CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

February 12, 1999 / Vol. 48 / No. 5

MMWR™
MORBIDITY AND MORTALITY WEEKLY REPORT

Needs Assessment Following Hurricane Georges — Dominican Republic, 1998

Hurricane Georges struck the Carribean Islands in September 1998, causing numerous deaths and extensive damage throughout the region. The Dominican Republic was hardest hit, with approximately 300 deaths; extensive infrastructure damage; and severe agricultural losses, including staple crops of rice, plantain, and cassava. Two months after the hurricane, the American Red Cross (ARC) was asked to provide food to an estimated 170,000 families affected by the storm throughout the country. To assist in directing relief efforts, CDC performed a needs assessment to estimate the food and water availability, sanitation, and medical needs of the hurricane-affected population. This report summarizes the results of that assessment, which indicate that, 2 months after the disaster, 40% of selected families had insufficient food ≥5 days per and 28% of families reported someone in need of medical attention.

A household survey was performed using a modified cluster-sampling method (*1*) to select persons from the first 33,000 families identified by the ARC as beneficiaries to receive support. The country was divided geographically into clusters. Using a random number generator, 30 clusters were selected with probability proportional to the number of households within a cluster. One adult family member was interviewed from each of seven selected households within each cluster. A total of 207 interviews were completed, representing 1414 persons. Respondents were asked about availability of food, water, and housing, and medical needs and storm preparation.

Data were analyzed using EpiInfo 6.1 (*2*). Frequencies of variables were calculated for the population as a whole. Two groups of beneficiaries were considered by ARC: persons residing in groups in migrant farm worker settlements (i.e., bateys) (35 of 207 households) where baseline conditions were thought to be more harsh, and persons residing in shelters (50 of 207 households) who had been displaced from their homes and resources. Conditions for persons in bateys and shelters were compared with conditions for persons residing in other housing at the time of the survey.

Food Availability

The availability of food decreased dramatically after the hurricane. Respondents from 167 (83%) of 202 households reported insufficient food since the hurricane, compared with 107 (53%) of 202 who reported insufficient food before the storm ($p<0.01$). Of 202 households, 174 (86%) reported not having enough food ≥1 day per week. Of 201 households, 13 (7%) reported insufficient food for ≥5 days per week before the

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storm and 59 (29%) of 203 households after the storm. Of 202 households, 70 (35%) reported having enough food in their home for the next 3 days. At the time of the survey, relief services were providing food for 45 (23%) of 207 households; 38 (82%) of these families reported insufficient food despite the support.

Persons residing in batey households reported a higher mean number of days each week with insufficient food than did persons residing in other households before the hurricane (2.7 days compared with 1.9 days) ($p<0.01$). At the time of the survey, no difference was reported (3.4 days compared with 3.3 days). Of 33 batey households, 10 (30%) reported insufficient food ≥5 days per week, compared with 35 (24%) in the other households ($p>0.05$). Three fourths of batey households reported needing food; 16 (50%) batey households were relying on relief efforts for food.

Before the hurricane, the need for food was similar between households now housed in shelters and other nonbatey households. After the hurricane, 70% of nonbatey households identified food as a need, with 20 (40%) of 50 shelter households without enough food ≥5 days per week. At the time of the survey, relief efforts provided food for 32% of families in shelters.

Health Care

At the time of the survey, 47 (28%) of 171 households reported having someone in the home who needed medical attention, and 160 (78%) of 205 households reported someone in the home who needed medication. Since the hurricane, 168 (82%) of 206 households reported an illness in a household member: respiratory illness (99 [59%]), gastrointestinal illness (69 [41%]), chronic illness (30 [18%]), or stress reaction (15 [9%]). In bateys and shelter populations, more families reported gastrointestinal (52% and 54%, respectively) ($p<0.01$) and respiratory (67% and 66%, respectively) disease than other families (37% [$p<0.01$] and 56% [$p>0.05$], respectively), but both were less likely to request medication. Families residing in shelters had the same access to health care than other households (67% compared with 74%) ($p=0.4$) and a higher self-reported need for health care (48% compared with 20%) ($p<0.01$).

Water and Sanitation

After the storm, 97 (47%) households had running water. At the time of the survey, 18 (9%) households were relying on river water and 18 (9%) on rainwater. Although 85 (41%) households reported having wells, many reported water as a need. Most (93%) households reported access to a bathroom or latrine.

Reported by: Dominican Republic Red Cross; American Red Cross International Svcs. National Center for Environmental Health; and EIS officers, CDC.

Editorial Note: After a natural disaster, assessments typically are conducted within the first week to 10 days to determine the acute impact on the population (*3*). This evaluation was conducted 2 months after the storm to identify public health needs that remained after the emergency response to the disaster. Basic subsistence and health-care needs were present 2 months after the hurricane, when relief efforts were decreasing. Because of small sample sizes, comparisons between groups (i.e., batey, shelter, and other populations) should be interpreted with caution.

Following this assessment, recommendations were given to ARC and the Dominican Republic Ministry of Health, emphasizing the need for food, with special consideration of pregnant and lactating women and their newborns. In addition, periodic reassessments were recommended to monitor the effectiveness of follow-up inter-

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ventions (*4*). Because of the high medical needs and low food availability reported by the shelter families, immediate preventive interventions were recommended.

As a result of these recommendations, ARC's food delivery schedule was accelerated by 1 month because of acute food needs. In addition, the Ministry of Health initiated medical interventions as soon as possible for shelter residents. Periodic needs assessments have been scheduled through November 1999.

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Human Rabies — Virginia, 1998

On December 31, 1998, a 29-year-old man in Richmond, Virginia, died from rabies encephalitis caused by a rabies virus variant associated with insectivorous bats. This report summarizes the clinical and epidemiologic investigations by the Virginia Department of Health and CDC.

On December 14, 1998, an inmate at the Nottoway Correctional Center in Nottoway County, Virginia, developed malaise and back pain while working on a roadside cleanup crew. He sought medical care at the prison on December 15, complaining of muscle pains, vomiting, and abdominal cramps, and was treated with acetaminophen. His clinical signs progressed to include persistent right wrist pain, muscle tremors in his right arm, and difficulty walking. On December 18, the patient was sent to a Richmond emergency department, where he had a temperature of 103 F (39.4 C). He initially was alert and oriented but had visual hallucinations. During the next 12 hours, he became increasingly agitated and less oriented. Physical examination revealed anisocoria, increased tone in the right forearm, and hyperesthesia over the entire right side of the body. Intoxication with anticholinergic agents such as pesticides or Jimson weed was considered; however, toxicology studies were negative.

The patient's condition worsened, with hypersalivation, priapism, and wide fluctuations in body temperature and blood pressure. He was intubated and heavily sedated on December 20. Laboratory findings included a white blood cell count of 20,800/µL (normal: 3700–9400/µL), myoglobinuria, and a compensated metabolic anion gap acidosis with renal insufficiency. Peak creatine phosphokinase levels were 130,900 U/L (normal: 50–450 U/L), indicating rhabdomyolysis. Analysis of cerebrospinal fluid (CSF) showed a white blood cell count of 57/µL (normal: 0–5/µL), protein levels of 128 mg/dL (normal: 12–60 mg/dL), and glucose levels of 46 mg/dL (normal: at least two thirds of a concurrent serum glucose value, which was approximately 136 mg/dL). A computed tomography scan of the patient's head revealed no abnormal findings.

