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Epidemiologic Notes and Reports

Respiratory Illness Associated with Inhalation of Mushroom Spores — Wisconsin, 1994

During April 8–14, 1994, eight persons aged 16–19 years from southeastern Wisconsin visited physicians for respiratory illness associated with inhalation of *Lycoperdon perlatum* (i.e., puffball mushrooms). On April 19, the Bureau of Public Health, Wisconsin Division of Health, was notified of these cases. This report summarizes the case investigations.

On April 3, the adolescents attended a party during which they inhaled and chewed puffball mushrooms. It was unknown whether other persons at the party participated in this activity. No illicit drugs were reportedly used at the party. Three persons reported nausea and vomiting within 6–12 hours after exposure. Within 3–7 days after exposure, all patients developed cough, fever (temperature up to 103 F [39.4 C]), shortness of breath, myalgia, and fatigue.

Five persons required hospitalization; two were intubated. Two patients had a history of asthma and were using steroid inhalers. Chest radiographs on all hospitalized patients indicated bilateral reticulonodular infiltrates. Two patients underwent transbronchial lung biopsy, and one had an open lung biopsy. Histopathologic examination of the lung biopsy specimens revealed an inflammatory process and the presence of yeast-like structures consistent with *Lycoperdon* spores. Fungal cultures of the lung biopsy tissue were negative.

All hospitalized patients received corticosteroids, and four received antifungal therapy with either amphotericin B or azole drugs. All patients recovered within 1–4 weeks with no apparent sequelae.

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Editorial Note: Lycoperdonosis is a rare respiratory illness caused by inhalation of spores of the mushroom *Lycoperdon*. Puffballs, which are found worldwide, grow in the autumn and can be edible then. In the spring, they desiccate and form spores that

Respiratory Illness — Continued

can be easily released by agitating the mushroom (*1*). One puffball species (*L. marginatum*) can produce psychoactive effects (*2*).

Only three cases of lycoperdonosis have been reported previously (*1,3*)—two in children and one in an adolescent. These three patients had inhaled large quantities of puffball spores, one unintentionally and two deliberately (as a folk remedy to control nosebleed). All patients had evidence of bilateral infiltrates on chest radiographs. Whether the pulmonary process results from a hypersensitivity reaction, an actual infection by the spores, or both is unknown.

The efficacy of using antifungal agents to treat lycoperdonosis is unknown. Physicians should be aware of this illness, especially in children and young adults presenting with a compatible clinical history and progressive respiratory symptoms.

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Epidemiologic Notes and Reports

Flood-Related Mortality — Georgia, July 4–14, 1994

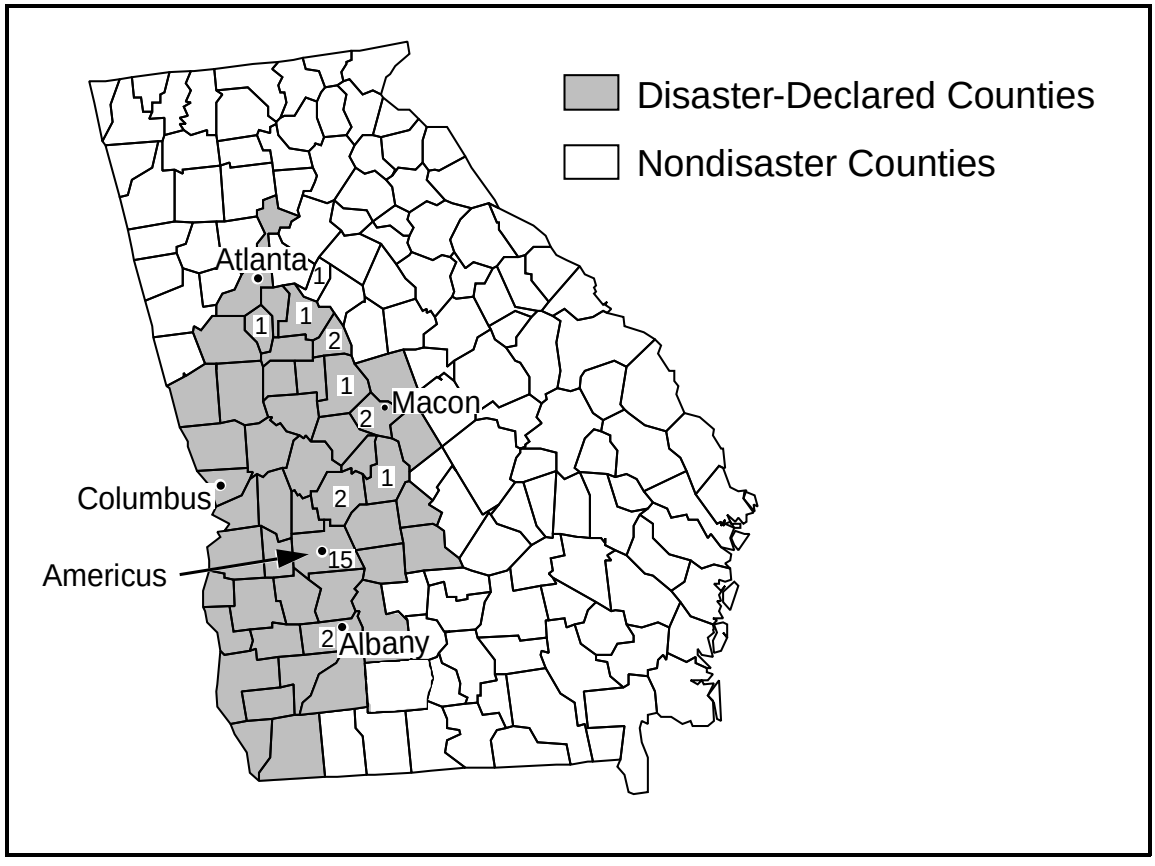
On July 3, 1994, tropical storm Alberto struck the Florida panhandle with maximum sustained winds of 60 miles per hour. On July 4, as the center of the storm deteriorated over Columbus, Georgia, a cold front pushed through Alabama and southwestern Georgia from the northwest, producing warm, moist air and unstable weather resulting in heavy, prolonged thunderstorms. Rainfall totals in some areas of south central Georgia were 12–15 inches during a 24-hour period; Americus, Georgia, recorded 24 inches on July 6 (W. Zaleski, National Weather Service, personal communication, 1994). Several rivers, cresting up to 20 feet above flood stage, inundated major portions of the state. Flood waters forced closure of 175 roads in 30 counties, and more than 100 dams and recreational watersheds were either damaged or destroyed. Forty-three (27%) of Georgia's 159 counties were declared federal disaster areas, and seven additional counties were declared state disaster areas. This report summarizes preliminary findings of surveillance for deaths associated with the floods.

To assess mortality associated with flooding, CDC obtained epidemiologic information from medical examiners and coroners (ME/Cs) in 48 of the 50 counties declared disaster areas and in two counties adjacent to disaster areas. ME/Cs were asked about the number of deaths in their counties attributable to flooding during July 4–14 and for information about the circumstances of each death. A flood-related death was defined as a death that resulted from the floods during July 4–14, as determined by the ME/C in each county.

From July 4 through July 14, ME/Cs classified 30 deaths as flood related. Two deaths were excluded from further analyses because they involved motor-vehicle crashes not directly related to flooding. Of the 28 remaining deaths, 27 occurred in 10 of the federally declared disaster counties; one occurred in an adjacent county (Figure 1). Fifteen deaths occurred in Sumter County; local officials attributed approxi-

Flood-Related Mortality — Continued

FIGURE 1. Number of flood-related deaths, by county — Georgia, July 4–14, 1994



mately 50% of these deaths to the rupture of seven to nine small earthen dams in the county. Waters from the dams inundated surrounding creeks, sweeping away many of the persons who died.

Decedents ranged in age from 2 to 84 years (mean: 31 years; median: 28 years); 20 were male (Table 1). Eighteen deaths occurred on July 6*. For 27 of 28 decedents, drowning was reported as the cause of death and "accident"† as the manner of death; the cause and manner of one flood-related death are unknown. Of the 27 drownings, 20 were motor-vehicle–related (e.g., victims drove into low-lying areas, across washed-out bridges, or off the road into deep water).

Reported by: C Duke, Coroner, Baker County, Newton; E Bon, Coroner, Bibb County, Macon; J Reeves, Deputy Coroner, Butts County, Jackson; B Miller, Coroner, Calhoun County, Morgan; B Chancellor, Coroner, Chattahoochee County, Cusseta; M Griffin, Coroner, Clay County, Fort Gaines; P Dickson, Coroner, Clayton County, Jonesboro; D Millians, Coroner, Coweta County, Newnan; G O'Neal, Coroner, Crawford County, Knoxville; A Posey, Deputy Coroner, Crisp County, Cordele; B Cooper, Coroner, Decatur County, Bainbridge; J Burton, MD, Medical Exam-

*Because some decedents were not found until after high waters subsided, it was sometimes difficult to verify exact date and time of death; therefore, all dates reflect the day on which the decedent was found.

