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Update: Isolation of Avian Influenza A(H5N1) Viruses from Humans — Hong Kong, 1997–1998

As of January 6, 1998, a total of 16 confirmed and three suspected cases of human infection with avian influenza A(H5N1) viruses have been identified in Hong Kong. Confirmed cases are those from which an influenza A(H5N1) virus was isolated or in which a seroconversion to influenza A(H5N1) virus was detected by a neutralization assay. Suspected cases are those with influenza-like illness (ILI) and preliminary laboratory evidence of influenza A(H5N1) infection. This report summarizes interim findings from the ongoing epidemiologic and laboratory investigation of influenza A(H5N1) cases by health officials in Hong Kong and by CDC.

The first known case of human infection with influenza A(H5N1) occurred in a 3-year-old boy who died from respiratory failure in May 1997 (*1*). Of the 15 remaining confirmed cases, five persons had onset of illness in November and 10 in December; all three persons with suspected cases had onset during December. No cases have been identified with onset after December 28, 1997. Ages of persons with confirmed cases ranged from 1 to 60 years (mean age: 17 years) and, for persons with suspected cases, from 3 to 7 years (mean age: 5 years). Nine (47%) cases occurred among persons aged ≤5 years. Four persons with confirmed cases have died, and three remain in critical condition.

Testing has been completed of serum samples collected in August as a part of the epidemiologic investigation of the first case of human influenza A(H5N1) infection. Serum samples were obtained from 502 persons who may have had contact with the child or with poultry, including family members, persons who lived in the same neighborhood, children and staff of the child-care center the child attended, health-care workers, poultry workers, and persons working on pig farms. Samples of control serum specimens were obtained from 218 healthy children and 201 healthy adult residents of Hong Kong. These samples were tested for antibody to influenza A(H5N1) virus using a micro-neutralization assay. Of the 502 persons tested who may have had contact with the child or with poultry, elevated neutralization antibody titers to influenza A(H5N1) virus were present in nine (2%). These persons included five (17%) of 29 poultry workers, one (2%) of 54 health-care workers, one (2%) of 63 neighbors, one (1%) of 73 laboratory workers, and one (0.4%) of 261 child-care center contacts. Specimens were negative for the four family members, 18 persons working on pig farms, and the 419 controls. Seropositivity was not associated with reported ILI.

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Antigenic and genetic analyses of viral isolates from seven case-patients indicated two closely related but distinguishable groups of influenza A(H5N1) viruses, suggesting multiple introductions in humans from poultry sources. All seven of the influenza A(H5N1) viruses analyzed from human cases contained all eight RNA gene segments from avian viruses, indicating that genetic reassortment between avian and human influenza viruses has not occurred.

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Editorial Note: The cases reported in Hong Kong represent the first identified instances of human illness associated with infection with influenza A(H5N1) viruses. Goals of the ongoing investigation are to detect new cases, determine sources of infection and mode(s) of transmission, and identify risk factors for influenza A(H5N1) infection. Except for a cluster of two confirmed and two suspected cases in one family, case-patients are not known to have had contact with each other or a common source of exposure and are geographically distributed throughout Hong Kong. All cases of infection have occurred among residents of Hong Kong, and no cases of infection with influenza A(H5N1) viruses have been identified among persons residing outside Hong Kong.

The serologic data obtained as part of the epidemiologic study of the initial case support the preliminary conclusion that persons with high levels of exposure to infected poultry or direct exposure to the virus in the laboratory may be at increased risk for infection with influenza A(H5N1) virus. However, the investigation has not ruled out the possibility of person-to-person transmission from exposure to ill and infectious persons: two seropositive persons who had contact with the first case-patient included a child-care center classmate and a health-care worker, and the classmate had contact with both the ill child and the same potential environmental source of exposure to ill chickens at the school as the ill child. However, the health-care worker reported no history of exposure to the virus in the laboratory or any recent exposure to poultry, and a history of exposure to the child or to poultry was unknown for a seropositive elderly neighbor. On the basis of the overall low rates of infection among contacts and controls and the lack of seropositivity among family members, at this time, the virus probably is not being efficiently transmitted among humans.

Global surveillance for influenza viruses is critical to monitor the circulation of different strains and indicates that human influenza type A(H3N2), type A(H1N1), and type B viruses continue to circulate worldwide. Data from the Hong Kong Department of Health's influenza surveillance system indicate that the number of cases of ILI in Hong Kong is at normal levels for this period; however, during December, the number of human influenza viruses isolated increased. During December, influenza A(H3N2) was the most commonly isolated influenza strain in Hong Kong, although influenza A(H1N1) and B viruses also were identified. The currently available inactivated trivalent influenza vaccine contains influenza A(H1N1), A(H3N2), and B strains repre-

Avian Influenza A Virus — Continued

sentative of those currently circulating among humans and is recommended for persons at increased risk for influenza-related complications (*2*).

Information about influenza A(H5N1) activity in Hong Kong and the United States and international influenza surveillance data are available through CDC's Influenza Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, World-Wide Web site http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm.

References

1. CDC. Isolation of avian influenza A(H5N1) viruses from humans—Hong Kong, May–December 1997. MMWR 1997;46:1204–7.
2. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(no. RR-9).

Rubella Among Crew Members of Commercial Cruise Ships — Florida, 1997

During April–July 1997, two different commercial cruse lines notified CDC of rubella outbreaks among crew members. In July 1997, CDC initiated an investigation on one cruise ship to determine the extent of and risk factors for rubella infection among crew members and to assess the potential risk for rubella transmission to passengers—particularly rubella-susceptible pregnant women at risk for giving birth to an infant with congenital rubella syndrome (CRS). This report summarizes rubella outbreaks involving two cruise ships and the results of the CDC investigation on one cruise ship, which demonstrate that crew members can serve as a susceptible population for rubella infection and should be vaccinated with measles-mumps-rubella vaccine (MMR) if they are not immune. Although the outbreaks were limited to crew members, cruise ship travel provides an environment conducive to the potential spread of rubella and other infectious diseases among crew and passengers; therefore, women of childbearing age, particularly pregnant women, should be immune to rubella before traveling on cruise ships to reduce the risks for rubella infection and CRS.

