertebrate amplifying host from the epizootic transmission cycle. Larvicidal treatment of breeding sites reduces the number of vector mosquitoes, but its continued effectiveness may be difficult to maintain during the wet season—which in La Guajira usually lasts through November.

VEE appeared in Venezuela in April 1995 and spread westward, with the first cases in Colombia recognized in August at the common border of the two countries. The virus most likely was transferred in a viremic equine or human and spread from there to the western coast of La Guajira. Comparisons of viral strains from Colombia and Venezuela indicate a close genetic relation (*2*).

Because VEE virus has been recovered from pharyngeal cultures in 40% of patients (*3*) and aerosols of VEE virus have infected laboratory personnel, direct

Venezuelan Equine Encephalitis — Continued

human-to-human transmission of VEE virus may be possible. However, it is unknown whether infectious VEE aerosols or respiratory droplets can be produced by infected humans. Human-to-human transmission by mosquitoes may occur during some epidemics, as suggested in previous outbreaks (*4*); however, the household survey in La Guajira found no evidence of direct person-to-person transmission.

References

1. CDC. Venezuelan equine encephalitis—Colombia, 1995. MMWR 1995;44:721–4.
2. Weaver SC, Rico-Hesse R, Scott TW. Genetic diversity and slow rates of evolution in New World alphaviruses. Current Topics Microbiol Immunol 1992;176:100–17.
3. Bergold GH. Discussion [of Arthropod vectors of epidemic Venezuelan equine encephalitis]. In: Venezuelan encephalitis: proceedings of the workshop-symposium on Venezuelan encephalitis virus. Washington, DC: Pan American Health Organization, 1972:164–7.
4. Suarez OM, Bergold GH. Investigations of an outbreak of Venezuelan equine encephalitis in towns of eastern Venezuela. Am J Trop Med Hygiene 1968;17:875–80.

Use of Mammography Services by Women Aged ≥65 Years Enrolled in Medicare — United States, 1991–1993

The incidence of invasive breast cancer among women aged ≥65 years is twice that among those aged 35–44 years (*1*), and the death rate from breast cancer is approximately three times higher among women aged ≥65 years than among women aged 35–64 years (*2*). Although routine screening mammography among women aged ≥50 years can reduce breast cancer mortality by ≥30% by detecting tumors at early, more treatable stages (*3*), older women are less likely to receive screening mammograms (*4*). The Health Care Financing Admininistration (HCFA) routinely examines trends in the use of health services by age, race, and sex to monitor access to medical care for Medicare beneficiaries. Using Medicare claims data, HCFA estimated rates of mammography use among women aged ≥65 years during 1991–1993. This report presents the findings of this analysis.

Women enrolled in Medicare are eligible for diagnostic and screening mammograms under the Medicare Part B program, which enrolls approximately 96% of U.S. residents aged ≥65 years. Biennial screening mammography for women aged ≥65 years has been a Medicare benefit since January 1, 1991; previously, only diagnostic mammograms were covered under Medicare Part B. Both screening and diagnostic mammography are reimbursed at 80% of allowed charges after an annual deductible of $100 for all Part B services.

For this analysis, Medicare claims data for services provided during 1991–1993, were used to calculate annual rates of mammography use for enrolled women aged ≥65 years; age- and race-specific rates also were calculated. Race-specific rates are presented for blacks and whites only because identification of other racial groups is incomplete in the Medicare administrative data system. Because claims are not submitted for the Medicare population enrolled in managed-care plans (approximately 7% in 1993) (*5*), rates are based on women enrolled in fee-for-service Medicare. Three cohorts of women were established using the Medicare denominator files for 1991, 1992, and 1993. Each annual cohort consisted of approximately 16 million women

Mammography Services — Continued

(Table 1) who were continuously enrolled in fee-for-service Medicare parts A and B. Women excluded from this analysis were those aged <65 years as of January 1 of the year, those enrolled in a health maintenance organization at any time during the year, and those who died during the year. Rates of mammography use represent the percentage of women in each cohort who had one or more mammograms (screening or diagnostic) during that year. Because providers do not uniformly apply the codes used to bill Medicare for mammograms, Medicare claims cannot reliably distinguish screening and diagnostic mammograms; therefore, both types of mammography are included in this analysis.