†"Manner of death" and "accident" are medicolegal terms used on death certificates and refer to the circumstances under which a death occurs; "cause of death" refers to the injury or illness responsible for the death. When a death occurs under "accidental" circumstances, the preferred term within the public health community for the cause of death is "unintentional injury".

Flood-Related Mortality — Continued

TABLE 1. Flood-related deaths, by date of death, age and sex of decedent, and circumstance of death — Georgia, July 4–14, 1994

Date*	Age (yrs)	Sex	Circumstance of death
July 5	40	M	Swept into creek while trying to repair bridge
	54	M	Lost control of vehicle on wet roadway
	31	F	Drove onto washed-out road
	24	F	Pickup truck submerged in drain ditch
July 6	60	F	Car swept into flooded creek
	84	M	Washed out of mobile home
	35	M	Pickup truck swept off road into flooded creek
	8	M	Pickup truck swept off road into flooded creek
	16	M	Pickup truck swept off road into flooded creek
	42	M	Swept out of car
	40	M	Tractor-trailer swept off road into flooded creek
	12	M	Tractor-trailer swept off road into flooded creek
	28	F	Swept out of car onto flooded road
	20	F	Swept out of car onto flooded road
	67	F	Swept away by swiftly moving waters
	17	M	Boat swept into flooded creek
	40	M	Car swept off road into flooded creek
	18	M	Swept off inner tube into flooded creek
	32	M	Swept into flooded creek
	35	M	Swept out of car while in parking lot
	16	F	Swept away trying to rescue a dog
	35	M	Swept out of pickup truck onto flooded road
July 7	4	M	Swept out of car into flooded river
	2	M	Swept out of car into flooded river
	Unknown	M	Unknown
July 8	62	M	Swept out of car as bridge washed out
July 9	28	F	Swept out of car onto flooded road
July 10	3	M	Swept out of car onto flooded road

*Because some decedents were not found until after high waters subsided, it was sometimes difficult to verify the exact date and time of death; therefore, all dates reflect the day on which the decedent was found.

iner, DeKalb County, Decatur; R Bowen, Coroner, Dooly County, Cordele; S Mackey, Deputy Coroner, Doughtery County, Albany; S Manry, Deputy Coroner, Early County, Blakely; C Mowell, Coroner, Fayette County, Fayetteville; D McGowan, Chief Investigator, Fulton County Medical Examiner's Office, Atlanta; J Kennebrew, Coroner, Harris County, Hamilton; R Stewart, Coroner, Henry County, McDonough; D Galpin, Coroner, Houston County, Warner Robins; J Bridge, Coroner, Jones County, Gray; J Smith, Coroner, Lamar County, Barnesville; S Braden, Sheriff, Lee County, Smithville; J Swank, Chief Investigator, Macon County, Montezuma; J Tante, Coroner, Marion County, Buena Vista; J Worley, Coroner, Meriweather County, Alvaton; T Toole, Coroner, Miller County, Colquitt; A Dillon, Coroner, Monroe County, Forsyth; V Novak, Deputy Coroner, Muscogee County, Columbus; B Johnson, Coroner, Newton County, Covington; K Rookes, Acting Coroner, Peach County, Fort Valley; B Hudson, Coroner, Pike County, Meansville; C Young, Coroner, Pulaski County, Hawkinsville; I Bellflower, Coroner, Quitman County, Georgetown; D Crozier, Deputy Coroner, Randolph County, Cuthbert; H Ellison, MD, Coroner, Rockdale County, Conyers; J Wall, Coroner, Schley County, Ellaville; G Skipper, Coroner, Seminole County, Donaldsonville; R Buchanan, Coroner, Spaulding County, Griffin; L McClung, Coroner, S Moreno, Fire Chief, Sumter County, Americus; L Stone, Coroner, Stewart County, Lumpkin; J Cosby, Coroner, Talbot County, Talbotton; B Goddard, Coroner, Taylor County, Reynolds; E Jenkins, Coroner, Terrell County, Dawson; E Lucas, Deputy Coroner, Troup County, West Point; T Cochran, Upson County, Thomaston; S Potter, Coroner, Webster County, Preston; R Coker, Coroner, Wilcox County, Pitts; J Banks, Coroner, Worth County, Sylvester; K Toomey, MD, State Epidemiologist, J Drinnon, Div of Public Health, Georgia Dept of Human Resources. K Davis, Federal Emergency Management Agency; M Johnson, Southeast Regional Climatologi-

Flood-Related Mortality — Continued

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Editorial Note: Floods account for an estimated 40% of natural disasters worldwide (*1*). In the United States, floods cause an average of 146 deaths per year. Most flood-related deaths are attributed to flash floods (*2*) (i.e., flooding that occurs within a few hours of heavy or excessive rain, when a dam or levee fails, or following a sudden release of water impounded by an ice jam [*1*]). Most flash floods occur during July–September (*3*) and are usually caused by slow-moving or localized and heavy thunderstorm activity. When these conditions exist, tributary streams can crest their banks in hours, or even minutes, after the onset of heavy rain (*1*).

The rapid onset of high-rising waters often makes effective warning and escape difficult and increases the risk for death (*4*). The leading cause of death from flash floods is drowning, and more than 50% of drownings in flash floods are associated with motor vehicles (*5*). Victims are often unwilling to abandon their cars, trucks, or boats and can be trapped inside. In Georgia, drowning was the cause of 96% of flood-related deaths, and 74% of these were motor-vehicle related.

Surveillance data from ME/Cs have provided timely information on mortality associated with natural disasters (*6,7*). Data from ME/Cs in past disasters have been used to develop recommendations for preventing flood- and other disaster-related deaths (*7*). During the 1993 midwestern floods, ME/C surveillance data were used to monitor flood-related mortality and to develop prevention strategies, including disseminating information about flood and postflood hazards to groups at increased risk and identifying water tributaries that posed hazards for flooding. Similarly, the surveillance findings from Georgia suggest that deaths from floods may be prevented by identifying flood- and flash-flood–prone areas and then advising persons to take appropriate actions when the potential exists for a flash flood. For example, motorists should be warned not to drive through areas in imminent danger of flash floods or onto roads and bridges covered by rapidly moving water (*8*). If vehicles are necessary to evacuate a community, particularly a mobile home community, safe evacuation routes should be identified in advance. In addition, deaths may be prevented by inspecting and requiring safety certification of dams located in flood-prone areas.

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Flood-Related Mortality — Continued

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Progress in Chronic Disease Prevention

Results from the National Breast and Cervical Cancer Early Detection Program, October 31, 1991–September 30, 1993

To reduce the burden of morbidity and mortality from breast and cervical cancers among U.S. women, Congress enacted the Breast and Cervical Cancer Mortality Prevention Act* in August 1990. This legislation authorized CDC to establish the National Breast and Cervical Cancer Early Detection Program (NBCCEDP), which provides state health agencies with grants to increase breast and cervical cancer screening among women (*1*). Most funds pay for screening and follow-up services for underserved women, particularly women who are elderly, have low incomes, are underinsured or uninsured, or are members of racial/ethnic minority groups (*2*). This report presents age- and race-specific cancer screening (i.e., mammography and Papanicolaou [Pap] smear) results for women who received these services through the NBCCEDP from October 1, 1991, to September 30, 1993.

During this period, eleven states† with NBCCEDP-funded cancer screening programs reported data to CDC. For each woman who received a cancer screening examination, data were obtained about demographics, screening location and results, diagnostic procedures and outcomes, and treatment information. The forms used for data collection varied among local sites and states; state program officials standardized data formats before transmitting files electronically to CDC. CDC requests that radiologists report mammography results using categories specified in the Breast Imaging Reporting and Data System (BIRADS) of the American College of Radiology (*3*) and that laboratories report Pap smear results using categories from the Bethesda System (*4*). This analysis presents results from initial mammography screening examinations and excludes results from women who may have undergone subsequent screening examinations. Results were adjusted for state and age using all women undergoing screening through the NBCCEDP as the standard population.

From October 1, 1991, through September 30, 1993, approximately 67,000 women aged ≥40 years had a mammogram through the NBCCEDP; of these women, 7.2% had abnormal results (i.e., suspicious abnormality, highly suggestive of malignancy, or assessment incomplete§) (Table 1). Overall, the proportion of women who had abnormal results declined with increasing age, from 7.8% for women aged 40–49 years to 5.3% for women aged ≥70 years. However, for results highly suggestive of malignancy (the most serious result) the opposite trend was observed. The proportion of abnormal mammography results was highest for non-Hispanic whites (7.9%) and non-Hispanic blacks (7.8%) and lowest for Asians/Pacific Islanders (4.1%).