Cruise Ship A

On April 7, cruise line A notified CDC about a rash illness in a crew member aboard one of the ships in its fleet. The cruise ship sailed twice a week from Florida on 3-day cruises to the Bahamas, carrying approximately 900 crew members and 2000 passengers per cruise. During May and June, rash illnesses were reported in six additional crew members; five of the seven cases were confirmed serologically (by immunoglobulin [Ig] M antibodies) as acute rubella infection. A survey of the crew members conducted by the cruise line indicated that a substantial proportion had no documentation of rubella vaccination and that at least 95% were not U.S.-born. Because of evidence of ongoing transmission of rubella among crew members (many of whom were natives of countries without rubella vaccination programs) and the potential for transmission to female crew members and passengers of childbearing age, CDC advised the cruise line to initiate a vaccination campaign with MMR during June. Serologic susceptibility testing was recommended for all crew members ineligible for vaccination, including pregnant women. Cruise line staff and state and local health depart-

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ment personnel vaccinated 865 (96%) of the approximately 900 crew members who had no documented rubella vaccination or immunity. Following the vaccination campaign, one additional rash illness was reported in a crew member and subsequently was serologically confirmed to be consistent with acute rubella infection. This crew member had received MMR <2 weeks before the onset of rash.

Cruise Ship B

On July 25, cruise line B notified CDC about a cluster of rash illnesses among crew members of one of its cruise ships sailing between Florida and the Bahamas. The cruise ship sailed daily from Florida with a crew of 385 and carried approximately 8400 passengers per week. CDC initiated an investigation in July to determine the extent of the outbreak and risk factors for rubella infection among crew members and to assess the potential risk for rubella transmission to passengers, particularly rubella-susceptible pregnant women at risk for serious adverse health outcomes (including CRS).

The investigation included review of the ship's medical logs and interviews and examinations of the 385 crew members. Because approximately 25%–50% of rubella infections are asymptomatic (*1*), a serosurvey of rubella IgM and IgG antibodies was conducted among 366 consenting crew members. A confirmed case was defined as IgM serology consistent with rubella infection, or signs and symptoms meeting the clinical case definition for rubella and linked epidemiologically to a laboratory-confirmed case with onset during May 30–August 2. Rubella was confirmed in 16 (4%) crew members; all confirmed cases had IgM serology consistent with rubella infection. Of 16 crew members with IgM-confirmed cases, eight (50%) had no symptoms of infection. An additional 25 (7%) of the 366 crew members surveyed were susceptible to rubella at the time of the serosurvey. The crew interviews indicated that approximately 85% of the crew members were not U.S.-born (representing at least 50 countries), and 75% had negative or unknown rubella vaccination histories. Crew members living aboard the ship were more likely to have confirmed rubella than were crew members living ashore (16 of 288 versus zero of 78; relative risk=9.0 [Woolf's estimate], p=0.03).

To determine demographic characteristics of passengers on cruise ship B and identify pregnant women who, if susceptible to rubella, could be at risk for giving birth to infants with CRS, a questionnaire was administered to passengers sailing on cruises during August 4–8. All passengers (approximately 6000) received a health alert about the rubella outbreak before boarding the ship; 3643 (61%) passengers completed the questionnaire. Among the respondents, approximately 75% of passengers were U.S.-born, 12% were born in the Bahamas, and 13% were born in other countries. A total of 1213 (33%) of the 3643 respondents were women of childbearing age (i.e., 15–44 years); 28 (0.8%) of all respondents were pregnant women, of whom 14 (50%) reported being in the first trimester. Although the rubella immune status of these pregnant passengers was not determined, previous serosurveys in the U.S. population suggest that approximately 10% of women of childbearing age may be susceptible to rubella, and up to 85% of susceptible pregnant women who are infected during their first trimester may give birth to an infant with CRS (*2*).

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Editorial Note: Although rubella is typically a mild, self-limited disease in adults, infection in pregnant women can result in serious adverse health outcomes for the fetus, including CRS, a group of birth defects including deafness, cataracts, heart defects, and mental retardation. In the United States, approximately 10% of young adults are susceptible to rubella; in other countries, some without routine vaccination policies for rubella, susceptibility rates for rubella range from 4% to 68% (*3*). During 1994–1996, 12 laboratory-confirmed cases of CRS were reported in the United States (*4*).

Although a definitive quantitation of the risk for transmission of rubella among crew members and passengers on the cruise ships could not be ascertained, risk for infection among those crew members of cruise ship B could be estimated. Results of the serosurvey among crew members indicate that at least 41 (11%) of 366 were acutely infected with or susceptible to rubella at the time of the serosurvey. This serosurvey was conducted after recognition of an ongoing outbreak of rash illnesses among crew members, and it is likely that rubella susceptibility rates at the outset of the outbreak would have been higher.

The risk for transmission of infection and an outcome of CRS in pregnant passengers in their first trimester of pregnancy on cruise ship B was difficult to determine because 1) the rubella immune status of these pregnant passengers was unknown and 2) the consequences of rubella infection in susceptible pregnant women (i.e., CRS) may not be evident for several months after the exposure. If pregnant passengers were exposed, and assuming that approximately 10% of these women were susceptible to rubella and 85% of susceptible pregnant women who are infected during their first trimester will give birth to an infant with CRS, one case of CRS could potentially occur each week among passengers sailing during the outbreak.

Minimizing or eliminating the risk for rubella exposure among susceptible pregnant women is important because of the potential for serious adverse health outcomes for the fetus. To interrupt transmission of rubella among crew members and to prevent transmission of infection and CRS among susceptible pregnant women, CDC recommended administration of MMR to all crew members lacking documented immunity to rubella; serologic testing to determine susceptibility to rubella for all crew members ineligible for vaccination, including pregnant women; active surveillance aboard the ship to detect new rubella infections; prospective notification of the potential risk for rubella exposure to all embarking passengers until 30 days after the last confirmed rubella infection; and retrospective notification to all passengers sailing during the period of potential rubella transmission. These recommendations were effective in interrupting rubella transmission among crew members on cruise ship B: no additional rash illnesses were identified after their implementation.