A diagnosis of rabies was first considered by the patient's physician on December 20. Samples sent to CDC for testing on December 21 included a nuchal skin biopsy, *Human Rabies — Continued*

which tested positive for rabies virus by direct fluorescent antibody test on December 22, and saliva and skin, which were positive by reverse-transcriptase polymerase chain reaction (RT-PCR) assay on December 23. The sequence of the amplified RT-PCR product showed >99.7% DNA homology to a rabies virus variant associated with eastern pipistrelle bats (*Pipistrellus subflavus*) and silver-haired bats (*Lasionycteris noctivagans*). Serum and CSF samples obtained December 21 contained rabies virus neutralizing antibody titers of 1:50 and 1:36, respectively, by rapid fluorescent focus inhibition test (RFFIT). A serum sample obtained December 28 showed a rabies virus neutralizing antibody titer of 1:1200 by RFFIT. After the removal of all sedatives, the patient showed no purposeful movement and loss of brainstem reflexes. He died December 31.

Postexposure prophylaxis (PEP) was administered to 48 persons who possibly had contact with the patient's saliva between December 4 (10 days preceding the first clinical signs of illness) and death. Of the 48, 29 were prison inmates who reported possible contact with the patient's saliva, either while caring for him during his illness or through shared cigarettes or drinking and eating utensils. Three family members who visited the patient at the prison on December 6, 15 health-care providers, and the pathologist who conducted the autopsy also received PEP.

Family members, friends, and prison staff reported the patient had not indicated any contact with or bite from an animal in recent months, and prison medical records did not document evidence of a bite or scratch. The patient lived at a work center that housed up to 160 inmates in two separate dormitories. He had worked around the prison on a farm repairing fence lines and feeding cattle, in a paper recycling facility, and along roadsides cleaning up trash and debris. No evidence of bats was found within the prison or on prison grounds, although inmates reported occasionally seeing bats flying near the outdoor lights in the summer. Several stray cats were reported to occasionally approach inmates at the facility; however, the patient was not known to have handled them.

The patient had been incarcerated at Nottoway for approximately 6 weeks after transfer from another correctional unit. At the other correctional facility, the patient worked inside the prison and on a road crew cutting brush and picking up trash along highways. No evidence of bats was found in the prison, and inmates reported that they had never seen bats inside the facility. Prison staff and inmates reported that they did not recall the patient ever being bitten by an animal while working, and that he usually did not handle small animals found by the road crews.

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Editorial Note: This report describes the only case of human rabies diagnosed in the United States during 1998 and the first case in Virginia since 1953. A definitive history of an animal bite could not be established for this patient, and the most likely explanation is an unrecognized bat bite occurring either at the farm or recycling facility or

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while the patient was working on a road crew. Because the incubation period for rabies varies from several weeks to several months, he may have contracted rabies before his transfer to Nottoway.

Since 1990, 27 human rabies cases have occurred in the United States (an average of three cases per year) (*1,2*). Although 20 (74%) have been attributed to bat-associated variants of the rabies virus, a definitive history of a bat bite was established for only one of these cases. Of the 20 attributed to bat-associated variants, 15 (75%) have been caused by the same eastern pipistrelle/silver-haired bat variant responsible for the death described in this report. Although bat-associated rabies virus variants theoretically can be secondarily transmitted from terrestrial mammals, an unrecognized bat bite is the most likely explanation for these cases.

The reasons for the preponderance of human rabies cases associated with the eastern pipistrelle/silver-haired bat virus variant remain speculative. Epidemiologic findings suggest that it can be transmitted following minor, undetected exposures (*1*). Insectivorous bats, such as those implicated in the human rabies deaths in the United States, have small teeth that may not cause an obvious wound in human skin (*3*). Accordingly, it is important to treat persons for rabies exposure when the possibility of a bat bite cannot be reasonably excluded. In all cases where bat-human contact has occurred, the bat should be collected and tested for rabies if possible. If the bat is not available for rabies testing, the need for PEP should be assessed by public health officials familiar with recent recommendations (*4*).

The total of 48 persons who received PEP after contact with the patient described in this report is similar to the mean of 49.8 persons who received PEP after exposures to human rabies cases during 1990–1997 (*1,5,6*). Consideration of rabies before the patient's death may have minimized the number of hospital staff that received PEP in this case.

Although this patient did not exhibit classic hydrophobia, other typical clinical signs, such as hypersalivation, hallucinations, priapism, paresthesias, muscle spasms, and autonomic instability occurred. The use of sedatives may have masked hydrophobia in this patient. Medical personnel should consider rabies as a diagnosis in any case presenting with the acute onset and rapid progression of compatible neurologic signs, regardless of whether the patient reports a history of an animal bite. Although early diagnosis cannot save the patient, it may help minimize the number of potential exposures and the need for PEP.

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Blastomycosis Acquired Occupationally During Prairie Dog Relocation — Colorado, 1998

On August 31, 1998, two suspected cases of fungal pneumonia were reported to the Boulder County (Colorado) Health Department (BCHD). Both patients were immunocompetent, otherwise healthy adults working for the City of Boulder Open Space (CBOS) program on a prairie dog relocation project. This report summarizes the epidemiologic investigation by BCHD, the Colorado Department of Public Health and Environment, and CDC; the findings indicate that these two persons acquired blastomycosis in Colorado, which is outside the area where the disease is endemic.

Case Investigations

Patient 1. On August 28, a 25-year-old man was admitted to a hospital with a 12-day history of fever, weight loss, fatigue, arthralgias, and productive cough. He had been treated by a private physician with two antibiotics during the preceding 8 days. On hospital admission, a computed tomography (CT) scan demonstrated bilateral pulmonary diffuse nodular opacities. A subsequent open lung biopsy revealed small budding yeasts. After 10 days of culture, *Blastomyces dermatitidis* was identified and confirmed by DNA probe (GenProbe, San Diego, California*), both at the local hospital laboratory and at CDC. The patient was treated with intravenous (IV) amphotericin B for 10 days, followed by a prescribed 6-month course of oral itraconazole.

Patient 2. On September 3, a 35-year-old man sought care for a 15-day history of fever, fatigue, shortness of breath, arthralgias, skin lesions (punctate lesions on arms and trunk and lesions resembling erythema nodosum on legs), cough, chest pain, and weight loss. His symptoms did not improve after 9 days of treatment with two antibiotics, and he was admitted to the same hospital as patient 1. A CT scan revealed diffuse, bilateral pulmonary nodules. The consulting physician for this patient also had seen patient 1; on the basis of work history and clinical course of the disease, the consultant suspected a fungal pneumonia. Specimens obtained by transbronchial biopsy/lavage were negative for fungal elements by microscopic examination and culture. Open lung biopsy specimens revealed small budding yeasts morphologically indistinguishable from those found in patient 1. Biopsy specimens grew *B. dermatitidis* after 21 days of culture. The patient received IV amphotericin B for 14 days, and at discharge, a 6-month prescribed course of oral itraconazole.

Follow-Up Investigation

The two ill persons had worked together on the prairie dog relocation project on August 3 and 10 (14 and 7 days before onset of illness for patient 1). Work practices at the relocation site included using a gasoline-powered auger and hand trowels to excavate abandoned prairie dog tunnels and burrows that were being used by many other animal species. The workers did not use personal protective equipment (e.g., protective clothing or face masks). All 15 workers involved in the project were interviewed. The two ill persons had performed vigorous digging, created large amounts of dust, and spent 6–7 hours each day with their faces close to the dirt. It rained on 13 of the 15 days during July 22–August 5 (Colorado State University Climate Center, unpublished

*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

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data, 1998); Boulder received 4.4 inches of rain during this period (normal rainfall for July and August combined is 3.3 inches).

The 15 workers were interviewed for symptoms of disease, and chest radiographs were offered to all workers; 12 (including the two ill workers) received chest radiographs. Only the two ill persons had chest abnormalities; both previously had lived in areas where the disease is endemic and where they could have been exposed to *B. dermatitidis*, but neither reported a history of such illness. Persons describing any symptoms of disease were referred to an occupational health specialist for further evaluation. Blood from 14 workers (including the two ill workers) was submitted for serologic testing (e.g., complement fixation, immunodiffusion, and radioimmunoassay) (*1*); results are pending. CDC collected composite soil samples from burrows at the site for microbiologic analyses (*2*); results are pending.