During the same period, approximately 100,500 women had Pap smears; of these, 5.1% had abnormal results (i.e., low-grade squamous intraepithelial lesion [SIL], high-

*Public Law 101-354.
†California, Colorado, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Carolina, South Carolina, and Texas.
§A mammography finding that requires additional radiologic evaluation (*3*).

TABLE 1. Percentage distribution of mammography screening results* among women aged ≥40 years, by age group and race/ethnicity — National Breast and Cervical Cancer Early Detection Program (NBCCEDP), October 1, 1991–September 30, 1993†

Characteristic	No. examined	Negative or benign	Probably benign	Abnormal results				Unsatisfactory examination
				Suspicious abnormality	Highly suggestive of malignancy	Assessment incomplete§	Total	
Age group (yrs)								
40–49	29,316	83.5%	8.6%	1.7%	0.2%	5.9%	**7.8%**	0.1%
50–59	20,449	84.1%	8.5%	1.9%	0.3%	5.1%	**7.3%**	0.1%
60–69	12,536	86.0%	7.6%	1.5%	0.3%	4.6%	**6.4%**	<0.1%
≥70	4,529	87.8%	6.8%	1.9%	0.4%	3.0%	**5.3%**	0.1%
Race/Ethnicity								
White, non-Hispanic	23,712	83.9%	8.1%	2.0%	0.4%	5.5%	**7.9%**	0.1%
Black, non-Hispanic	10,827	83.8%	8.4%	1.8%	0.3%	5.7%	**7.8%**	0.1%
Hispanic¶	18,385	84.0%	9.0%	1.3%	0.2%	5.4%	**6.9%**	0.1%
Asian/Pacific Islander	1,666	88.8%	7.1%	1.7%	<0.1%	2.4%	**4.1%**	<0.1%
American Indian/ Alaskan Native	8,179	87.2%	6.2%	1.4%	0.4%	4.8%	**6.6%**	<0.1%
Other/Unknown**	4,061	85.9%	7.4%	1.7%	0.3%	4.7%	**6.7%**	<0.1%
Overall	**66,830**	**84.4%**	**8.3%**	**1.7%**	**0.3%**	**5.2%**	**7.2%**	**0.1%**

*Results are from initial screening examinations and exclude results for women who may have undergone subsequent screening examinations. Result categories are from the Breast Imaging Reporting and Data System (*3*). Data were adjusted for state and age using all women undergoing screening through the NBCCEDP as the standard population.
†Data were reported to CDC from 11 states with NBCCEDP-funded cancer screening programs (California, Colorado, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Carolina, South Carolina, and Texas).
§A mammography finding that requires additional radiologic evaluation (*3*).
¶May be of any race.
**Includes 2,079 white women and 437 black women of unknown ethnicity.

Breast and Cervical Cancer — Continued

grade SIL, or squamous cell carcinoma) (Table 2). The proportion of women with abnormal results declined sharply with increasing age, from 11.5% for women aged <30 years to 1.9% for women aged ≥70 years. The proportion of abnormal Pap smear results varied slightly among racial/ethnic groups (except Asians/Pacific Islanders) ranging from 4.2% for Hispanics to 4.7% for American Indians/Alaskan Natives; the proportion was lowest for Asians/Pacific Islanders (2.0%).

Reported by: Epidemiology and Statistics Br and Office of the Director, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: Despite the proven effectiveness of mammography and Pap smears in detecting breast and cervical cancers in early, more treatable stages, not all women have access to necessary screening and follow-up services. The NBCCEDP is mandated to detect cancer and precancerous lesions in women who are at high risk for not being screened and therefore at higher risk for having cancer diagnosed at a later stage. This report represents one of the largest case studies on screening services targeting underserved women.

The overall proportion of abnormal mammograms reported by NBCCEDP during 1991–1993 is consistent with findings in a previous study (*5*), although these two studies used different result categories. The overall decline with increasing age in the proportion of abnormal mammography results is attributable primarily to results categorized as assessment incomplete—an outcome more common among younger women, whose dense breast tissue make radiologic assessment more difficult. The percentage of findings categorized as highly suggestive of malignancy increases with age, reflecting the increasing incidence of breast cancer with increasing age (*6*). The higher proportion of abnormal results among white and black women reflects the higher reported incidence of breast cancer in these groups than in other racial/ethnic groups. Reasons for these differences in incidence are unclear.

Most of the Pap smear results reported by NBCCEDP during 1991–1993 are similar to findings in previous studies (*7,8*). The steady decline with increasing age in the proportion of abnormal Pap smear results is attributable primarily to the increase in results categorized as low-grade SIL.

The findings in this report are subject to at least two limitations. First, NBCCEDP results are derived from screening tests and therefore do not represent the final diagnoses. Some abnormal results classified as cancer may not be confirmed as such on biopsy, and some results classified as noncancerous may be found to be cancer. Because states have had difficulty tracking the diagnostic results of women with abnormal screening examinations, complete information is not yet available to analyze diagnostic outcomes. Second, because use of the BIRADS reporting categories was initiated in NBCCEDP in 1991 (before BIRADS was officially disseminated to U.S. radiologists by the American College of Radiologists), the categories for reporting results of mammography screening probably have not been used uniformly among the participating states, particularly during the first year of the program. However, as radiologists become more familiar with BIRADS, its use in different program sites probably will become more uniform.

CDC's NBCCEDP increases cancer screening among women by increasing access to screening and follow-up services, increasing education programs for women and health-care providers, and improving measures to assure quality of mammography and Pap smear testing. These activities are implemented through partnerships with

TABLE 2. Percentage distribution of Papanicolaou smear screening results*, by age group and race/ethnicity — National Breast and Cervical Cancer Early Detection Program (NBCCEDP), October 1, 1991–September 30, 1993†

Characteristic	No. examined	Negative or benign§	ASCUS¶	Abnormal results				Other	Unsatisfactory examination
				Low-grade SIL**	High-grade SIL	Squamous cell cancer	Total		
Age group (yrs)									
<30	31,569	78.3%	8.0%	9.4%	2.1%	<0.1%	**11.5%**	0.6%	1.5%
30–39	18,359	86.9%	5.4%	4.2%	1.4%	0.1%	**5.7%**	0.5%	1.6%
40–49	23,455	89.5%	5.2%	2.4%	0.7%	<0.1%	**3.1%**	0.5%	1.8%
50–59	14,897	91.5%	4.3%	1.6%	0.7%	0.1%	**2.4%**	0.4%	1.4%
60–69	8,889	93.0%	3.3%	1.2%	0.3%	0.1%	**1.6%**	0.5%	1.6%
≥70	3,245	92.5%	4.0%	1.3%	0.6%	<0.1%	**1.9%**	0.5%	1.1%
Race/Ethnicity									
White, non-Hispanic	38,754	88.9%	4.4%	3.6%	1.0%	<0.1%	**4.6%**	0.4%	1.7%
Black, non-Hispanic	12,971	89.5%	4.2%	3.8%	0.7%	0.1%	**4.6%**	0.3%	1.3%
Hispanic††	26,886	88.1%	5.7%	3.4%	0.8%	<0.1%	**4.2%**	0.4%	1.4%
Asian/Pacific Islander	2,008	92.6%	4.2%	1.3%	0.7%	<0.1%	**2.0%**	0.2%	0.9%
American Indian/ Alaskan Native	13,544	85.6%	7.6%	3.9%	0.8%	<0.1%	**4.7%**	0.4%	1.8%
Other/Unknown§§	6,251	84.4%	7.7%	4.7%	0.9%	<0.1%	**5.6%**	0.3%	1.9%
Overall	**100,414**	**87.3%**	**5.4%**	**4.0%**	**1.1%**	**<0.1%**	**5.1%**	**0.5%**	**1.7%**

* Result categories are from the Bethesda System (*4*). Data were adjusted for state and age using all women undergoing screening through the NBCCEDP as the standard population.
† Data were reported to CDC from 11 states with NBCCEDP-funded cancer screening programs (California, Colorado, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Carolina, South Carolina, and Texas).
§ Includes infection and reactive changes.
¶ Atypical squamous cells of uncertain significance.
** Squamous intraepithelial lesions.
†† May be of any race.
§§ Includes 3,083 white women and 389 black women of unknown ethnicity.

Breast and Cervical Cancer — Continued

state health agencies; 45 states are participating in NBCCEDP at different levels. These efforts should increase detection and treatment of precancerous cervical lesions and early-stage breast cancer and ultimately reduce the incidence of cervical cancer and morbidity and mortality from breast cancer among underserved women.

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Current Trends

Occupational Homicide — Alaska, 1993

During 1980–1992, approximately two homicides occurred at work each year in Alaska; however, in 1993, homicide was the third most frequent cause of occupational fatality (n=11), following aircraft crash (n=23) and drowning (n=20). This report summarizes the 10 incidents resulting in these 11 occupational deaths in 1993.