This report of two clusters of rubella infections on commercial cruise ships demonstrates that crew members—many from countries without routine rubella vaccination programs—are potential groups of susceptible persons at risk for rubella infection. To prevent future rubella outbreaks among such persons, CDC recommends that cruise lines administer MMR to all crew members without documented immunity to rubella. Although reported rubella cases in these two outbreaks were limited to crew mem-

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bers, cruise ship travel provides a semi-closed environment for crew and passenger interactions, conducive to the potential spread of rubella and many other infectious diseases among crew and passengers. To prevent transmission of rubella infection and subsequent CRS, women of childbearing age, particularly pregnant women, should be immune to rubella before cruise ship excursions or international travel.

The outbreaks described in this report illustrate the potential for transmission of infectious disease among persons traveling across international borders, including aboard commercial cruise ships. Previous infectious disease outbreaks reported among crew members and passengers have included diarrheal diseases and other vaccine-preventable diseases such as influenza (*5*). Approximately 4 million persons travel aboard North American cruise ships each year (CDC, unpublished data, 1998). Ensuring routinely recommended adult vaccinations for all crew members will substantially decrease the potential for future outbreaks of vaccine-preventable illnesses aboard cruise ships. All suspected cases of rubella and other notifiable vaccine-preventable diseases should be reported to the nearest state and local health department. State health departments should report all suspected cases of rubella to CDC's Child Vaccine-Preventable Disease Branch, Epidemiology and Surveillance Division, National Immunization Program, telephone (404) 639-8230.

References

1. American Academy of Pediatrics. 1997 Red book: report of the Committee on Infectious Diseases. 24th ed. Elk Grove Village, Illinois: American Academy of Pediatrics, 1997.
2. Miller E, Cradock-Watson JE, Pollock TM. Consequences of confirmed maternal rubella at successive stages of pregnancy. Lancet 1982;2:781–4.
3. Cutts FT, Robertson SE, Diaz-Ortega JL, Samuel R. Control of rubella and congenital rubella syndrome (CRS) in developing countries, part 1: burden of disease from CRS. Bull World Health Organ 1997;75:55–68.
4. CDC. Rubella and congenital rubella syndrome—United States, 1994–1997. MMWR 1997; 46:350–4.
5. CDC. Update: influenza activity—United States, 1997–98 season. MMWR 1997;46:1094–98.

Enhanced Medical Assessment Strategy for Barawan Somali Refugees — Kenya, 1997

Each year, approximately 100,000 refugees are resettled to the United States. Before resettlement, these refugees undergo medical screening to identify inadmissible conditions (e.g., infectious tuberculosis and human immunodeficiency virus [HIV] infection) among individual refugees. This report describes the implementation and results of an enhanced refugee medical assessment strategy among Barawan Somali refugees in Kenya during July 1997. This strategy employs population-based screening for parasitic infections. The findings indicate that, among these refugees, the prevalences of malaria and intestinal parasites were sufficient to warrant preembarkation therapy to improve the health of both individuals and the total refugee population. This therapy also may prevent local transmission of parasitic infections in the resettlement communities in the United States.

In May 1997, resettlement began for approximately 4000 Barawan Somali refugees encamped since 1992 near Mombasa, Kenya. In 1993, detection of substantial malaria parasitemia (15%) among Somali refugees from this region prompted recommenda-

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tion of antimalarial treatment before resettlement (*1*). In addition, high prevalences of malaria (30%) and intestinal parasites (60%–80%) had been reported among residents of Kenya living in the coastal region, including Mombasa (S.K. Sharif, M.D., Ministry of Health, Kenya, personal communication, 1997). Because the prevalence of parasitic infections among the Barawan refugees may reflect those of the local community, the International Organization for Migration (IOM) consulted CDC on appropriate pre-embarkation interventions for Barawan refugees. IOM, a nongovernmental organization, medically screens more than half of the refugees resettling to the United States. CDC interim recommendations included mass pre-embarkation therapy with single-dose sulfadoxine-pyrimethamine (SP) for malaria parasitemia and mebendazole (100 mg twice a day for 3 days) for intestinal helminths. During July 1997, CDC conducted a cross-sectional survey of an approximately 10% sample of refugees during the standard medical screening process to 1) determine the prevalences of malaria and intestinal parasites, 2) reevaluate recommended pre-embarkation therapies, 3) assess the effectiveness of the antimalarial regimen, and 4) evaluate the laboratory component of medical screening.

IOM provided information about two groups: refugees examined during February 3–June 23 (travel-approved population, n=3253) and refugees examined during July 7–17 (survey population, n=390). Basic characteristics of the two groups (i.e., age, sex, country of origin, and size of family unit) were similar. Members of the survey population were asked about histories of recent illness and use of medications and other antimalarial preventive measures. A local hospital laboratory screened members of the survey population for malaria by using a qualitative buffy-coat (QBC) test followed by confirmation of all QBC-positives using microscopic examination of Field's-stained blood smears; persons who were positive for malaria were retested 3 and 7 days following completion of antimalarial therapy. Stool specimens were screened at a local hospital for intestinal parasites by direct and formalin ether-concentrated smears. CDC performed quality-control assessments for both the malaria smears and stool samples.

Malaria

Of the 390 survey participants, 26 (7%; 95% confidence interval [CI]=4%–10%) were positive for malaria. Of the 26 who were positive, 25 had *Plasmodium falciparum* parasitemia, and one had *P. ovale* parasitemia. Because of the severity of the parasitemia and symptoms, the local hospital treated seven of the 26 malaria-positive persons with halofantrine or artemether. Nineteen received a weight-adjusted dose of SP. One patient receiving SP was lost to follow-up. Of the remaining 18 patients receiving SP, 13 were malaria-negative on day 3 of follow-up, and all were malaria-negative by day 7.