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Editorial Note: This article describes the first reported cases of blastomycosis acquired in Colorado. Blastomycosis is caused by inhalation of spores from *B. dermatitidis*, a dimorphic fungus found in soil and rotting wood. Blastomycosis most commonly presents as a subacute pulmonary disease, but the clinical spectrum ranges from asymptomatic infection to disseminated disease involving the skin, bones, and genitourinary system (*3,4*). In the United States, disease occurs sporadically throughout the Ohio and Mississippi river valleys and the southeastern states (*5*). In states where blastomycosis is reportable (e.g., Wisconsin and Mississippi), the annual incidence of disease is 1.3–1.4 per 100,000 population; in areas where it is endemic, smaller areas of hyperendemicity can have rates of up to 41.9 cases per 100,000 persons (*6,7*).

In areas where blastomycosis is endemic, dogs infected with *B. dermatitidis* can signal increased risk for human infection (*5*). Few cases of blastomycosis have been reported among humans or animals in Colorado (*8,9*). Although both patients in this outbreak previously resided in areas where they could have been exposed to *B. dermatitidis*, it is unlikely that they would have concurrent reactivation of previously acquired disease.

Two factors may have contributed to blastomycosis in the two workers described in this report. First, *B. dermatitidis* is more common in soils with high nitrogen and organic content, which may have been provided by the stored food and fecal matter of the animals living in the burrows (*2*). Second, the above-average rainfall before the excavations may have been a factor, because humidity may aid reproduction of the organism (*4*).

Blastomycosis should be considered in the differential diagnosis of illness in patients with subacute lobar or segmental pneumonia, particularly when it is refractory to initial antibiotic therapy and the patient has a history of outdoor occupational or recreational exposures. Serologic testing may assist in diagnosis, but complement fixation and immunodiffusion lack sensitivity and the WI-1 antigen-based antibody test has good sensitivity and specificity but is not widely available. Skin testing is not available for blastomycosis (*4*). Treatment of this disease includes ketoconazole or

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itraconazole for mild or moderate disease and intravenous amphotericin B for patients who are severely immunocompromised, have central nervous system involvement, or are severely ill.

The risk for exposure to blastomycosis remains small even in areas where the disease is endemic, and few public health recommendations have been developed for prevention of blastomycosis. Measures recommended for protecting workers against other endemic mycoses (e.g., histoplasmosis and coccidioidomycosis) probably will be protective against exposures to soil contaminated by *B. dermatitidis* (*10*). These measures include 1) use of a CDC-approved N-95 disposable half-facepiece filtering respirator (or equivalent) and protective clothing and shoe covers by all persons engaged in soil-disturbing activities during prairie dog relocation, 2) employer-provided instruction of all persons with potential to be engaged in these activities in the proper fitting and wearing of the recommended face mask, 3) implementation of a respiratory-protection program for employees, and 4) education of workers about clinical signs and symptoms of disease and screening and treatment options. Interim recommendations for workers engaged in prairie dog relocation have been developed by BCHD and will be modified as needed based on the serology and soil-testing results.

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Insurance Coverage of Unintended Pregnancies Resulting in Live-Born Infants — Florida, Georgia, Oklahoma, and South Carolina, 1996

In the United States during 1994, approximately 49% of all pregnancies, excluding miscarriages, were unintended (*1*). Unintended pregnancy can result in adverse health outcomes that affect the mother, infant, and family (*2*). Little is known about the distribution of unintended pregnancy with respect to the payment source for health care. In the absence of data for periconceptional payment source for health care, prenatal-care payment source is used as a surrogate. To develop recommendations to reduce unintended pregnancy, CDC analyzed insurance coverage-specific

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prevalences of live-born infants from unintended pregnancies among women aged 20–34 years using data from the Pregnancy Risk Assessment and Monitoring System (PRAMS) for 1996 (the most recent year for which data are available). This report summarizes the results of this analysis, which indicates that the highest rates of unintended pregnancy occurred among women covered by Medicaid, with lower rates among women covered by health-maintenance organizations (HMOs) or private insurance.

PRAMS is an ongoing, state-based surveillance system that surveys a sample of new mothers and ascertains pregnancy intendedness and pregnancy-related behaviors, experiences, payment sources for prenatal care, and outcomes. Each month, 18 participating states survey 100–250 new mothers by using stratified, systematic sampling of resident birth certificates. A questionnaire is mailed to each mother 2–6 months postpartum, and a second questionnaire is mailed to nonrespondents. Nonrespondents are then contacted by telephone. This report uses data from Florida, Georgia, Oklahoma, and South Carolina, where questionnaires ascertained information about public and private payment sources for prenatal care, including managed-care organizations and HMOs. The response rate for the states included in this analysis was ≥70%.

Intended pregnancies were pregnancies for which a woman wanted to be pregnant when she conceived or sooner; unintended pregnancies were pregnancies for which the woman either did not want to be pregnant or desired to be pregnant later. Mothers were asked to identify payment sources for prenatal care. Responses were categorized hierarchically as Medicaid, HMO, private commercial insurance (PCI), or other sources, which included the Indian Health Service or military coverage. When sample sizes were too small to disaggregate, HMO and PCI were combined. Analysis was stratified by race and marital status because of differences in the rate of unintended pregnancy by these variables.

Because of small sample sizes, additional variables were not stratified. SUDAAN was used to account for the sample design in estimating prevalence percentages and standard errors (*3*). Data were weighted to adjust for survey design and nonresponse. Differences in proportions were assessed by examining the 95% confidence intervals (CIs); the proportions were considered to be different from each other if the associated 95% CIs did not overlap. The 5419 mothers in the analysis represented 276,763 women in the four states having live-born infants.

In 1996, most of the women who delivered live-born infants were white (range: 68.0%–90.0%). Among white women, 76.6%–88.1% were married, and 11.9%–23.4% were unmarried; among black women, 38.5%–41.7% were married, and 58.3%–61.5% were unmarried. The main payment source for prenatal care for married white women was PCI (44.9%–55.2%), followed by Medicaid (21.2%–28.4%), HMO (8.1%–17.7%), and other sources (9.0%–17.6%). For unmarried white women, Medicaid was the main source (68.3%–85.4%), followed by PCI (7.5%–27.4%) and other sources (4.1%–7.2%). For married black women, the payment sources were PCI (38.7%–68.4%), Medicaid (19.8%–51.2%), and other sources (9.7%–11.8%). For unmarried black women, payment sources were Medicaid (71.9%–88.3%), PCI (10.3%–19.7%), and other sources (1.4%–8.4%).