Occupational homicide is defined as a fatality resulting from intentional nonself-inflicted injury (*International Classification of Diseases, Ninth Revision* [ICD-9], external cause-of-death codes E960–E969) that occurred in a work setting (as defined by standard guidelines [*1*]). Since 1991, the Alaska Occupational Injury Surveillance System (AOISS)* has received reports of fatal occupational injuries from the Alaska Department of Health and Social Services, Occupational Safety and Health Administration, the Alaska Department of Labor, the National Transportation Safety Board, and the U.S. Coast Guard. Fatal events that occur outside the primary jurisdictions of these agencies may not be reported. To identify additional occupational homicides, newspaper reports were screened daily, and death certificates were reviewed routinely. As of March 9, 1994, death certificates were available for 10 of the homicide victims, and reports from medical examiners were available for five. Law enforcement

* Maintained by CDC's National Institute for Occupational Safety and Health, Division of Safety Research, Alaska Activity.

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agencies provided information for one homicide event; reports on other events were withheld because of ongoing investigations and litigation.

All 11 occupational homicides occurred during May–October 1993; all victims were men, with a median age of 40 years (range: 22–50 years). Seven occurred on Saturdays, and four were in urban areas. Eight incidents involved firearms; a homemade bomb was used in one; and a knife was used in one. Two victims (in one incident) were maintenance personnel on a moored vessel; two were on-duty taxicab drivers, and one was an on-duty pilot for an air-taxi service. Other victims were a shopkeeper, a forester inspecting a logging camp, a painter driving a company truck from a remote worksite, an Army National Guardsman driving through an armory gate, a health aide attending a patient, and a security guard attempting to break up a fight.

In six of the 11 deaths (five of 10 incidents), the alleged assailants knew the victims, and in two others, they did not know the victims; this information was unavailable for three incidents. Three incidents occurred during a known or suspected robbery. Five events did not occur during any other crime, and adequate information to determine whether another crime was involved was unavailable for two incidents.

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Editorial Note: In 1993, the occupational homicide rate in Alaska was 4.1 per 100,000 workers; for 1980–1989, when an average of 2.2 occupational homicides (range: 0–5) occurred each year in Alaska, the annual rate was 1.1 per 100,000 workers in Alaska, compared with 0.7 per 100,000 for U.S. workers. Why the number and rate of occupational homicides in Alaska increased in 1993 is unclear; because the events in this report occurred during a single year, future surveillance for occupational homicide in Alaska is needed to characterize any trends.

The higher occupational homicide rate determined by AOISS may be, in part, the result of more complete ascertainment of incidents in Alaska than in the remainder of the United States. Newspaper reports can be used to identify homicide incidents rapidly. Death certificates have been used for homicide surveillance (*2*) but may not always be timely and must be supplemented with information from other official sources. For the cases in this report, legal authorities did not provide information on the accused assailants (e.g., psychiatric history or prior criminal records) that would permit further characterization of these homicide incidents.

Most occupational homicides in this report did not involve victims in known high-risk occupations (e.g., taxicab driver, late-night retail worker, and security guard [*3,4*]). In addition, only three of the events involved robberies, and the victims knew their assailants in most instances; these findings contrast with national data on occupational homicides, which more frequently involve robberies committed by strangers (*3*).

Four of the events reported here ensued when arguments escalated to violence; two others (the air-taxi pilot and forester) involved impulsive attacks. The availability of deadly force (a firearm in eight incidents) probably contributed to these deaths. A previous study has shown positive correlations between rates of household gun ownership and homicide rates (*5*). Reducing access to firearms may be particularly difficult to accomplish in Alaska, where gun dealership rates are the highest in the United States (*6*) and where a recent law (Chapter 67, SLA 94) provides a mechanism

Homicide — Continued

for Alaskans to obtain concealed weapons permits—with a local (municipal) option to prohibit such permits. Interposing physical barriers between customers and service personnel may be considered for settings where workers must serve customers at late hours or in relative isolation. However, the effectiveness of such measures has not been determined (*7*).

Because most of the 1993 homicides in Alaska occurred on Saturdays, Alaskan workers, especially those who deal with customers or the public, should be alerted to the potentially heightened risk of homicide on weekends. U.S. homicides on weekends have been partly attributable to greater consumption of alcohol on weekends (*8*), but insufficient information was available to assess the impact of alcohol consumption on the events in this report.

All workers should be trained in conflict-resolution and nonviolent responses to potentially hazardous or threatening situations in the workplace (*9*). Preventable risk factors and practical preventive strategies for occupational homicide need to be evaluated in Alaska and other states. Expanded surveillance for violence-related injuries and fatalities has been proposed, as has a multifaceted prevention strategy incorporating education, legislation, and technology approaches (*2*). Expanded collaboration with timely sharing of information between public health and law enforcement agencies may facilitate development of strategies and interventions that address this public health problem (*10*).

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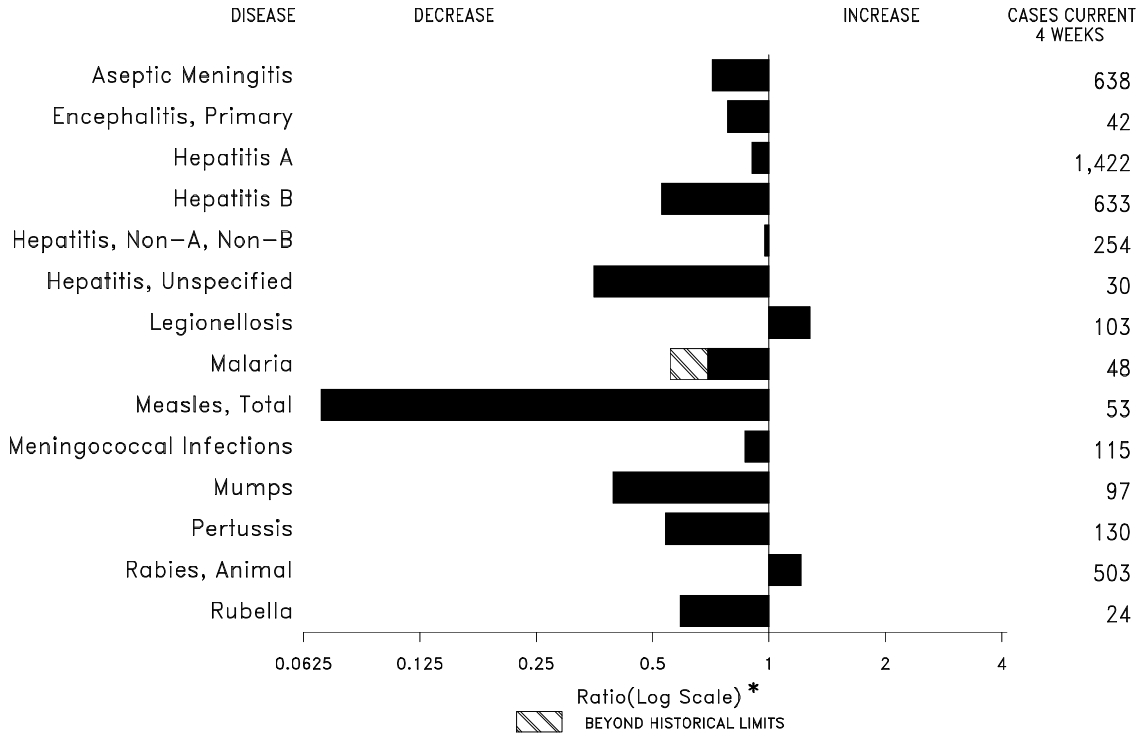
FIGURE I. Notifiable disease reports, comparison of 4-week totals ending July 23, 1994, with historical data — United States



*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 July 23, 1994 (29th Week)

	Cum. 1994		Cum. 1994
AIDS*	39,475	Measles: imported	148
Anthrax	-	indigenous	624
Botulism: Foodborne	37	Plague	7
Infant	40	Poliomyelitis, Paralytic[§]	-
Other	7	Psittacosis	22
Brucellosis	47	Rabies, human	-
Cholera	9	Syphilis, primary & secondary	11,913
Congenital rubella syndrome	3	Syphilis, congenital, age < 1 year[¶]	532
Diphtheria	-	Tetanus	21
Encephalitis, post-infectious	65	Toxic shock syndrome	115
Gonorrhea	205,263	Trichinosis	26
Haemophilus influenzae (invasive disease)[†]	678	Tuberculosis	11,694
Hansen Disease	59	Tularemia	36
Leptospirosis	16	Typhoid fever	203
Lyme Disease	3,419	Typhus fever, tickborne (RMSF)	169