Of the surveyed population, recent febrile symptoms were reported by 20% and 37% during initial and follow-up questioning, respectively (Table 1). Use of antimalarial therapy (chloroquine, halofantrine, SP, or quinine) was common among those refugees reporting fever (71% and 93%, respectively). Ten percent of the surveyed refugees reported using any malaria chemoprophylaxis, and most (91%) reported using bed nets (Table 1). Of the 229 refugees reporting the condition of their bed nets, 51 (22%) reported holes or tears in the netting (i.e., poor condition). Use of

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bed nets in poor condition compared with use of bed nets in good condition was associated with malaria parasitemia (odds ratio=9.2; 95% CI=3.2–27.5).

A total of 37 randomly selected blood smears from refugees reported as parasite-negative by the local hospital were reviewed by CDC and confirmed as negative. However, of the 26 refugees reported as parasite-positive, two cases of *P. falciparum* parasitemia could not be confirmed by CDC. The smear diagnosed by the local hospital as *P. ovale* was identified by CDC as *P. falciparum*.

Intestinal Parasites

Stool specimens were obtained from 331 persons; of these, specimens from 129 (39%) were positive for one or more pathogenic intestinal parasites, including *Trichuris trichiura* (28%), *Ascaris lumbricoides* (9%), and other pathogens (Table 2). Sex-specific prevalences were similar (41% for females versus 37% for males, chi-square test=0.47, p=0.49). However, age-specific prevalence was higher for persons

TABLE 1. Number of affirmative responses to initial and follow-up questions about malaria symptoms among Barawan Somali refugees, 1997

Survey/Characteristic	Affirmative responses		Total respondents
	No.	(%)	
Initial survey*			
Had fever in July	77	(20)	**389**
Received any antimalarial therapy†	*54*	*(71)*	***76***
Follow-up survey§			
Had fever during May–July	131	(37)	**358**
Received any antimalarial therapy†	*122*	*(93)*	***131***
Used chemoprophylaxis	34	(10)	**355**
Used bed nets	325	(91)	**355**
Bed nets in poor condition	*51*	*(22)*	***229***

*Survey conducted during July 7–17; n=390.
†Chloroquine, sulfadoxine-pyrimethamine, quinine, halofantrine, or artemether.
§Survey conducted July 12 and July 16; n=358.

TABLE 2. Number and percentage distribution of selected intestinal parasites among Barawan Somali refugees and comparison of results of stool specimen screening performed by a local hospital and reviewed by CDC, by parasite, 1997

Parasite	Survey population*		Quality review			
			Local hospital		CDC†	
	No.	(%)	No.	(%)	No.	(%)
Trichuris trichiura	92	(28)	13	(32)	17	(42)
Ascaris lumbricoides	29	(9)	7	(17)	7	(17)
Giardia lamblia	25	(8)	5	(12)	7	(17)
Entamoeba histolytica	7	(2)	2	(5)	4	(10)
Hookworms	3	(1)	1	(2)	0	—
Strongyloides stercoralis	3	(1)	1	(2)	1	(2)
Hymenolepis nana	3	(1)	0	—	0	—

*Stool specimens from survey population tested at a local hospital during July; n=331.
†Quality review by CDC during October; n=41.

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aged <15 years (51%) than for persons aged ≥15 years (32%) (chi-square test=11.95, p<0.01). CDC reviewed randomly selected negative (n=15) and positive (n=26) stool specimens as determined by the local hospital and found that, for 11 (27%) of these 41 specimens, the local hospital either did not detect or misclassified pathogens that were present in sufficient numbers to detect. The most commonly undetected pathogen was *T. trichiura*, and the most commonly misclassified pathogen was *Entamoeba histolytica*.

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Editorial Note: Although the prevalences of parasitic infections among the Barawan refugees were lower than the prevalences of these infections among persons in the surrounding communities, the prevalences of malaria (7%) and intestinal parasites (39%) among Barawan Somali refugees encamped in Kenya were sufficient to warrant pre-embarkation therapies. The strategy of screening for parasitic infections among a subset of refugees before resettlement provided an opportunity to assess the need for public health interventions for the entire Barawan refugee population. This strategy optimized the efficient distribution of these therapies before the refugees were resettled to the United States. This screening strategy also may be used to determine the need for other pre-embarkation therapies among future refugee populations. However, because the magnitudes of exposures and risks may vary among different groups, the use of specific interventions may differ by refugee group.

CDC oversees refugee health screening in accordance with the Refugee Act of 1980.* The law requires that refugees with medical conditions potentially affecting the public's health be identified and treated; the quality of medical screening and related health services be monitored and assessed; and that health officials in resettlement communities be notified of identified medical conditions. Refugee medical assessments previously focused on identifying inadmissible medical conditions. The enhancement of the medical screening process described in this report emphasizes the expansion of screening to include parasitic diseases with the potential for local transmission in the resettlement community (*2,3*) and a broadening of the focus from the individual to a population.

As a result of the findings of the enhanced assessment of Barawan Somali refugees, CDC recommended continuation of mass pre-embarkation therapy (day before departure) for malaria infection with SP for all departing refugees who had no contraindication to therapy (i.e., sulfa allergy). This recommendation was based on three considerations. First, the prevalence of parasitemia (7%) may have been underestimated because of the extensive use of presumptive antimalarial therapy for fever. Second, single-dose SP provides adequate cost-effective therapy for *P. falciparum*. Although the small number of refugees treated with SP (n=19) precluded accurate assessment of the effectiveness of SP, all refugees were malaria-negative by day 7 following SP therapy (n=18, one lost to follow-up). Third, mass pre-embarkation therapy effectively treats symptomatic persons and reduces asymptomatic malaria parasitemia among the entire refugee population, thereby reducing the risk for imported *P. falciparum* malaria.

*Public Law 96-212.