The prevalence of unintended pregnancies resulting in live-born infants varied by maternal race and marital status (Table 1). Overall, the prevalence of unintended preg-

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TABLE 1. Percentage* of live-born infants from unintended pregnancies among women aged 20–34 years, by race† and marital status§ — Florida, Georgia, Oklahoma, and South Carolina, Pregnancy Risk Assessment and Monitoring System, 1996

Race/ Marital status	Florida (n=1388)		Georgia (n=1202)		Oklahoma (n=1343)		South Carolina (n=1486)	
	%	(SE¶)	%	(SE)	%	(SE)	%	(SE)
White (n=3587)								
Married	32.1	(±2.3)	28.0	(±2.6)	36.6	(± 2.6)	29.7	(±2.2)
Unmarried	55.4	(±5.1)	55.6	(±8.7)	63.7	(± 5.7)	66.3	(±5.5)
Total	**37.3**	**(±2.2)**	**31.1**	**(±2.5)**	**41.7**	**(± 2.4)**	**35.4**	**(±2.1)**
Black (n=1805)								
Married	48.4	(±4.8)	49.5	(±3.9)	43.0	(±11.8)	59.6	(±5.5)
Unmarried	75.0	(±3.2)	74.0	(±3.0)	72.8	(± 9.6)	79.7	(±3.5)
Total	**65.0**	**(±2.8)**	**63.4**	**(±2.5)**	**59.9**	**(± 7.8)**	**71.8**	**(±3.1)**

*Percentages weighted to account for survey design and nonresponse.
†Numbers for races other than white and black were too small for meaningful analysis.
§Marital status for 27 women was unknown.
¶Standard error.

nancy was higher among black women (59.9%–71.8%) than among white women (31.1%–41.7%). Among unmarried white women, the state-specific prevalences were significantly higher (55.4%–66.3%) than among married white women (28.0%–36.6%). Similarly, percentages were significantly higher among unmarried black women (72.8%–79.7%) than among married black women (43.0%–59.6%) except in Oklahoma.

Overall, the prevalence of unintended pregnancy by payment source varied by state. For women whose prenatal care was paid by Medicaid, the state-specific percentages for unintended pregnancies ranged from 58.9 % to 65.3%; for HMO enrollees, from 23.5% to 29.0%; for PCI enrollees, from 25.2% to 36.0%; and for other sources, from 35.8% to 42.7%. For married white women whose prenatal care was paid by Medicaid, the state-specific percentages for unintended pregnancies ranged from 43.8% to 53.5%; for HMO enrollees, from 23.5% to 29.0%; and for PCI enrollees, from 20.0% to 30.9%. High prevalences of unintended pregnancy resulting in live-born infants were observed for all sources among unmarried white women (Table 2).

The state-specific prevalences of unintended pregnancies resulting in live-born infants among married black women were highest for those whose prenatal care was paid by Medicaid (61.1%–87.7%), by PCI/HMO (28.9%–43.7%), and by other sources (55.0%–70.0%) (Table 2). The prevalences among unmarried black women were highest for those whose prenatal care was covered by Medicaid (68.2%–80.1%), PCI/HMO, and other sources (Table 2).

Reported by: PRAMS Working Group. Program Svcs and Development Br, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The prevalence of unintended pregnancy among women delivering live-born infants was higher among unmarried women, black women, and women whose prenatal care was paid by Medicaid. These findings may reflect differences in education, socioeconomic status, cultural factors, and access to family-planning and health-care services across populations of women in these states. The findings of this

Unintended Pregnancy — Continued

TABLE 2. Percentage of live-born infants from unintended pregnancies among women aged 20–34 years, by race,* marital status,† and prenatal care (PNC) payment source§ — Florida, Georgia, Oklahoma, and South Carolina, Pregnancy Risk Assessment and Monitoring System, 1996

Race/ Marital status/ payment source	Florida (n=1388)		Georgia (n=1202)		Oklahoma (n=1343)		South Carolina (n=1486)	
	%	(SE¶)	%	(SE)	%	(SE)	%	(SE)
White (n=3587)								
Married (n=2887)								
Medicaid	46.3	(± 5.4)	43.8	(± 6.0)	53.5	(± 5.9)	48.0	(± 4.7)
HMO	29.0	(± 6.8)	23.5	(± 8.7)	23.9	(± 6.2)	24.8	(± 4.8)
PCI	26.6	(± 2.9)	20.0	(± 3.0)	30.9	(± 3.6)	20.4	(± 2.8)
Other	34.6	(± 7.1)	32.9	(± 8.3)	39.1	(± 6.4)	32.4	(± 7.3)
Unmarried (n=649)								
Medicaid	59.2	(± 5.9)	54.5	(± 9.7)	62.1	(± 7.1)	65.3	(± 6.4)
PCI/HMO	61.0	(±11.2)	66.2	(±27.0)**	69.8	(±10.3)	76.1	(±10.3)
Other	5.5	(± 3.2)**	34.3	(±28.6)**	53.6	(±25.0)	60.4	(±28.3)**
Black (n=1805)								
Married (n=707)								
Medicaid	68.9	(± 8.6)	61.1	(± 6.2)	87.7	(± 8.5)**	71.0	(± 6.8)
PCI/HMO	35.3	(± 5.9)	37.4	(± 5.4)	28.9	(±11.9)	43.7	(± 8.9)
Other	55.0	(±15.2)	63.9	(±11.5)	70.0	(±20.1)**	61.2	(±20.1)**
Unmarried (n=1069)								
Medicaid	75.9	(± 3.9)	76.4	(± 3.2)	68.2	(±11.3)	80.1	(± 3.6)
PCI/HMO	78.0	(± 6.3)	57.1	(±10.0)	95.9	(± 2.3)**	71.9	(±13.1)
Other	59.3	(±12.3)	74.7	(±12.4)	69.8	(±22.3)**	71.3	(±14.2)**

*Numbers for races other than white and black were too small for meaningful analysis.
†Marital status for 27 women was unknown, and for 80 other women source of payment could not be ascertained.
§Because of small sample sizes, health- maintenance organizations (HMOs) and private commercial insurance (PCI) were combined for unmarried white women and for black women.
¶Standard error.
**Sample size ≤20.

analysis emphasize the need for providing timely and appropriate family-planning services to women in both public and private settings.

Many women with Medicaid coverage during pregnancy lacked comprehensive health-care coverage before pregnancy and became eligible for Medicaid by being pregnant. In the absence of comprehensive health-care coverage, low-income women are eligible for Title X services, which provide free or low-cost family-planning services. Use of family-planning services is influenced by behavioral, financial, and structural barriers (*1,2,4*).

This report is subject to at least four limitations. First, the findings are from a few selected states and are not representative of the entire United States. The findings are most generalizable to women having live-born infants in the four states included in this report. However, the prevalence of unintended pregnancy resulting in live-born infants among women whose prenatal care was paid for by HMOs, PCI, or other sources was similar to that (25%) in one study of well-educated women enrolled in

Unintended Pregnancy — Continued

selected HMOs (*5*). Second, data to assess prevalence of unintended pregnancies resulting in abortions or miscarriages were not available, and because nearly all abortions result from unintended pregnancies, the findings are applicable only to women who gave birth to live-born infants. Third, payment source and intendedness of pregnancy may be misclassified because of problems in recall or changes in insurance coverage that may occur during pregnancy. Finally, source of payment for prenatal care may incompletely reflect source of payment for health care before pregnancy.

To reduce the adverse consequences of unintended pregnancies and to maximize the benefits of periconceptional interventions (e.g., use of folic acid and cessation of alcohol consumption), health-care providers and communities need to collaborate in promoting a social norm in which all pregnancies are planned (*2*). Findings from this and other reports suggest that access to health care and timely family-planning services to women in all settings is needed to avoid the medical, social, and economic costs of unintended pregnancy.

References

1. Henshaw SK. Unintended pregnancy in the United States. Fam Plan Perspec 1998;30:24–9.
2. Brown SS, Eisenberg L, ed. The best intentions: unintended pregnancy and the well-being of children and families. Washington, DC: National Academy Press, 1995.
3. Shah BV, Barnwell BG, Bieler GS. SUDAAN: software for the statistical analysis of correlated data: user's manual, release 7.0. Research Triangle Park, North Carolina: Research Triangle Institute, 1996.
4. Kirkman-Leff B, Kronenfeld JJ. Access to family planning services and health insurance among low-income women in Arizona. Am J Public Health 1994;84:1010–2.
5. Hellerstedt WL, Pirie PL, Lando HA, et al. Differences in preconceptional and prenatal behaviors in women with intended and unintended pregnancies. Am J Public Health 1998;88:663–6.