*Updated monthly; last update June 28, 1994.
[†]Of 639 cases of known age, 183 (29%) were reported among children less than 5 years of age.
[§]No cases of suspected poliomyelitis have been reported in 1994; 3 cases of suspected poliomyelitis have been reported in 1993; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.
[¶]Total through first quarter, 1994.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending July 23, 1994, and July 24, 1993 (29th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994
UNITED STATES	39,475	3,395	312	65	205,263	217,795	11,520	6,300	2,399	242	813	3,419
NEW ENGLAND	1,590	108	9	4	4,371	3,971	176	224	80	15	19	1,062
Maine	49	15	1	-	50	44	16	9	-	-	-	6
N.H.	32	8	-	2	56	35	11	18	6	-	-	12
Vt.	21	9	-	-	15	14	4	-	-	-	-	3
Mass.	812	39	6	1	1,638	1,619	73	146	60	14	13	104
R.I.	122	37	2	1	262	209	14	5	14	1	6	155
Conn.	554	-	-	-	2,350	2,050	58	46	-	-	-	782
MID. ATLANTIC	11,456	242	25	8	21,888	24,577	660	644	272	4	115	1,773
Upstate N.Y.	1,103	122	14	1	5,281	4,588	343	227	134	2	28	1,204
N.Y. City	6,840	20	1	-	6,997	7,880	79	45	-	-	-	3
N.J.	2,375	-	-	-	2,637	3,041	160	201	112	-	15	326
Pa.	1,138	100	10	7	6,973	9,068	78	171	26	2	72	240
E.N. CENTRAL	3,249	505	81	14	40,315	45,350	1,115	664	185	5	236	50
Ohio	580	123	22	1	13,007	11,606	405	100	14	-	115	34
Ind.	360	76	3	1	4,645	4,502	208	113	7	-	55	8
Ill.	1,602	95	27	4	9,678	16,153	253	126	36	2	10	3
Mich.	527	204	25	8	9,457	9,603	149	227	125	3	40	5
Wis.	180	7	4	-	3,528	3,486	100	98	3	-	16	-
W.N. CENTRAL	830	183	18	4	10,769	11,943	541	339	102	7	81	71
Minn.	213	15	2	-	1,748	1,280	113	40	14	1	1	29
Iowa	29	51	-	-	749	916	29	16	7	5	24	3
Mo.	363	67	7	3	6,260	7,138	231	247	62	1	38	28
N. Dak.	18	1	2	-	18	29	2	-	-	-	4	-
S. Dak.	9	-	2	-	104	151	17	-	-	-	-	-
Nebr.	48	6	3	1	-	484	78	18	8	-	12	8
Kans.	150	43	2	-	1,890	1,945	71	18	11	-	2	3
S. ATLANTIC	8,466	784	60	23	56,917	56,940	770	1,427	384	23	196	334
Del.	122	15	-	-	815	765	11	4	1	-	-	6
Md.	1,079	98	14	2	10,291	8,685	103	189	21	5	56	155
D.C.	763	21	-	1	4,082	2,713	16	30	-	-	8	3
Va.	655	111	14	5	7,316	6,603	90	70	18	2	5	41
W. Va.	23	13	2	-	398	331	6	20	20	-	1	10
N.C.	663	112	29	1	13,849	13,981	67	158	36	-	12	43
S.C.	612	17	-	-	7,135	5,746	25	22	3	-	9	6
Ga.	1,056	33	1	-	-	4,660	23	498	149	-	73	63
Fla.	3,493	364	-	14	13,031	13,456	429	436	136	16	32	7
E.S. CENTRAL	1,031	235	23	2	24,123	24,624	268	608	461	2	39	21
Ky.	161	72	9	1	2,586	2,576	97	50	14	-	6	10
Tenn.	315	38	10	-	7,411	7,493	102	518	439	1	21	8
Ala.	315	98	4	1	8,362	8,881	46	40	8	1	9	3
Miss.	240	27	-	-	5,764	5,674	23	-	-	-	3	-
W.S. CENTRAL	3,972	380	24	1	26,145	24,286	1,701	759	281	48	25	60
Ark.	134	28	-	-	3,873	3,475	46	14	4	1	5	3
La.	614	17	3	-	6,988	6,629	81	105	82	1	6	-
Okla.	156	-	-	-	2,157	2,591	145	179	162	1	10	32
Tex.	3,068	335	21	1	13,127	11,591	1,429	461	33	45	4	25
MOUNTAIN	1,242	118	6	3	4,693	6,170	2,311	355	254	32	58	5
Mont.	15	1	-	-	44	35	15	18	5	-	14	-
Idaho	30	3	-	-	46	110	190	58	55	1	1	1
Wyo.	12	2	1	2	42	53	14	14	83	-	3	1
Colo.	472	46	1	-	1,520	2,087	301	56	40	10	14	-
N. Mex.	92	6	-	-	523	515	658	121	37	8	2	3
Ariz.	349	36	-	-	1,746	2,262	751	22	8	8	3	-
Utah	69	9	-	1	160	71	243	36	16	1	7	-
Nev.	203	15	4	-	612	1,037	139	30	10	4	14	-
PACIFIC	7,639	840	66	6	16,042	19,934	3,978	1,280	380	106	44	43
Wash.	496	-	-	-	1,532	2,100	196	39	38	1	5	-
Oreg.	324	-	-	-	496	-	221	25	6	1	-	-
Calif.	6,697	753	65	5	13,157	17,208	3,394	1,185	331	102	36	43
Alaska	26	14	1	-	475	295	133	8	-	-	-	-
Hawaii	96	73	-	1	382	331	34	23	5	2	3	-
Guam	1	9	-	-	70	64	13	-	-	4	2	-
P.R.	1,271	21	-	3	294	276	38	194	82	6	-	-
V.I.	12	-	-	-	11	63	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	18	30	4	-	-	-	-	-
C.N.M.I.	-	-	-	-	25	47	3	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly; last update June 28, 1994.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending July 23, 1994, and July 24, 1993 (29th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1994	1994	Cum. 1994	1994	Cum. 1994	Cum. 1993	Cum. 1994	1994	Cum. 1994	1994	Cum. 1994	Cum. 1993	1994	Cum. 1994	Cum. 1993
UNITED STATES	478	38	624	2	148	214	1,653	22	818	47	1,703	2,025	-	203	141
NEW ENGLAND	34	-	12	-	10	57	80	-	14	2	167	380	-	125	1
Maine	2	-	1	-	3	-	13	-	3	-	2	6	-	-	1
N.H.	3	-	1	-	-	-	6	-	4	-	38	107	-	-	-
Vt.	1	-	1	-	1	31	2	-	-	-	27	51	-	-	-
Mass.	14	-	2	-	4	16	32	-	-	2	78	175	-	122	-
R.I.	5	-	4	-	2	1	-	-	1	-	4	4	-	2	-
Conn.	9	-	3	-	-	9	27	-	6	-	18	37	-	1	-
MID. ATLANTIC	67	-	165	-	22	13	156	3	71	1	317	262	-	11	48
Upstate N.Y.	26	-	25	-	3	1	58	2	20	1	124	92	-	8	11
N.Y. City	11	-	14	-	2	4	10	-	5	-	65	21	-	1	16
N.J.	17	-	122	-	14	8	37	-	6	-	8	42	-	2	13
Pa.	13	-	4	-	3	-	51	1	40	-	120	107	-	-	8
E.N. CENTRAL	50	-	58	-	40	16	260	-	136	12	246	478	-	11	3
Ohio	8	-	15	-	-	7	72	-	41	11	91	118	-	-	1
Ind.	11	-	-	-	1	-	43	-	6	-	40	39	-	-	1
Ill.	16	-	17	-	38	9	86	-	54	-	46	131	-	3	-
Mich.	13	-	23	-	1	-	34	-	31	1	23	21	-	8	-
Wis.	2	-	3	-	-	-	25	-	4	-	46	169	-	-	1
W.N. CENTRAL	25	-	116	-	42	3	115	-	38	2	82	127	-	2	1
Minn.	8	-	-	-	-	-	9	-	4	-	39	51	-	-	-
Iowa	4	-	6	-	1	-	13	-	10	-	6	1	-	-	-
Mo.	10	-	108	-	40	1	57	-	20	1	21	51	-	2	1
N. Dak.	1	-	-	-	-	-	1	-	2	-	3	3	-	-	-
S. Dak.	-	-	-	-	-	-	7	-	-	1	1	3	-	-	-
Nebr.	1	-	1	-	1	-	8	-	2	-	5	7	-	-	-
Kans.	1	-	1	-	-	2	20	-	-	-	7	11	-	-	-
S. ATLANTIC	101	38	45	1	4	22	285	12	131	8	186	187	-	9	6
Del.	3	-	-	-	-	-	4	-	-	1	1	3	-	-	-
Md.	47	-	1	-	2	4	22	-	35	1	57	65	-	-	2
D.C.	8	-	-	-	-	-	2	-	-	-	4	2	-	-	-
Va.	11	-	1	-	1	1	51	2	29	-	17	17	-	-	-
W. Va.	-	36	36	-	-	-	11	-	3	-	2	4	-	-	-
N.C.	2	2	2	1§	1	-	42	9	35	6	50	29	-	-	-
S.C.	2	-	-	-	-	-	11	-	6	-	10	5	-	-	-
Ga.	12	-	2	-	-	-	55	-	8	-	13	19	-	-	-
Fla.	16	-	3	-	-	17	87	1	15	-	32	43	-	9	4
E.S. CENTRAL	16	-	28	-	-	1	111	-	15	1	89	91	-	-	-
Ky.	6	-	-	-	-	-	29	-	-	-	52	15	-	-	-
Tenn.	6	-	28	-	-	-	25	-	6	-	17	39	-	-	-
Ala.	3	-	-	-	-	1	51	-	3	1	16	30	-	-	-
Miss.	1	-	-	-	-	-	6	-	6	-	4	7	-	-	-
W.S. CENTRAL	24	-	9	-	7	1	211	1	177	12	66	49	-	12	16
Ark.	2	-	-	-	1	-	34	-	1	1	12	3	-	-	-
La.	4	-	-	-	1	1	26	1	20	3	9	6	-	-	1
Okla.	2	-	-	-	-	-	19	-	23	-	21	27	-	4	1
Tex.	16	-	9	-	5	-	132	-	133	8	24	13	-	8	14
MOUNTAIN	21	-	144	1	15	2	113	2	53	3	190	143	-	6	6
Mont.	-	-	-	-	-	-	4	-	-	-	3	1	-	-	-
Idaho	2	-	-	-	-	-	15	-	7	-	23	25	-	1	1
Wyo.	1	-	-	-	-	-	5	-	1	-	-	1	-	-	-
Colo.	9	-	16	-	3	2	22	-	1	-	106	59	-	-	1
N. Mex.	3	-	-	-	-	-	11	N	N	2	12	23	-	1	-
Ariz.	1	-	-	1†	1	-	39	-	24	1	34	18	-	-	-
Utah	4	-	128	-	-	-	12	-	10	-	10	16	-	3	3
Nev.	1	-	-	-	11	-	5	2	9	-	2	-	-	1	1
PACIFIC	140	-	47	-	8	99	322	4	183	6	360	308	-	27	60
Wash.	5	-	-	-	-	-	23	-	6	-	17	23	-	-	-
Oreg.	7	-	-	-	-	-	50	N	N	-	27	4	-	-	1
Calif.	116	-	44	-	6	83	241	4	165	6	307	274	-	24	35
Alaska	-	-	3	-	-	-	2	-	2	-	-	3	-	1	1
Hawaii	12	-	-	-	2	16	6	-	10	-	9	4	-	2	23
Guam	2	U	211	U	-	2	1	U	4	U	-	-	U	1	-
P.R.	2	-	13	-	-	310	6	-	2	-	1	1	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	U	-	U	-	1	-	U	1	U	1	2	U	-	-
C.N.M.I.	1	U	26	U	-	1	-	U	2	U	-	-	U	-	-