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Because some Barawan Somali refugees were infected with both helminthic and protozoan pathogens, the interim recommendation for mass pre-embarkation therapy with 3-day mebendazole was changed to single-dose albendazole (400 mg per kg of body weight) for all persons except pregnant women.† This approach was considered preferable because of the high prevalence of mixed intestinal parasites, the low cost of albendazole, and the ease of single-dose therapy before departure (*4–6*). The optimal choices of agent(s) and duration of therapy for mass treatment of intestinal parasites among refugee populations remain to be determined.

The program of enhanced screening for and management of infectious diseases among this vulnerable refugee population enabled the implementation of population-based interventions before members of this group dispersed to multiple locations in ≥20 states. CDC is notifying health officials in the states in which refugees are being resettled of the results of the pre-embarkation medical screening and treatment. CDC also is working with IOM and state refugee health programs to develop a shared database of refugee medical screening results.

References

1. Slutsker L, Tipple M, Keane V, McCance C, Campbell CC. Malaria in East African refugees resettling to the United States: development of strategies to reduce the risk of imported malaria. J Infect Dis 1995;171:489–93.
2. CDC. Malaria in Montagnard refugees—North Carolina, 1992. MMWR 1993;42:180–3.
3. Gyorkos TW, Frappier-Davignon L, MacLean JD, Viens P. Effect of screening and treatment on imported intestinal parasite infections: results from a randomized, controlled trial. Am J Epidemiol 1989;129:753–61.
4. Raccurt CP, Lambert MT, Bouloumie J, Ripert C. Evaluation of the treatment of intestinal helminthiases with albendazole in Djohong (North Cameroon). Trop Med Parasitol 1990;41:46–8.
5. Pungpak S, Singhasivanon V, Bunnag D. Albendazole as a treatment for *Giardia* infection. Ann Trop Med Parasitol 1996;90:563–5.
6. Hall A, Nahar Q. Albendazole as a treatment for infections with *Giardia duodenalis* in children in Bangladesh. Trans R Soc Trop Med Hyg 1993;87:84–6.

†Albendazole is currently approved by the Food and Drug Administration for treatment of neurocysticercosis and hydatid disease.

Evaluation of HIV Case Surveillance Through the Use of Non-Name Unique Identifiers — Maryland and Texas, 1994–1996

Notifiable disease reporting laws or regulations in states and territories require reporting of acquired immunodeficiency syndrome (AIDS) cases, including patient and physician names, to state or local health authorities. As of January 1, 1998, a total of 31 states were conducting name-based human immunodeficiency virus (HIV) case surveillance by using the same methods as surveillance for AIDS. However, because of concerns about name-based HIV surveillance, Maryland and Texas implemented HIV surveillance using non-name unique identifiers (UI)*. This report summarizes a 3-year collaboration by CDC and these states to evaluate UI surveillance for HIV infec-

*Reporting in Maryland is exempted for nonstate residents; persons who are tested at anonymous test sites; are blood, semen, or tissue donors; and participants of certain research projects. No exemptions to reporting exist in Texas.

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tion; the findings indicate some limitations to the use of a Social Security number-based UI for HIV surveillance.

In both Maryland and Texas, UI surveillance for HIV was implemented in early 1994, and both used the same 12-digit numeric UI code (comprising the last four digits of the patient's Social Security number [SSN], six-digit [month/day/year] date of birth [DOB], one-digit code for race/ethnicity, and one-digit code for sex). HIV-infection reports included residence data, diagnosing facility, and date of test, but did not include mode of HIV exposure. In both states, UI HIV surveillance databases were maintained separately from name-based AIDS surveillance databases.

Evaluation criteria included the proportion of reports with full UI codes, timeliness and completeness of HIV reporting, and potential for matching the UI-based case reports to alternate databases. In Texas, selected HIV reports also were evaluated for ability to follow back UI reports to patient records; in Maryland, provider compliance with maintaining patient surveillance logs was assessed. During July 1994–December 1996, Maryland reported 6412 AIDS cases and received 9971 HIV-infection reports, and Texas reported 12,041 AIDS cases and received approximately 23,000 HIV-infection reports.

Maryland

In 1993, the Maryland legislature mandated UI reporting of both positive HIV tests and patients with CD4+ T-lymphocyte counts of <200 cells/μL (CD4+)[†]. Health-care providers requesting HIV or CD4+ tests are required to construct the UI code for each patient, include the code on the laboratory slip, and record it in a surveillance log that matches the UI to patient identifiers (e.g., medical record number, patient name, or other patient code) for purposes of case investigation and follow up. Laboratories licensed by Maryland are required to submit the UI-based reports to the state health department through the local health departments.

Of 9971 HIV-infection reports entered during July 1994–December 1996, all UI elements were present for 7119 (71%) (Table 1). Element-specific presence ranged from 78% (SSN) to 98% (DOB and sex). The proportion of reports with full UI increased during July 1994–June 1996, and declined slightly during July–December 1996. The median time from date of HIV test to receipt of report by the state health department was 20 days (range: 1–847 days). During October–November 1997, all 72 providers in nine counties of eastern Maryland (the counties reported 3% of AIDS cases in Maryland in 1996) for whom laboratories had submitted HIV-infection reports were contacted to determine the proportion of providers who maintain the required surveillance log linking UI to patient identifiers; 32 (44%) of these providers maintained logs.

Completeness of HIV-infection reporting was estimated by comparison to cases of AIDS reported in the AIDS surveillance registry. Of AIDS cases with dates of HIV diagnosis from July 1995 through June 1996, data elements to construct UI were available for 633 (85%) cases. Of these, 319 (50%) matched to HIV-infection reports with full UI in the UI database (Table 2).

Data from the Maryland HIV counseling and testing (C&T) system (excluding sites offering only anonymous HIV tests) were used to evaluate the proportion of records

[†]HIV-infected persons with a CD4+ T-lymphocyte count of <200 cells/μL meet the 1993 expanded AIDS surveillance case definition and are reportable by name for AIDS surveillance.