Notice to Readers

Change in Recommendation for Meningococcal Vaccine for Travelers

Because no evidence exists of ongoing epidemics, CDC no longer recommends meningococcal vaccine for travelers to Saudi Arabia, Nepal, India, Mongolia, Kenya, Burundi, and Tanzania. This announcement supersedes the most recent edition of *Health Information for International Travel* (*1*), which recommends meningococcal vaccine for those countries. These new recommendations will be reflected in the next edition of *Health Information for International Travel*.

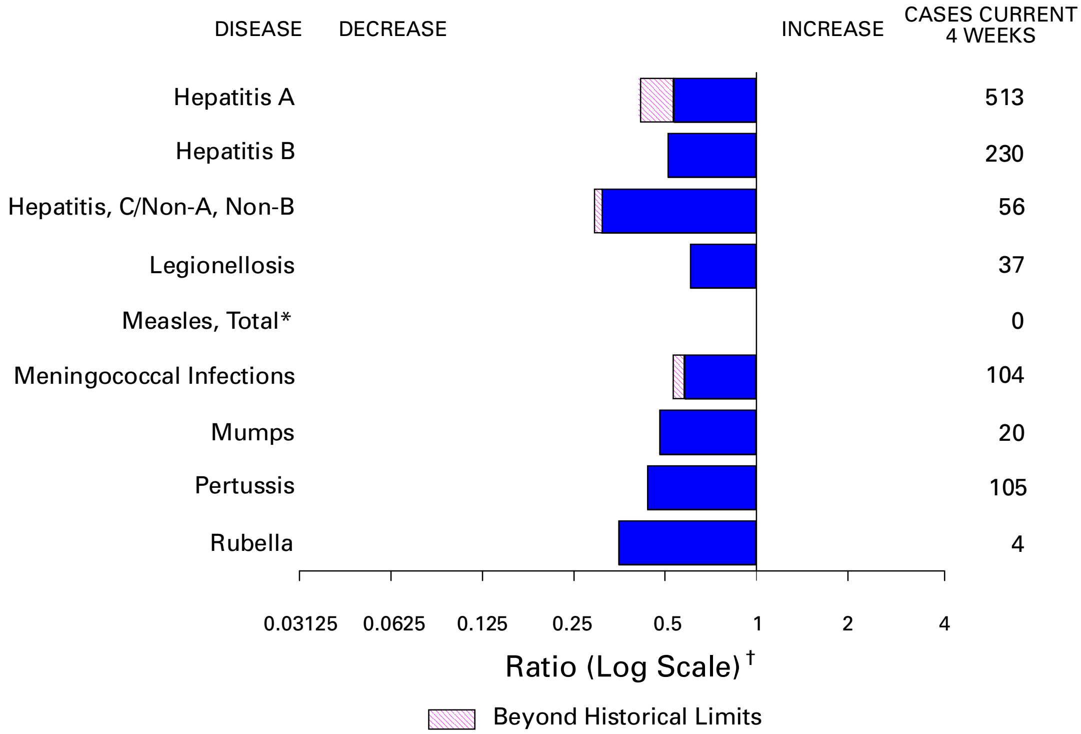
Although CDC no longer recommends vaccination, Saudi officials may require that pilgrims and "Umra" performers produce a certificate of vaccination against meningococcal disease issued not more than 3 years and not less than 10 days before arrival in Saudi Arabia. Travelers to Saudi Arabia during pilgrimage months should verify these requirements with a Saudi embassy.

From December through June, vaccination is still recommended for countries in the meningitis belt of Africa.

Reference

1. CDC. Health information for international travel, 1996–97. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1997.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending February 6, 1999, with historical data — United States



*No measles cases were reported for the current 4-week period, yielding a ratio for week 5 of zero (0).
† 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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending February 6, 1999 (5th Week)

	Cum. 1999		Cum. 1999
Anthrax	-	Plague	-
Brucellosis	2	Poliomyelitis, paralytic	-
Cholera	1	Psittacosis	2
Congenital rubella syndrome	-	Rabies, human	-
Cryptosporidiosis*	51	Rocky Mountain spotted fever (RMSF)	13
Diphtheria	-	Streptococcal disease, invasive Group A	71
Encephalitis: California*	1	Streptococcal toxic-shock syndrome*	3
eastern equine*	-	Syphilis, congenital¶	-
St. Louis*	-	Tetanus	1
western equine*	-	Toxic-shock syndrome	5
Hansen Disease	3	Trichinosis	2
Hantavirus pulmonary syndrome*†	-	Typhoid fever	10
Hemolytic uremic syndrome, post-diarrheal*	4	Yellow fever	-
HIV infection, pediatric*§	7		

-:no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update January 24, 1999.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 6, 1999, and February 7, 1998 (5th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7 NETSS[†]	*Escherichia coli* O157:H7 PHLIS[§]	Gonorrhea		Hepatitis C/NA,NB	
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1999	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998
UNITED STATES	3,137	3,128	38,608	51,577	92	30	24,355	32,256	137	259
NEW ENGLAND	158	64	1,190	1,995	15	10	343	640	35	8
Maine	3	2	35	28	1	-	6	5	-	-
N.H.	3	-	84	86	-	-	3	14	-	-
Vt.	-	5	22	27	-	-	5	-	-	1
Mass.	124	6	832	875	8	6	265	227	35	7
R.I.	9	13	211	241	-	-	62	36	-	-
Conn.	19	38	6	738	6	4	2	358	-	-
MID. ATLANTIC	489	893	6,040	7,542	5	-	3,111	4,648	3	15
Upstate N.Y.	17	114	N	N	4	-	89	579	3	13
N.Y. City	237	488	3,715	3,292	-	-	1,814	1,643	-	-
N.J.	162	131	303	1,099	1	-	146	743	-	-
Pa.	73	160	2,022	3,151	N	-	1,062	1,683	-	2
E.N. CENTRAL	179	202	6,466	8,330	21	3	4,887	6,377	11	55
Ohio	38	33	2,117	3,077	15	2	1,354	1,832	-	2
Ind.	25	38	-	-	5	-	561	564	-	1
Ill.	77	101	2,395	2,019	1	-	1,484	1,898	-	9
Mich.	22	15	1,844	1,940	-	-	1,418	1,561	11	43
Wis.	17	15	110	1,294	N	1	70	522	-	-
W.N. CENTRAL	110	57	1,182	3,237	17	7	448	1,184	-	39
Minn.	20	15	312	658	8	6	130	258	-	-
Iowa	3	6	42	244	4	1	16	57	-	1
Mo.	72	19	-	1,167	1	-	-	439	-	37
N. Dak.	-	-	-	87	-	-	-	10	-	-
S. Dak.	-	4	125	149	-	-	17	22	-	-
Nebr.	6	9	242	303	-	-	114	117	-	-
Kans.	9	4	461	629	4	-	171	281	-	1
S. ATLANTIC	883	773	10,124	9,055	11	3	8,284	8,125	18	7
Del.	13	13	266	182	-	-	160	155	-	-
Md.	81	52	780	648	1	-	902	764	14	2
D.C.	8	84	N	N	-	-	299	366	-	-
Va.	54	38	1,461	992	N	-	1,273	759	1	1
W. Va.	10	5	163	294	-	1	54	84	-	-
N.C.	69	45	2,076	1,675	2	1	1,958	1,451	-	3
S.C.	60	59	2,732	1,689	1	1	1,535	1,292	1	-
Ga.	111	113	-	1,940	-	-	-	1,845	-	-
Fla.	477	364	2,646	1,635	3	-	2,103	1,409	2	1
E.S. CENTRAL	157	156	3,583	3,589	4	-	3,410	3,855	10	11
Ky.	15	19	-	497	-	-	-	389	-	2
Tenn.	64	52	1,281	1,235	3	-	1,103	1,221	9	8
Ala.	31	56	1,213	910	1	-	1,277	1,302	1	1
Miss.	47	29	1,089	947	-	-	1,030	943	-	-
W.S. CENTRAL	532	379	3,188	7,052	1	-	2,388	4,633	3	3
Ark.	19	17	425	256	-	-	252	431	-	-
La.	27	66	1,836	1,270	-	-	1,617	1,063	3	-
Okla.	6	14	927	674	-	-	519	403	-	-
Tex.	480	282	-	4,852	1	-	-	2,736	-	3
MOUNTAIN	45	87	1,826	2,392	5	1	449	744	9	30
Mont.	-	5	60	61	-	-	1	-	-	3
Idaho	4	3	-	111	-	-	-	12	2	11
Wyo.	-	-	-	77	-	-	-	5	-	7
Colo.	26	21	653	539	2	1	98	265	1	2
N. Mex.	4	9	471	438	1	-	97	78	3	3
Ariz.	4	33	522	813	1	-	243	314	2	-
Utah	4	13	120	173	1	-	10	19	1	3
Nev.	3	3	-	180	-	-	-	51	-	1
PACIFIC	584	517	5,009	8,385	13	6	1,035	2,050	48	91
Wash.	29	31	-	1,014	-	2	-	179	1	-
Oreg.	15	13	245	586	6	4	42	94	-	1
Calif.	525	468	4,552	6,397	7	-	959	1,704	47	80
Alaska	5	-	156	177	-	-	27	32	-	-
Hawaii	10	5	56	211	-	-	7	41	-	10
Guam	1	-	-	10	N	-	-	3	-	-
P.R.	92	87	U	U	-	U	29	59	-	-
V.I.	-	1	N	N	N	U	U	U	U	U
Amer. Samoa	-	-	U	U	N	U	U	U	U	U
C.N.M.I.	-	-	N	N	N	U	-	6	-	-