*For measles only, imported cases include both out-of-state and international importations.
N: Not notifiable U: Unavailable † International § Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending July 23, 1994, and July 24, 1993 (29th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994
UNITED STATES	11,913	14,855	115	11,694	11,846	36	203	169	3,395
NEW ENGLAND	126	205	2	251	256	-	16	8	1,032
Maine	4	3	-	-	5	-	-	-	-
N.H.	1	21	-	14	10	-	-	-	100
Vt.	-	1	1	3	3	-	-	-	90
Mass.	50	90	1	128	143	-	12	7	398
R.I.	11	8	-	27	36	-	1	-	5
Conn.	60	82	-	79	59	-	3	1	439
MID. ATLANTIC	733	1,439	20	2,111	2,555	1	49	3	343
Upstate N.Y.	92	119	10	112	376	1	6	1	79
N.Y. City	324	756	-	1,396	1,516	-	29	-	-
N.J.	104	202	-	424	273	-	14	-	164
Pa.	213	362	10	179	390	-	-	2	100
E.N. CENTRAL	1,576	2,494	23	1,170	1,259	2	38	23	23
Ohio	670	659	7	178	174	-	5	14	-
Ind.	130	212	2	93	127	-	4	2	7
Ill.	431	1,001	5	606	671	-	18	5	3
Mich.	164	346	9	257	235	1	4	2	7
Wis.	181	276	-	36	52	1	7	-	6
W.N. CENTRAL	672	949	17	294	254	14	-	13	117
Minn.	28	42	1	65	31	1	-	-	13
Iowa	33	45	7	20	37	-	-	1	51
Mo.	581	764	5	137	125	9	-	5	10
N. Dak.	-	2	-	4	5	-	-	-	5
S. Dak.	-	1	-	16	10	1	-	6	14
Nebr.	-	10	2	10	15	1	-	1	-
Kans.	30	85	2	42	31	2	-	-	24
S. ATLANTIC	3,444	3,870	7	2,226	2,289	1	33	81	1,162
Del.	13	76	-	-	24	-	1	-	29
Md.	127	218	-	168	210	-	5	8	320
D.C.	141	210	-	65	91	-	1	-	2
Va.	422	350	1	198	247	-	5	7	216
W. Va.	8	4	-	50	45	-	-	2	44
N.C.	976	1,084	1	253	282	-	-	30	95
S.C.	411	594	-	209	244	-	-	2	102
Ga.	860	657	-	496	424	1	1	29	224
Fla.	486	677	5	787	722	-	20	3	130
E.S. CENTRAL	2,067	2,127	2	712	853	-	2	11	106
Ky.	120	173	1	181	206	-	1	1	8
Tenn.	542	617	1	207	243	-	1	7	34
Ala.	372	473	-	237	264	-	-	1	64
Miss.	1,033	864	-	87	140	-	-	2	-
W.S. CENTRAL	2,721	2,875	1	1,526	1,157	12	8	21	418
Ark.	290	331	-	151	101	11	-	4	15
La.	994	1,362	-	14	85	-	3	-	47
Okla.	87	199	1	156	81	1	1	14	22
Tex.	1,350	983	-	1,205	890	-	4	3	334
MOUNTAIN	148	135	5	283	291	5	7	9	62
Mont.	3	1	-	9	5	3	-	4	-
Idaho	1	-	1	10	7	-	-	-	2
Wyo.	-	4	-	4	2	-	-	2	14
Colo.	77	39	2	21	42	-	3	2	7
N. Mex.	9	19	-	43	35	1	-	-	2
Ariz.	30	57	-	129	126	-	1	1	28
Utah	5	1	2	23	14	1	1	-	6
Nev.	23	14	-	44	60	-	2	-	3
PACIFIC	426	761	38	3,121	2,932	1	50	-	132
Wash.	35	33	-	160	141	-	3	-	-
Oreg.	20	-	-	91	-	1	-	-	-
Calif.	367	722	35	2,677	2,605	-	45	-	103
Alaska	3	4	-	33	35	-	-	-	29
Hawaii	1	2	3	160	151	-	2	-	-
Guam	4	2	-	57	39	-	1	-	-
P.R.	166	307	-	73	111	-	-	-	49
V.I.	22	31	-	-	2	-	-	-	-
Amer. Samoa	1	-	-	3	2	-	1	-	-
C.N.M.I.	1	3	-	22	19	-	1	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending July 23, 1994 (29th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	531	355	104	36	16	20	42
Boston, Mass.	157	93	33	15	4	12	21
Bridgeport, Conn.	23	7	12	1	2	1	1
Cambridge, Mass.	20	14	5	1	-	-	2
Fall River, Mass.	25	24	1	-	-	-	-
Hartford, Conn.	56	35	10	5	5	1	1
Lowell, Mass.	14	11	2	1	-	-	-
Lynn, Mass.	13	10	3	-	-	-	-
New Bedford, Mass.	26	22	4	-	-	-	3
New Haven, Conn.	43	28	7	4	1	3	-
Providence, R.I.	28	20	5	3	-	-	3
Somerville, Mass.	1	-	1	-	-	-	-
Springfield, Mass.	30	25	2	2	-	1	3
Waterbury, Conn.	36	25	8	1	2	-	2
Worcester, Mass.	59	41	11	3	2	2	6
MID. ATLANTIC	2,560	1,579	501	337	78	64	94
Albany, N.Y.	50	27	13	5	4	1	1
Allentown, Pa.	13	10	2	1	-	-	-
Buffalo, N.Y.	101	68	25	3	4	1	2
Camden, N.J.	35	18	9	2	3	3	2
Elizabeth, N.J.	54	44	6	1	2	1	2
Erie, Pa.§	42	30	7	3	2	-	2
Jersey City, N.J.	37	17	4	11	4	1	-
New York City, N.Y.	1,372	815	260	224	40	33	39
Newark, N.J.	65	28	18	16	-	3	7
Paterson, N.J.	23	10	10	2	-	1	1
Philadelphia, Pa.	393	230	94	47	13	8	20
Pittsburgh, Pa.§	66	43	13	3	4	3	4
Reading, Pa.	12	9	1	2	-	-	-
Rochester, N.Y.	116	85	18	8	1	4	5
Schenectady, N.Y.	21	20	1	-	-	-	2
Scranton, Pa.§	23	19	1	2	-	1	1
Syracuse, N.Y.	71	53	11	4	1	2	2
Trenton, N.J.	21	13	5	1	-	2	2
Utica, N.Y.	16	16	-	-	-	-	-
Yonkers, N.Y.	29	24	3	2	-	-	2
E.N. CENTRAL	2,226	1,303	457	248	150	68	110
Akron, Ohio	37	23	9	2	1	2	-
Canton, Ohio	24	15	7	1	1	-	3
Chicago, Ill.	547	212	115	113	94	13	28
Cincinnati, Ohio	132	89	26	10	4	3	9
Cleveland, Ohio	137	92	29	7	1	8	2
Columbus, Ohio	183	109	46	19	6	3	8
Dayton, Ohio	125	87	24	8	3	3	3
Detroit, Mich.	200	107	51	21	13	8	6
Evansville, Ind.	54	44	6	1	2	1	2
Fort Wayne, Ind.	65	49	10	4	2	-	1
Gary, Ind.	12	7	-	3	2	-	-
Grand Rapids, Mich.	39	25	8	2	2	2	7
Indianapolis, Ind.	187	106	39	21	9	12	14
Madison, Wis.	64	39	11	10	3	1	4
Milwaukee, Wis.	129	97	23	8	-	1	10
Peoria, Ill.	43	30	8	4	1	-	6
Rockford, Ill.	52	31	12	6	-	3	3
South Bend, Ind.	21	14	4	1	1	1	-
Toledo, Ohio	118	83	21	6	4	4	4
Youngstown, Ohio	57	44	8	1	1	3	-
W.N. CENTRAL	776	532	145	57	28	14	24
Des Moines, Iowa	109	72	21	7	7	2	-
Duluth, Minn.	15	14	1	-	-	-	-
Kansas City, Kans.	42	31	9	1	-	1	2
Kansas City, Mo.	113	78	22	10	2	1	8
Lincoln, Nebr.	25	17	4	4	-	-	1
Minneapolis, Minn.	150	103	35	8	-	4	7
Omaha, Nebr.	83	54	13	12	2	2	4
St. Louis, Mo.	112	71	21	6	11	3	-
St. Paul, Minn.	60	44	9	5	1	1	1
Wichita, Kans.	67	48	10	4	5	-	1