HIV Case Surveillance — Continued

TABLE 1. Number of reports of HIV infection and percentage of reports that included data elements for unique identifiers (UIs), by reporting period — Maryland (MD) and Texas (TX), July 1994–December 1996

Reports/Data element	State	July–Dec. 1994	Jan.–June 1995	July–Dec. 1995	Jan.–June 1996	July–Dec. 1996	Overall
Total no. reports	MD	2,238	1,691	1,866	1,881	2,295	**9,971**
	TX*	3,932	3,399	3,597	2,852	2,339	**16,119**
Data element†							
Social Security number	MD	69.6	73.1	81.2	83.5	84.5	**78.4**
	TX	56.7	68.6	65.0	69.5	75.2	**66.0**
Date of birth	MD	95.2	96.3	98.7	99.3	98.8	**97.6**
	TX	88.4	89.8	93.1	96.8	97.6	**92.6**
Sex	MD	96.8	97.2	98.7	99.2	99.4	**98.3**
	TX	91.5	97.5	98.4	99.1	97.9	**96.6**
Race/Ethnicity	MD	85.8	88.5	91.6	94.0	89.9	**89.8**
	TX	80.8	91.6	94.4	97.1	95.4	**91.1**
% Reports with full UI	MD	61.3	65.9	74.9	78.5	76.5	**71.4**
	TX	51.8	61.9	61.6	66.5	71.3	**61.6**

*Excludes approximately 7000 records that had three or more missing UI data elements.
† Proportion of all reports containing specific UI data elements.

with full UI and completeness of HIV-infection reporting. In early 1995, counselors were instructed to obtain UI code information from clients and record the UI on the HIV C&T record. During 1995–1996, a total of 1093 records with a positive HIV test were entered into the C&T database; of these, all UI elements were present for 94%. HIV C&T reports for persons who had HIV diagnosed from July 1995 through June 1996 were matched to the UI database. Of the 528 reports, 276 (52%) matched.

Texas

In 1994, the Texas Board of Health amended regulations to require named reporting of HIV-infected children aged <13 years and UI reporting of HIV-infected adolescents and adults. Both health-care providers ordering an HIV test and laboratories performing the test report confirmed HIV infections to the Texas Department of Health (TDH) through the local health departments. Neither providers nor laboratories are required to maintain registries linking UI to patient identifiers.

Approximately 23,000 HIV-infection reports were received at TDH during the evaluation period. Since 1995, TDH excluded approximately 7000 paper HIV reports with three or more missing UI data elements. Of 16,119 HIV-infection reports entered into the UI database, all UI elements were present for 9923 (62%) (Table 1). Element-specific presence ranged from 66% (SSN) to 97% (sex). Overall, 60% of reports were submitted in periodic batches, which had a longer time from date of HIV test to receipt by TDH (median: 173 days; range: 26–974 days) than the 40% of reports submitted individually (median: 59 days; range: 2–906 days).

Completeness of HIV-infection reporting was estimated by comparison to AIDS surveillance data using the same methodology as in Maryland. Data elements to construct UI were available for 1762 (79%) of AIDS cases with dates of HIV diagnosis in the

HIV Case Surveillance — Continued

TABLE 2. Percentage completeness of HIV-infection reporting, availability of unique identifier (UI) data elements in alternate databases, and sources of report — Maryland and Texas, July 1994–December 1996

Characteristic	Maryland (n=9,971)	Texas (n=16,119)
Completeness of reporting		
HIV*	50.4	26.0
CD4+ T-lymphocyte count*	44.4	NA†
HIV§	52.3	NA
Availability of UI data elements in alternate databases		
Birth¶	No	No
Death	Yes	Yes
Sexually transmitted disease	No	No
Tuberculosis	No	No
Drug assistance**	Yes	Yes
Medical assistance††	Yes	No
Hospital discharge	No	No
Source of HIV report		
Public	30%§§	77%§§
Private	70%¶¶	23%***

* AIDS cases reported through July 1997 compared with the UI database.
† Not available.
§ HIV cases diagnosed from July 1995 through June 1996 in HIV counseling and testing sites compared with the UI database.
¶ Used for pediatric AIDS surveillance only.
** Federal- and state-funded medication program.
†† Federal- and state-funded medical-assistance program.
§§ Includes local health departments and state laboratory.
¶¶ Includes community-based organizations and private clinics and laboratories.
*** Includes community-based organizations, hospitals, private physicians, clinics, and laboratories.

specified period (Table 2). Of these, 454 (26%) matched to HIV-infection reports with full UI in the UI database.

To evaluate the feasibility of epidemiologic follow up, TDH sampled 765 HIV-infection reports submitted during January 1995–June 1996, in six areas of the state, reflective of variation in geography, demography, HIV morbidity, and reporting sources. Of these, 456 (60%) could be matched to a client record using any combination of UI (including records without full UI), health-care provider name, date of test, residential information, and other locally available information. Matched records that were missing the SSN data element (n=208) were reviewed to determine whether these data could be located. SSN could not be located for 120 (58%) of these records.

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HIV Case Surveillance — Continued

Editorial Note: HIV and AIDS surveillance data are needed to provide reliable population-based data to guide public health programs. During 1995–1996, the first declines in the incidence of AIDS-opportunistic infections and AIDS deaths were reported in the United States (6% and 23%, respectively), in part, as a result of increasingly effective HIV therapy (*1*). On the basis of revised HIV treatment guidelines (*2*), the impact of treatment advances on AIDS trends is expected to continue and will reduce the usefulness of AIDS data alone to monitor HIV-infection trends and morbidity. CDC and other public health and advocacy organizations have recognized the need for national HIV case surveillance while continuing to discuss the relative merits of HIV surveillance methods based on numeric codes compared to the name-based approach employed for AIDS surveillance (*1,3*).