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

*Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update January 24, 1999.

[†]National Electronic Telecommunications System for Surveillance.

[§]Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending February 6, 1999, and February 7, 1998 (5th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999*	Cum. 1998	Cum. 1999
UNITED STATES	47	101	166	267	74	115	422	679	756	870	285
NEW ENGLAND	2	4	20	27	1	6	10	10	19	22	58
Maine	-	-	-	1	-	-	-	-	-	-	4
N.H.	1	2	-	-	-	-	-	1	-	-	4
Vt.	-	-	-	-	-	-	1	-	-	1	10
Mass.	-	-	20	9	1	6	7	9	6	7	19
R.I.	1	-	-	1	-	-	-	-	9	2	5
Conn.	-	2	-	16	-	-	2	-	4	12	16
MID. ATLANTIC	8	21	62	171	17	41	17	40	89	65	69
Upstate N.Y.	1	2	13	45	6	9	1	2	-	5	40
N.Y. City	-	5	-	5	-	24	10	4	30	39	U
N.J.	2	1	41	29	10	4	1	13	35	16	18
Pa.	5	13	8	92	1	4	5	21	24	5	11
E.N. CENTRAL	13	41	6	12	1	13	77	98	80	59	-
Ohio	7	13	5	8	1	1	9	26	27	13	-
Ind.	3	5	1	3	-	1	26	15	4	19	-
Ill.	-	10	-	-	-	7	42	31	49	26	-
Mich.	3	5	-	1	-	3	-	15	-	-	-
Wis.	-	8	U	U	-	1	-	11	-	1	-
W.N. CENTRAL	1	7	3	3	5	4	1	12	17	18	31
Minn.	-	-	-	-	-	-	-	-	13	6	9
Iowa	1	-	1	3	2	-	-	-	-	-	6
Mo.	-	3	-	-	3	3	-	7	3	10	-
N. Dak.	-	-	1	-	-	-	-	-	-	-	10
S. Dak.	-	-	-	-	-	-	-	-	1	-	-
Nebr.	-	4	-	-	-	-	1	2	-	-	-
Kans.	-	-	1	-	-	1	-	3	-	2	6
S. ATLANTIC	12	9	38	40	24	23	168	242	58	110	111
Del.	1	1	-	-	-	1	1	-	-	-	-
Md.	-	3	30	39	10	12	27	70	15	11	21
D.C.	-	1	1	1	5	2	1	7	4	10	-
Va.	2	2	-	-	2	1	17	27	-	5	29
W. Va.	N	N	-	-	-	-	1	-	-	9	-
N.C.	2	1	7	-	1	2	62	53	19	39	35
S.C.	1	-	-	-	-	-	24	30	20	26	8
Ga.	-	-	-	-	-	3	-	25	-	10	-
Fla.	6	1	-	-	6	2	35	30	-	-	18
E.S. CENTRAL	2	4	5	4	1	1	101	120	36	87	7
Ky.	-	3	-	-	-	-	-	9	-	9	-
Tenn.	2	-	2	4	1	-	49	61	-	29	7
Ala.	-	-	3	-	-	-	34	26	34	33	-
Miss.	-	1	-	-	-	1	18	24	2	16	-
W.S. CENTRAL	-	-	-	-	2	2	41	88	7	155	-
Ark.	-	-	-	-	-	-	5	14	-	-	-
La.	-	-	-	-	1	2	18	36	-	-	-
Okla.	-	-	-	-	-	-	18	6	7	8	-
Tex.	-	-	-	-	1	-	-	32	-	147	-
MOUNTAIN	3	7	-	-	3	5	-	27	16	29	5
Mont.	-	-	-	-	1	-	-	-	-	-	1
Idaho	-	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-
Colo.	1	2	-	-	-	3	-	2	-	5	1
N. Mex.	-	1	-	-	1	2	-	2	3	2	-
Ariz.	-	-	-	-	1	-	-	19	5	11	3
Utah	2	4	-	-	-	-	-	2	8	-	-
Nev.	-	-	-	-	-	-	-	2	-	11	-
PACIFIC	6	8	32	10	20	20	7	42	434	325	4
Wash.	-	-	-	-	1	-	-	1	22	19	-
Oreg.	-	-	-	-	-	3	-	1	5	10	-
Calif.	6	8	32	10	18	17	7	40	391	286	4
Alaska	-	-	-	-	-	-	-	-	4	3	-
Hawaii	-	-	-	-	1	-	-	-	12	7	-
Guam	-	-	-	-	-	-	-	-	-	4	-
P.R.	-	-	-	-	-	-	28	23	-	3	4
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	-	-	1	-	6	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 6, 1999, and February 7, 1998 (5th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported[†]		Total	
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	1999	Cum. 1999	1999	Cum. 1999	Cum. 1999	Cum. 1998
UNITED STATES	67	110	942	1,611	378	760	-	7	-	2	9	1
NEW ENGLAND	3	9	10	43	4	10	-	-	-	-	-	1
Maine	-	-	1	5	-	-	-	-	-	-	-	-
N.H.	1	1	1	3	-	1	-	-	-	-	-	-
Vt.	1	-	-	1	-	-	-	-	-	-	-	-
Mass.	1	8	5	11	2	5	-	-	-	-	-	1
R.I.	-	-	-	2	2	-	-	-	-	-	-	-
Conn.	-	-	3	21	-	4	-	-	-	-	-	-
MID. ATLANTIC	11	12	47	110	39	114	-	-	-	-	-	-
Upstate N.Y.	9	4	9	27	13	23	-	-	-	-	-	-
N.Y. City	-	4	5	43	1	27	-	-	-	-	-	-
N.J.	2	4	15	19	8	22	-	-	-	-	-	-
Pa.	-	-	18	21	17	42	-	-	-	-	-	-
E.N. CENTRAL	9	20	134	320	17	219	-	-	-	-	-	-
Ohio	8	8	56	49	12	9	-	-	-	-	-	-
Ind.	-	2	27	41	4	106	-	-	-	-	-	-
Ill.	1	9	4	88	-	30	-	-	-	-	-	-
Mich.	-	-	47	123	1	58	U	-	U	-	-	-
Wis.	-	1	-	19	-	16	U	-	U	-	-	-
W.N. CENTRAL	3	-	15	162	4	45	-	-	-	-	-	-
Minn.	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	1	-	5	53	1	8	-	-	-	-	-	-
Mo.	-	-	3	99	-	34	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	1	-	1	-	-	-	-	-	-
Nebr.	-	-	4	2	2	-	-	-	-	-	-	-
Kans.	1	-	3	7	1	2	-	-	-	-	-	-
S. ATLANTIC	25	18	111	82	66	45	-	-	-	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	-	-
Md.	15	7	35	32	17	17	-	-	-	-	-	-
D.C.	-	-	6	2	-	1	-	-	-	-	-	-
Va.	-	3	8	14	6	5	-	-	-	-	-	-
W. Va.	-	1	-	-	-	-	-	-	-	-	-	-
N.C.	2	1	10	9	26	16	-	-	-	-	-	-
S.C.	1	-	-	5	7	-	-	-	-	-	-	-
Ga.	-	6	21	11	2	5	-	-	-	-	-	-
Fla.	7	-	31	9	8	1	-	-	-	-	-	-
E.S. CENTRAL	2	9	38	49	19	42	-	-	-	-	-	-
Ky.	-	2	-	2	-	1	U	-	U	-	-	-
Tenn.	2	2	21	23	12	31	-	-	-	-	-	-
Ala.	-	5	16	12	7	10	-	-	-	-	-	-
Miss.	-	-	1	12	-	-	-	-	-	-	-	-
W.S. CENTRAL	3	4	34	107	13	50	-	-	-	2	2	-
Ark.	-	-	3	1	5	10	-	-	-	-	-	-
La.	1	2	2	2	-	1	-	-	-	-	-	-
Okla.	1	1	2	36	-	3	-	-	-	-	-	-
Tex.	1	1	27	68	8	36	-	-	-	2	2	-
MOUNTAIN	6	24	100	293	53	81	-	1	-	-	1	-
Mont.	-	-	-	6	-	1	-	-	-	-	-	-
Idaho	-	-	1	15	4	3	-	-	-	-	-	-
Wyo.	-	-	-	3	-	1	U	-	U	-	-	-
Colo.	-	1	34	26	14	10	-	1	-	-	1	-
N. Mex.	2	-	5	19	24	27	-	-	-	-	-	-
Ariz.	-	14	50	176	6	20	-	-	-	-	-	-
Utah	4	1	10	19	5	8	-	-	-	-	-	-
Nev.	-	8	-	29	-	11	U	-	U	-	-	-
PACIFIC	5	14	453	445	163	154	-	6	-	-	6	-
Wash.	-	-	5	38	-	12	-	-	-	-	-	-
Oreg.	4	7	6	35	4	12	-	6	-	-	6	-
Calif.	-	6	440	367	157	126	-	-	-	-	-	-
Alaska	1	-	1	-	2	1	-	-	-	-	-	-
Hawaii	-	1	1	5	-	3	-	-	-	-	-	-
Guam	-	-	-	-	-	-	U	-	U	-	-	-
P.R.	-	1	4	2	3	35	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	6	U	-	U	-	-	-