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,317	717	257	189	112	42	62
Atlanta, Ga.	231	92	37	26	66	10	8
Baltimore, Md.	198	110	44	29	10	5	16
Charlotte, N.C.	82	48	19	9	6	-	10
Jacksonville, Fla.	138	83	28	20	5	2	5
Miami, Fla.	113	55	25	21	8	4	-
Norfolk, Va.	62	27	12	17	3	3	5
Richmond, Va.	U	U	U	U	U	U	U
Savannah, Ga.	48	28	13	2	1	4	3
St. Petersburg, Fla.	48	37	6	3	-	2	2
Tampa, Fla.	168	119	29	18	2	-	8
Washington, D.C.	218	110	42	43	11	12	5
Wilmington, Del.	11	8	2	1	-	-	-
E.S. CENTRAL	742	507	123	76	20	16	48
Birmingham, Ala.	143	88	23	16	9	7	9
Chattanooga, Tenn.	29	19	5	5	-	-	1
Knoxville, Tenn.	89	65	10	10	1	3	9
Lexington, Ky.	65	47	12	6	-	-	7
Memphis, Tenn.	190	127	30	23	8	2	18
Mobile, Ala.	60	37	15	5	-	3	1
Montgomery, Ala.	55	42	9	3	-	1	-
Nashville, Tenn.	111	82	19	8	2	-	3
W.S. CENTRAL	1,398	817	301	174	69	37	65
Austin, Tex.	66	39	13	8	4	2	7
Baton Rouge, La.	51	34	5	7	2	3	-
Corpus Christi, Tex.	43	25	11	6	1	-	3
Dallas, Tex.	202	113	52	27	5	5	2
El Paso, Tex.	56	29	15	6	2	4	2
Ft. Worth, Tex.	68	37	19	8	3	1	3
Houston, Tex.	371	199	79	63	22	8	30
Little Rock, Ark.	76	50	7	6	6	7	5
New Orleans, La.	110	56	27	14	9	4	-
San Antonio, Tex.	198	126	38	22	9	3	7
Shreveport, La.	44	32	8	2	2	-	2
Tulsa, Okla.	113	77	27	5	4	-	4
MOUNTAIN	776	527	132	67	35	15	45
Albuquerque, N.M.	85	54	21	7	3	-	1
Colo. Springs, Colo.	44	31	7	2	3	1	3
Denver, Colo.	99	64	19	10	4	2	5
Las Vegas, Nev.	122	73	32	11	4	2	4
Ogden, Utah	U	U	U	U	U	U	U
Phoenix, Ariz.	189	139	19	15	10	6	17
Pueblo, Colo.	21	16	4	-	1	-	2
Salt Lake City, Utah	93	63	11	13	4	2	6
Tucson, Ariz.	123	87	19	9	6	2	7
PACIFIC	2,073	1,386	375	211	56	39	156
Berkeley, Calif.	20	15	2	3	-	-	3
Fresno, Calif.	79	54	10	6	3	6	7
Glendale, Calif.	25	12	8	4	-	-	1
Honolulu, Hawaii	67	48	12	4	1	2	6
Long Beach, Calif.	81	58	12	7	2	2	10
Los Angeles, Calif.	610	378	123	74	23	8	23
Pasadena, Calif.	11	6	4	-	-	1	1
Portland, Oreg.	116	82	22	10	1	1	10
Sacramento, Calif.	164	118	25	15	2	4	19
San Diego, Calif.	255	169	46	28	9	3	25
San Francisco, Calif.	161	104	25	24	4	3	19
San Jose, Calif.	167	112	35	14	3	3	11
Santa Cruz, Calif.	31	24	5	2	-	-	3
Seattle, Wash.	148	103	26	12	5	2	4
Spokane, Wash.	50	41	6	2	-	1	9
Tacoma, Wash.	88	62	14	6	3	3	5
TOTAL	12,399¶	7,723	2,395	1,395	564	315	646

*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.

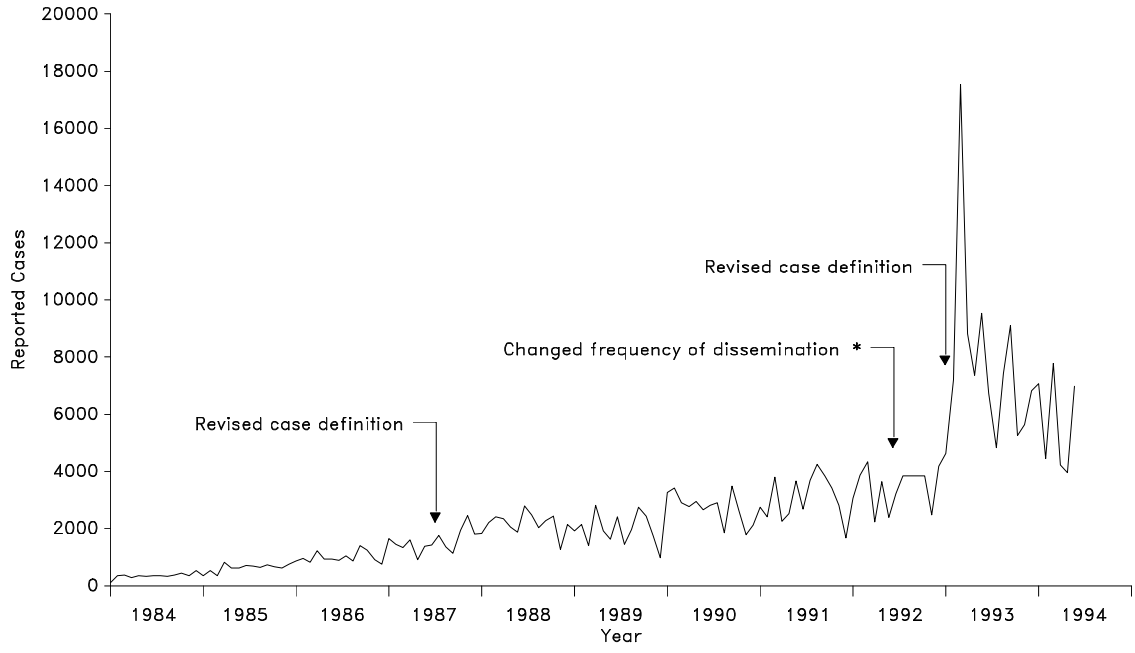
†Pneumonia and influenza.