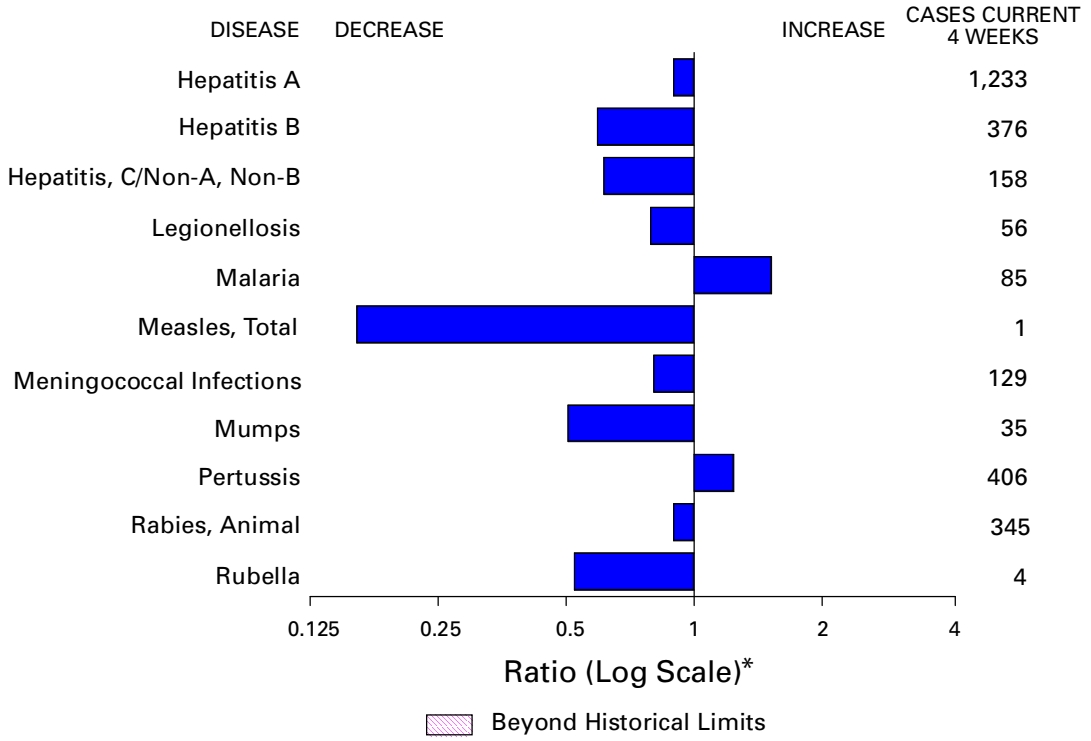
CDC uses established criteria to evaluate performance of public health surveillance systems to provide accurate data to target prevention and care programs (*4*). States conduct active surveillance using existing name-based clinical and public health records to decrease the reporting burden on providers, eliminate duplicate reports, and facilitate epidemiologic follow-up. These methods enable AIDS surveillance to attain high performance standards as reflected by completeness of reporting (>85%) (*5*) and documentation of risk exposures (≥93% of cases) (*6*). Evaluation of name-based HIV surveillance has shown 74%–97% completeness of reporting (*7*; CDC, unpublished data, 1997), and documentation of risk exposures (≥76% of cases) (*6*). Secure and confidential surveillance practices are required as a condition for receipt of federal resources for HIV and AIDS surveillance. At the state level, the most comprehensive protections of medical data apply to government-held data, and most specifically to HIV-related data (*8*). Names are removed before encoded and encrypted AIDS or HIV surveillance data are transmitted to CDC.

The evaluations in Maryland and Texas indicated that the use of UIs limits the performance of an HIV surveillance system and complicates efforts to collect risk-behavior information. Both systems demonstrated timely reporting. Although data from both states indicated increases in reporting of the SSN data element during the evaluation period, overall 22% of reports in Maryland and 34% in Texas were missing the SSN element, which contributed to a high rate of incomplete case reporting. The follow-back investigation in Texas suggests that SSNs are not readily available in client or medical records but, in the controlled environment of the Maryland HIV C&T system, counselors were able to collect SSNs for most clients. The completeness of reporting also may be affected by the ability of providers and laboratories to use UIs as part of routine HIV-testing practices. For example, one large laboratory providing HIV-testing services in Maryland did not report HIV infections during the evaluation period. The difficulty in collecting HIV data when persons are tested out of state also may affect completeness of reporting and the ability to eliminate duplicate reports. Maryland is continuing to evaluate its UI surveillance system, and Texas is exploring alternative HIV surveillance systems with input from community groups.

Effective HIV surveillance systems must include HIV risk information; however, this information often is not available at the time of the initial UI case report, and follow-up with health-care providers is necessary. To supply follow-up information, health-care providers must use lists or other mechanisms to link the UI to patient identifiers. The UI approach complicates efforts to collect this information and increases the number of lists of HIV-infected persons that could be disclosed in a breach of confidentiality.

(Continued on page 1271)

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending December 27, 1997, 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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending December 27, 1997 (52nd Week)

	Cum. 1997		Cum. 1997
Anthrax	0	Plague	4
Brucellosis	75	Poliomyelitis, paralytic¶	1
Cholera	10	Psittacosis	37
Congenital rubella syndrome	4	Rabies, human	2
Cryptosporidiosis*	1,950	Rocky Mountain spotted fever (RMSF)	396
Diphtheria	5	Streptococcal disease, invasive Group A	1,404
Encephalitis: California*	118	Streptococcal toxic-shock syndrome*	31
eastern equine*	10	Syphilis, congenital**	525
St. Louis*	12	Tetanus	42
western equine*	-	Toxic-shock syndrome	133
Hansen Disease	109	Trichinosis	9
Hantavirus pulmonary syndrome*†	18	Typhoid fever	344
Hemolytic uremic syndrome, post-diarrheal*	60	Yellow fever	-
HIV infection, pediatric*§	214		