During 1991–1993, of each annual cohort of approximately 16 million women aged ≥65 years who were continuously enrolled in fee-for-service Medicare, 3.8–4.0 million (approximately 25%) had one or more mammography claims (Table 1). During this period, rates of mammography use varied inversely with age of the beneficiary (Figure 1); in all years, the rate for women aged 80–84 years was less than half that for women aged 65–69 years. For all age groups, black women were less likely than white women to have received mammograms, although this difference declined during each of the 3 years: in 1991, the black-to-white ratio of mammography rates was 0.64:1, compared with 0.71:1 in 1993 (Table 2).

Reported by: AE Trontell, MD, Div of Health Information and Outcomes, Office of Research and Demonstrations; EW Franey, Institutional Payment and Studies Br, Div of Provider Data, Office of Health Care Information Systems, Bur of Data Management and Strategy, Health Care Financing Administration. Epidemiology and Statistics Br, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report are consistent with previous studies that indicate a low rate of mammography use among women aged ≥65 years (*4*). In this analysis, black women and women aged ≥85 years were least likely to have received mammograms under Medicare. A national health objective for the year 2000 is to increase to 60% the percentage of women aged ≥50 years who received a mammogram and clinical breast examination during the previous 2 years (objective 16.11) (*6*). Among Medicare beneficiaries, the biennial rate of mammography use for 1992–1993 was 37% for women aged ≥65 years (*7*).

In addition to the patient and physician attributes known to influence screening mammography use (*8*), three additional factors may explain the low rate of use among this elderly Medicare population. First, for women aged ≥75 years, low rates of use may be a consequence of variations in recommendations by professional associations to perform screening mammography for women in this age group (*9*). Second, for black women, low rates may reflect financial barriers (e.g., the Part B deductible or copayments) and other obstacles in the delivery of health services to women of lower socioeconomic status. Finally, overall low use of mammography by Medicare benificiaries also may reflect limited awareness of this health benefit: in 1992, approximately two thirds of elderly women were unaware that mammography was a Medicare benefit (*10*).

In response to the low awareness and low use of the Medicare mammography benefit, HCFA has organized multimedia outreach efforts through its national and regional offices. Since May 1995, approximately 50 major organizations have participated in campaigns to publicize mammography as a Medicare benefit; participating organizations have included CDC and other federal agencies, health-care

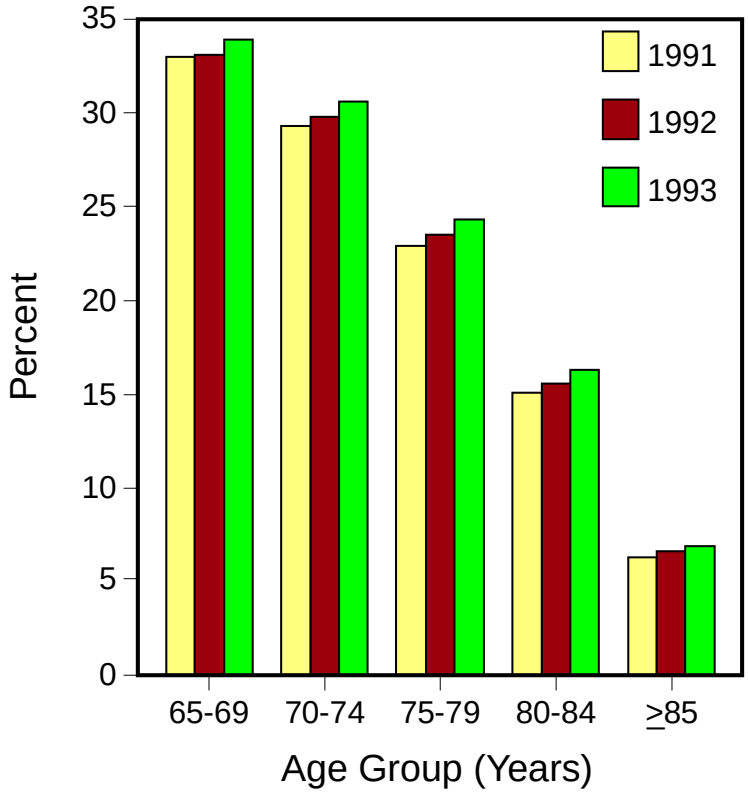
TABLE 1. Number of women aged ≥65 years who were enrolled in Medicare,* by year, and percentage of those who had one or more mammography claims† during the year, by race, age group, and year — United States, 1991–1993