§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.

FIGURE II. Acquired immunodeficiency syndrome cases, by 4-week period of report — United States, 1984–1994



*Change to reflect Notice to Readers, Vol. 41, No. 18, pg. 325.

FIGURE III. Tuberculosis cases, by 4-week period of report — United States, 1984–1994

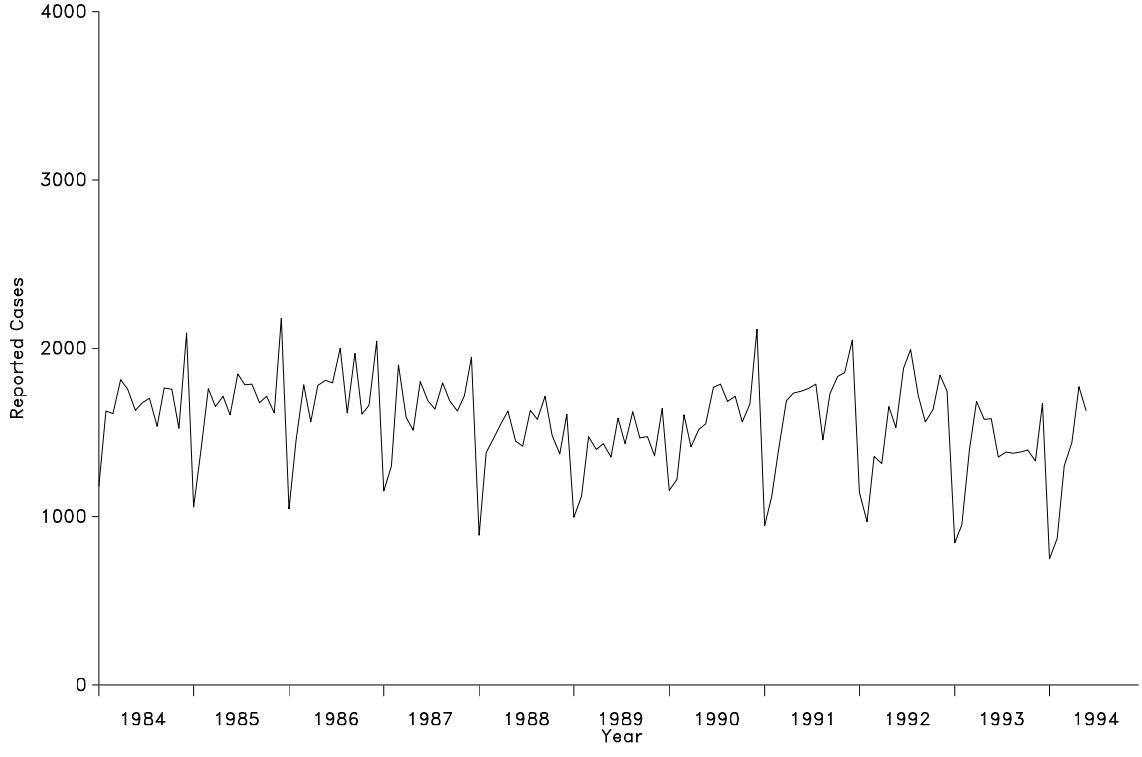


FIGURE IV. Gonorrhea cases, by 4-week period of report — United States, 1984–1994

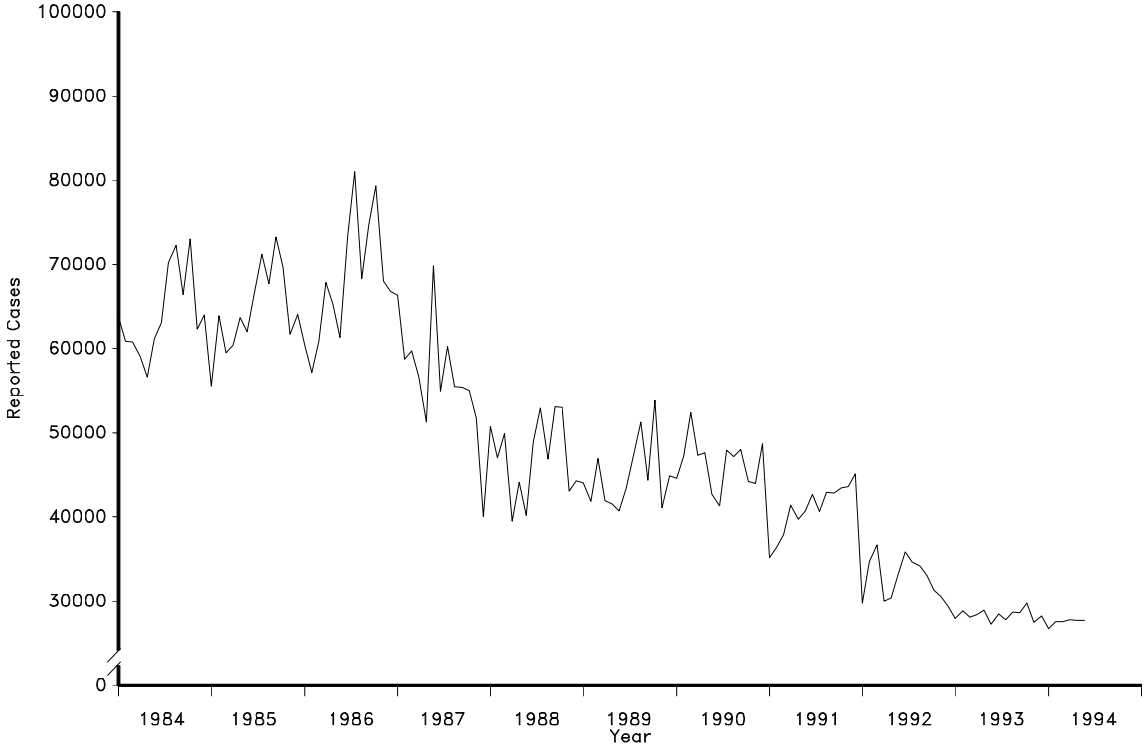
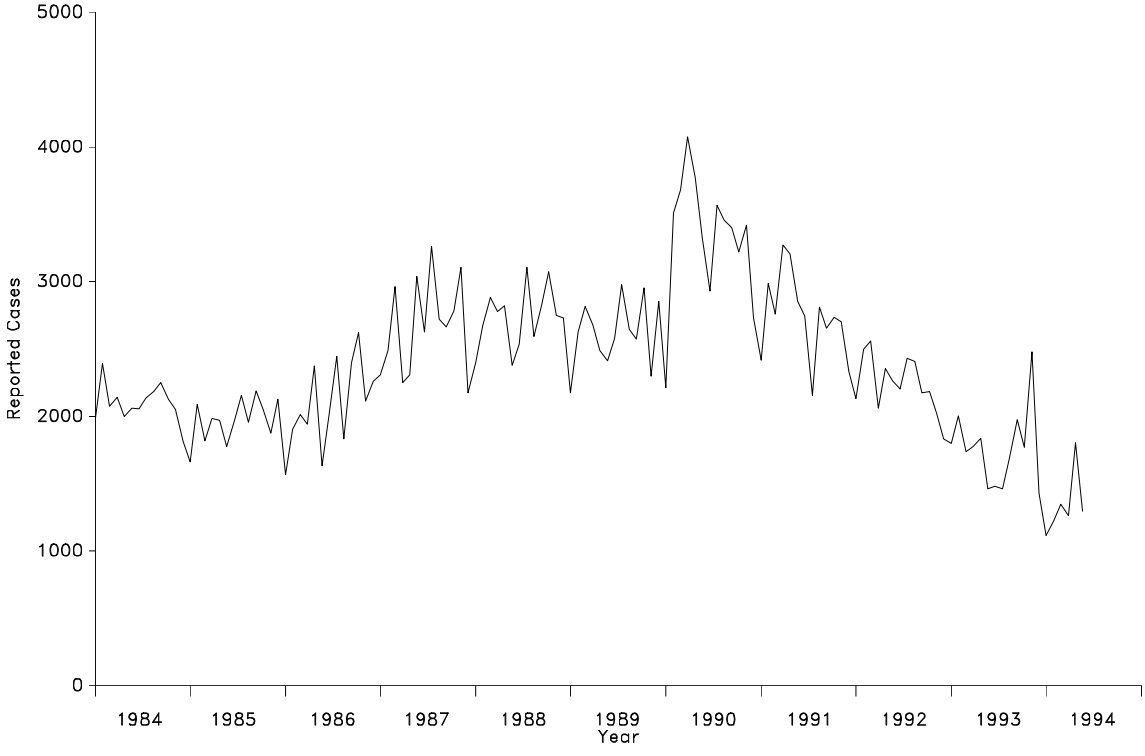


FIGURE V. Syphilis cases, by 4-week period of report — United States, 1984–1994



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