N: Not notifiable U: Unavailable -: no reported cases

*Of 7 cases among children aged <5 years, serotype was reported for 1 which was not type b.

[†]For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 6, 1999, and February 7, 1998 (5th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998
UNITED STATES	178	329	14	29	28	31	185	346	-	3	14
NEW ENGLAND	14	24	-	1	-	2	32	75	-	-	-
Maine	2	1	-	-	-	-	-	4	-	-	-
N.H.	-	1	-	1	-	-	1	7	-	-	-
Vt.	1	1	-	-	-	2	7	17	-	-	-
Mass.	11	8	-	-	-	-	24	46	-	-	-
R.I.	-	3	-	-	-	-	-	-	-	-	-
Conn.	-	10	-	-	-	-	-	1	-	-	-
MID. ATLANTIC	18	32	-	2	1	3	7	22	-	-	11
Upstate N.Y.	3	5	-	-	1	3	7	19	-	-	10
N.Y. City	4	6	-	-	-	-	-	-	-	-	-
N.J.	7	13	-	-	-	-	-	3	-	-	1
Pa.	4	8	-	2	-	-	-	-	-	-	-
E.N. CENTRAL	27	56	1	1	4	4	40	48	-	-	-
Ohio	16	25	1	1	3	3	39	18	-	-	-
Ind.	6	6	-	-	-	1	1	1	-	-	-
Ill.	5	17	-	-	-	-	-	-	-	-	-
Mich.	-	3	U	-	1	U	-	8	U	-	-
Wis.	-	5	U	-	-	U	-	21	U	-	-
W.N. CENTRAL	11	22	-	1	-	1	3	15	-	-	-
Minn.	-	-	-	-	-	-	-	6	-	-	-
Iowa	3	2	-	1	-	-	1	4	-	-	-
Mo.	3	10	-	-	-	1	1	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	3	3	-	-	-	-	1	-	-	-	-
Nebr.	-	1	-	-	-	-	-	2	-	-	-
Kans.	2	6	-	-	-	-	-	3	-	-	-
S. ATLANTIC	36	46	1	4	7	4	22	28	-	3	1
Del.	-	-	-	-	-	-	-	-	-	-	-
Md.	6	7	-	-	-	-	9	5	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-	-
Va.	2	6	-	-	-	-	1	-	-	-	-
W. Va.	-	2	-	-	-	-	-	-	-	-	-
N.C.	3	4	-	1	4	3	10	23	-	3	1
S.C.	5	5	1	2	2	1	2	-	-	-	-
Ga.	2	16	-	-	-	-	-	-	-	-	-
Fla.	18	6	-	1	1	-	-	-	-	-	-
E.S. CENTRAL	14	28	-	-	-	1	7	10	-	-	-
Ky.	-	7	U	-	-	U	-	-	U	-	-
Tenn.	7	9	-	-	-	1	4	2	-	-	-
Ala.	7	10	-	-	-	-	3	8	-	-	-
Miss.	-	2	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	5	20	6	8	5	1	9	8	-	-	1
Ark.	-	4	-	-	-	-	3	2	-	-	-
La.	4	4	-	-	-	-	-	-	-	-	-
Okla.	-	11	-	-	-	-	-	-	-	-	-
Tex.	1	1	6	8	5	1	6	6	-	-	1
MOUNTAIN	16	26	2	2	2	13	59	87	-	-	-
Mont.	-	1	-	-	-	-	-	1	-	-	-
Idaho	2	1	-	-	-	5	36	36	-	-	-
Wyo.	-	1	U	-	-	U	-	-	U	-	-
Colo.	3	10	1	1	-	1	2	13	-	-	-
N. Mex.	3	3	N	N	N	1	6	34	-	-	-
Ariz.	5	8	-	-	1	1	2	-	-	-	-
Utah	3	1	1	1	-	5	13	2	-	-	-
Nev.	-	1	U	-	1	U	-	1	U	-	-
PACIFIC	37	75	4	10	9	2	6	53	-	-	1
Wash.	3	8	-	-	-	-	2	5	-	-	-
Oreg.	3	22	N	N	N	1	3	8	-	-	-
Calif.	27	44	3	8	3	-	-	40	-	-	1
Alaska	3	-	1	1	2	1	1	-	-	-	-
Hawaii	1	1	-	1	4	-	-	-	-	-	-
Guam	-	-	U	-	-	U	-	-	U	-	-
P.R.	-	-	-	-	-	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending February 6, 1999 (5th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	600	452	98	26	13	11	73
Boston, Mass.	172	114	36	12	8	2	15
Bridgeport, Conn.	45	34	6	1	3	1	3
Cambridge, Mass.	21	17	3	1	-	-	4
Fall River, Mass.	32	27	4	1	-	-	4
Hartford, Conn.	75	54	17	3	-	1	12
Lowell, Mass.	33	29	3	1	-	-	6
Lynn, Mass.	5	5	-	-	-	-	-
New Bedford, Mass.	24	20	4	-	-	-	4
New Haven, Conn.	45	31	9	-	-	5	3
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	4	2	2	-	-	-	-
Springfield, Mass.	48	42	3	1	-	2	5
Waterbury, Conn.	42	35	4	2	1	-	7
Worcester, Mass.	54	42	7	4	1	-	10
MID. ATLANTIC	2,829	2,070	496	187	44	32	112
Albany, N.Y.	56	42	9	2	2	1	3
Allentown, Pa.	27	21	5	-	1	-	2
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	33	22	5	4	-	2	5
Elizabeth, N.J.	13	5	5	3	-	-	-
Erie, Pa.	56	45	6	5	-	-	4
Jersey City, N.J.	63	46	12	5	-	-	-
New York City, N.Y.	1,653	1,215	291	104	24	19	9
Newark, N.J.	56	29	12	12	2	1	5
Paterson, N.J.	29	24	4	-	-	1	1
Philadelphia, Pa.	399	258	90	40	11	-	27
Pittsburgh, Pa.§	44	32	7	3	1	1	3
Reading, Pa.	40	33	5	1	1	-	7
Rochester, N.Y.	152	129	16	4	2	1	20
Schenectady, N.Y.	26	20	4	2	-	-	4
Scranton, Pa.	36	32	2	-	-	2	-
Syracuse, N.Y.	94	73	16	1	-	4	15
Trenton, N.J.	31	25	5	1	-	-	6
Utica, N.Y.	21	19	2	-	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,325	1,612	412	170	60	68	163