Race§/Age group (yrs)	1991		1992		1993	
	No. women in cohort†	% Women with ≥1 mammography claim	No. women in cohort	% Women ≥1 mammography claim	No. women in cohort	% Women with ≥1 mammography claim
White						
65–69	3,801,318	34.3	3,702,946	34.4	3,651,436	35.1
70–74	3,428,770	30.4	3,496,483	30.8	3,508,097	31.6
75–79	2,778,679	23.7	2,803,397	24.2	2,805,740	25.0
80–84	1,947,766	15.5	1,982,701	16.0	2,009,368	16.7
≥85	1,677,000	6.4	1,729,097	6.7	1,765,866	7.0
Total	**13,633,533**	**25.0**	**13,714,624**	**25.3**	**13,740,507**	**25.9**
Black						
65–69	340,119	21.1	338,684	22.5	337,010	24.3
70–74	291,684	18.9	298,836	20.1	303,665	21.7
75–79	231,693	15.1	236,692	16.1	233,149	17.4
80–84	154,291	10.7	157,559	11.6	161,218	12.3
≥85	136,148	5.6	141,769	5.8	146,570	6.1
Total	**1,153,935**	**16.1**	**1,173,540**	**17.1**	**1,181,612**	**18.4**
All races¶						
65–69	4,455,911	33.0	4,395,045	33.1	4,362,734	33.9
70–74	3,923,110	29.3	4,014,482	29.8	4,051,938	30.6
75–79	3,151,318	22.9	3,188,427	23.5	3,192,607	24.3
80–84	2,190,889	15.1	2,234,131	15.6	2,269,042	16.3
≥85	1,869,301	6.3	1,930,032	6.6	1,976,235	6.9
Total	**15,590,529**	**24.3**	**15,762,117**	**24.6**	**15,852,556**	**25.2**

*Enrollees in Medicare parts A and B who were not in health maintenance organizations and who were aged ≥65 years as of January 1 and alive on December 31 of the indicated year.
†For a screening or diagnostic mammogram. Because Medicare providers do not uniformly apply the codes used to bill Medicare for mammograms, Medicare claims cannot reliably distinguish screening and diagnostic mammograms.
§Identification of races other than white and black is incomplete in the Medicare administrative data system.
¶Includes women of other and unknown race.

Mammography Services — Continued

FIGURE 1. Percentage of women aged ≥65 years who were enrolled in Medicare* and who had one or more mammography claims† during the calendar year, by age group and year – United States, 1991–1993



*Enrollees in Medicare parts A and B who were not in health maintenance organizations and who were aged ≥65 years as of January 1 and alive on December 31 of the indicated year.
†For a screening or diagnostic mammogram. Because Medicare providers do not uniformly apply the codes used to bill Medicare for mammograms, Medicare claims cannot relably distinguish screening and diagnostic mammograms.

TABLE 2. Black-to-white ratio of mammography rates* for women aged ≥65 years who were enrolled in Medicare†, by age group and year — United States, 1991–1993

Age group (yrs)	1991	1992	1993
65–69	0.62:1	0.66:1	0.69:1
70–74	0.62:1	0.65:1	0.69:1
75–79	0.63:1	0.67:1	0.69:1
80–84	0.69:1	0.72:1	0.74:1
≥85	0.88:1	0.86:1	0.88:1
Total	**0.64:1**	**0.68:1**	**0.71:1**

*Rates are for diagnostic and screening mammography. Because Medicare providers do not uniformly apply the codes used to bill Medicare for mammograms, Medicare claims cannot reliably distinguish screening and diagnostic mammograms.
†Enrollees in Medicare parts A and B who were not in health maintenance organizations and who were aged ≥65 years as of January 1 and alive on December 31 of the indicated year.