Akron, Ohio	61	46	3	7	2	3	2
Canton, Ohio	32	23	6	-	2	1	1
Chicago, Ill.	521	328	108	49	15	18	44
Cincinnati, Ohio	120	92	16	5	2	5	13
Cleveland, Ohio	154	101	31	12	4	6	5
Columbus, Ohio	221	152	40	18	4	7	18
Dayton, Ohio	151	112	22	8	6	3	12
Detroit, Mich.	236	141	54	31	5	5	13
Evansville, Ind.	U	U	U	U	U	U	U
Fort Wayne, Ind.	67	54	9	2	-	2	4
Gary, Ind.	33	14	8	3	6	2	2
Grand Rapids, Mich.	52	40	2	3	4	3	5
Indianapolis, Ind.	162	116	24	11	7	4	2
Lansing, Mich.	41	24	11	4	1	1	4
Milwaukee, Wis.	137	111	18	5	-	3	15
Peoria, Ill.	51	40	8	2	1	-	3
Rockford, Ill.	63	43	13	4	-	3	6
South Bend, Ind.	56	40	14	1	1	-	1
Toledo, Ohio	116	100	12	3	-	1	8
Youngstown, Ohio	51	35	13	2	-	1	5
W.N. CENTRAL	716	522	119	36	18	21	63
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	19	14	3	-	2	-	1
Kansas City, Kans.	U	U	U	U	U	U	U
Kansas City, Mo.	98	72	12	8	2	4	11
Lincoln, Nebr.	40	30	6	4	-	-	2
Minneapolis, Minn.	227	173	33	11	7	3	26
Omaha, Nebr.	89	57	19	3	3	7	7
St. Louis, Mo.	120	83	26	5	2	4	5
St. Paul, Minn.	123	93	20	5	2	3	11
Wichita, Kans.	U	U	U	U	U	U	U
S. ATLANTIC	1,300	873	251	115	33	27	80
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	270	171	53	32	7	6	17
Charlotte, N.C.	128	83	29	11	4	1	12
Jacksonville, Fla.	166	112	34	14	5	1	7
Miami, Fla.	105	76	20	4	5	-	1
Norfolk, Va.	69	39	13	5	4	8	3
Richmond, Va.	85	54	17	7	2	5	5
Savannah, Ga.	59	41	12	2	2	2	10
St. Petersburg, Fla.	63	50	9	3	-	1	6
Tampa, Fla.	238	173	48	12	2	3	12
Washington, D.C.	102	69	14	17	2	-	7
Wilmington, Del.	15	5	2	8	-	-	-
E.S. CENTRAL	1,030	680	220	67	38	20	73
Birmingham, Ala.	243	158	49	17	7	7	26
Chattanooga, Tenn.	87	60	23	4	-	-	8
Knoxville, Tenn.	106	68	25	9	3	1	4
Lexington, Ky.	59	38	15	1	3	2	3
Memphis, Tenn.	194	125	38	16	9	6	20
Mobile, Ala.	107	76	17	7	6	1	2
Montgomery, Ala.	59	38	13	4	3	1	5
Nashville, Tenn.	175	117	40	9	7	2	5
W.S. CENTRAL	1,773	1,182	348	149	58	36	116
Austin, Tex.	89	68	15	5	1	-	3
Baton Rouge, La.	75	58	8	7	2	-	-
Corpus Christi, Tex.	60	45	10	3	-	2	4
Dallas, Tex.	185	118	42	16	5	4	5
El Paso, Tex.	92	61	18	10	2	1	6
Ft. Worth, Tex.	138	95	26	8	6	3	12
Houston, Tex.	427	261	95	39	20	12	35
Little Rock, Ark.	73	50	17	3	3	-	7
New Orleans, La.	141	81	24	23	8	5	-
San Antonio, Tex.	242	168	46	21	5	2	20
Shreveport, La.	106	70	20	10	4	2	13
Tulsa, Okla.	145	107	27	4	2	5	11
MOUNTAIN	945	681	178	57	16	13	89
Albuquerque, N.M.	139	103	23	7	3	3	9
Boise, Idaho	51	34	11	4	1	1	5
Colo. Springs, Colo.	67	47	13	4	-	3	2
Denver, Colo.	108	67	26	10	4	1	13
Las Vegas, Nev.	222	165	42	11	3	1	19
Ogden, Utah	23	18	4	1	-	-	3
Phoenix, Ariz.	122	85	25	6	3	3	8
Pueblo, Colo.	33	28	4	1	-	-	7
Salt Lake City, Utah	U	U	U	U	U	U	U
Tucson, Ariz.	180	134	30	13	2	1	23
PACIFIC	1,125	830	191	58	29	16	118
Berkeley, Calif.	13	12	1	-	-	-	1
Fresno, Calif.	101	71	23	3	4	-	10
Glendale, Calif.	U	U	U	U	U	U	U
Honolulu, Hawaii	80	61	12	4	2	1	8
Long Beach, Calif.	78	56	13	2	3	4	14
Los Angeles, Calif.	U	U	U	U	U	U	U
Pasadena, Calif.	37	29	6	1	-	1	4
Portland, Oreg.	149	113	22	5	5	4	7
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	163	122	24	10	4	3	17
San Francisco, Calif.	149	112	29	6	2	-	28
San Jose, Calif.	U	U	U	U	U	U	U
Santa Cruz, Calif.	44	35	7	2	-	-	9
Seattle, Wash.	161	111	26	17	5	2	4
Spokane, Wash.	70	54	10	2	3	1	9
Tacoma, Wash.	80	54	18	6	1	-	7
TOTAL	12,643¶	8,902	2,313	865	309	244	887

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 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 this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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☆U.S. Government Printing Office: 1999-733-228/87057 Region IV