Mammography Services — Continued

provider associations, senior citizen groups, voluntary organizations, major corporations, and trade associations. These outreach efforts also are being promoted during National Breast Cancer Awareness Month in October. In addition to informational efforts aimed at elderly women enrolled in Medicare and their families, county-level and race-specific annual and biennial mammography rates were made available to local and national health organizations to assist in developing interventions to increase mammography use (*7*).

References

1. Coleman EA, Feuer EJ. NCI Breast Cancer Screening Consortium: breast cancer screening among women from 65 to 74 years of age in 1987–1988 and 1991. Ann Intern Med 1992;117: 961–6.
2. Ries LAG, Miller BA, Hankey BF, Kosary CL, Harras A, Edwards BK, eds. SEER cancer statistics review, 1973–1991: tables and graphs. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute, 1994; DHHS publication no. (NIH)94-2789.
3. Urban N, Anderson GL, Peacock S. Mammography screening: how important is cost as a barrier to use? Am J Public Health 1994;84:50–5.
4. Breen N, Kessler L. Changes in the use of screening mammography: evidence from the 1987 and 1990 National Health Interview Surveys. Am J Public Health 1994;84:62–7.
5. Health Care Financing Administration. 1993 HCFA statistics. Baltimore, Maryland: US Department of Health and Human Services, Health Care Financing Administration, 1993; publication no. 03341.
6. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991:428–9; DHHS publication no. (PHS)91-50213.
7. Health Care Financing Administration. 1992–1993 Mammography services paid by Medicare: state and county rates. Baltimore, Maryland: US Department of Health and Human Services, Health Care Financing Administration, 1995.
8. Mor V, Pacala JT, Rakowski W. Mammography for older women: who uses, who benefits? J Gerontol 1992;47:43–9.
9. Costanza ME. Breast cancer screening in older women: overview. J Gerontol 1992;47:1–3.
10. American Association of Retired Persons. Older women and the Medicare mammography benefit: 1992 awareness and usage levels. Washington, DC: American Association of Retired Persons, 1993.

Notice to Readers

Availability of Information on Cryptosporidiosis

CDC now has a voice-fax cryptosporidiosis information telephone system. Callers can listen to recorded messages on cryptosporidiosis and order printed materials, designed for different audiences, by fax. One of the items available is a multipage fact sheet designed specifically for persons who have human immunodeficiency virus infection or acquired immunodeficiency syndrome. The telephone number is (404) 330-1242.

Many of the materials available from the information line are also available from the National Center for Infectious Diseases on the World Wide Web: http://www.cdc.gov/ncidod/diseases/crypto/crypto.htm.

Erratum: Vol. 44, No. 28

For the article, "Pneumonia and Influenza Death Rates—United States, 1979–1994," reexamination of the database detected an error in the age-adjustment procedure used to calculate the weekly mean pneumonia and influenza (P&I) death rates for non-influenza periods. The following corrected paragraph replaces the first paragraph on page 536:

"To control for the highly variable seasonal contribution of influenza-associated deaths, the trend for mean weekly number of P&I deaths for the noninfluenza period (weeks 26–39) was analyzed. From 1979 through 1992, age-adjusted P&I death rates during these weeks increased from 3.1 to 3.7 per 1 million population. Analysis of P&I deaths listed in any position on the death certificate (multiple-cause-of-death data) indicated a similar increase."

Erratum: Vol. 44, No. RR-12

In the *MMWR Recommendations and Reports* "Recommendations for Preventing the Spread of Vancomycin Resistance: Recommendations of the Hospital Infection Control Practices Advisory Committee (HICPAC)," the publication date printed at the top of even-numbered pages ii–12 should have been September 22, 1995.

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