-: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 to the Division of HIV/AIDS Prevention–Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update November 25, 1997.
¶One suspected case of polio with onset in 1997 has also been reported to date.
**Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending December 27, 1997, and December 28, 1996 (52nd Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	53,031	66,213	458,353	437,869	2,292	1,530	284,427	322,818	3,132	3,719
NEW ENGLAND	2,252	2,746	17,362	16,967	200	127	5,687	6,296	56	113
Maine	51	49	1,025	931	17	-	66	55	-	-
N.H.	40	93	799	752	13	16	95	162	8	7
Vt.	32	19	421	398	8	3	51	47	2	26
Mass.	808	1,306	7,390	6,791	109	93	2,118	2,163	39	74
R.I.	142	171	1,822	1,832	10	-	392	486	7	6
Conn.	1,179	1,108	5,905	6,263	43	15	2,965	3,383	-	-
MID. ATLANTIC	16,043	18,114	58,700	57,172	141	52	36,918	41,735	368	337
Upstate N.Y.	2,390	2,422	N	N	97	-	6,147	7,606	287	272
N.Y. City	8,610	9,942	30,377	26,455	15	8	14,213	13,008	-	3
N.J.	3,044	3,584	9,524	12,261	29	25	7,176	8,721	-	-
Pa.	1,999	2,166	18,799	18,456	N	19	9,382	12,400	81	62
E.N. CENTRAL	3,957	5,171	69,621	83,652	405	280	42,597	57,320	503	490
Ohio	798	1,153	20,254	20,653	108	52	12,710	14,946	20	35
Ind.	488	591	9,487	10,100	81	46	6,175	6,458	11	8
Ill.	1,715	2,192	10,838	22,459	70	31	5,272	15,776	83	93
Mich.	716	964	20,151	20,277	146	103	14,488	15,267	389	354
Wis.	240	271	8,891	10,163	N	48	3,952	4,873	-	-
W.N. CENTRAL	1,055	1,600	32,731	31,705	518	402	14,834	15,822	163	111
Minn.	194	304	7,416	5,608	214	203	2,752	2,698	4	10
Iowa	100	92	4,647	4,165	119	74	1,245	1,144	35	53
Mo.	505	851	11,922	12,020	55	69	7,792	8,492	108	23
N. Dak.	12	12	749	1,022	15	12	52	42	3	-
S. Dak.	8	14	1,438	1,536	28	32	169	176	-	-
Nebr.	90	93	2,560	2,878	61	-	1,087	1,213	3	9
Kans.	146	234	3,999	4,476	26	12	1,737	2,057	10	16
S. ATLANTIC	13,084	16,514	89,547	53,331	214	135	87,862	95,569	273	235
Del.	214	285	1,276	1,148	5	4	1,228	1,432	-	1
Md.	1,811	2,246	7,516	U	25	14	12,931	11,316	22	4
D.C.	955	1,257	N	N	2	-	4,256	4,470	-	-
Va.	1,113	1,146	11,340	11,754	N	41	8,668	9,292	24	17
W. Va.	121	121	2,882	2,301	N	1	928	850	17	9
N.C.	795	898	17,097	U	74	38	16,675	18,229	50	46
S.C.	754	842	12,359	U	13	8	11,235	10,984	38	34
Ga.	1,604	2,422	12,244	13,333	41	-	14,384	19,810	U	-
Fla.	5,717	7,297	24,833	24,795	46	29	17,557	19,186	122	124
E.S. CENTRAL	1,908	2,280	31,504	32,507	95	39	31,709	35,982	334	590
Ky.	338	401	6,207	6,687	30	-	3,960	4,229	15	29
Tenn.	745	821	12,438	13,121	46	39	10,975	11,710	232	400
Ala.	512	608	8,587	8,352	15	-	11,917	13,334	13	8
Miss.	313	450	4,272	4,347	4	-	4,857	6,709	74	153
W.S. CENTRAL	5,663	6,793	59,878	59,215	71	26	39,190	40,942	489	515
Ark.	216	267	2,128	1,663	10	5	3,571	5,050	11	8
La.	997	1,464	10,030	7,330	7	12	9,777	7,976	241	292
Okla.	275	261	7,374	7,219	12	6	4,725	4,792	7	7
Tex.	4,175	4,801	40,346	43,003	42	3	21,117	23,124	230	208
MOUNTAIN	1,527	2,014	22,765	29,642	239	132	7,925	7,459	484	555
Mont.	41	34	1,084	1,232	24	-	47	35	23	20
Idaho	50	38	1,646	1,505	38	23	156	98	84	99
Wyo.	14	7	611	621	17	12	52	41	230	179
Colo.	352	519	1,896	7,282	83	57	2,138	1,367	40	64
N. Mex.	163	206	3,369	3,862	7	-	1,136	891	58	77
Ariz.	374	591	10,550	10,686	N	30	3,596	3,705	25	76
Utah	134	194	1,728	1,554	59	-	269	280	5	19
Nev.	399	425	1,881	2,900	11	10	531	1,042	19	21
PACIFIC	7,542	10,980	76,245	73,678	409	332	17,705	21,693	462	773
Wash.	617	762	9,408	9,236	130	131	1,917	2,020	31	66
Oreg.	286	461	5,009	5,347	84	95	735	871	4	8
Calif.	6,510	9,522	58,580	55,926	183	94	14,204	17,842	266	479
Alaska	40	36	1,549	1,345	12	3	371	459	-	3
Hawaii	89	199	1,699	1,824	N	9	478	501	161	217
Guam	2	4	193	355	N	-	27	63	-	6
P.R.	1,975	2,238	U	U	41	U	526	648	150	180
V.I.	95	18	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	1	-	N	N	N	U	17	11	2	-

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

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention, last update November 25, 1997.

†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 December 27, 1997, and December 28, 1996 (52nd Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	1,033	1,198	10,622	16,455	1,756	1,800	7,787	11,344	16,905	21,168	7,674
NEW ENGLAND	82	80	2,877	4,095	96	84	128	195	441	485	1,230
Maine	2	5	11	63	1	10	2	2	11	21	221
N.H.	7	4	38	47	10	4	-	1	15	21	43
Vt.	13	5	8	26	2	8	-	-	6	4	113
Mass.	27	34	370	321	30	32	68	85	254	262	278
R.I.	15	32	409	534	11	12	2	4	36	39	41
Conn.	18	N	2,041	3,104	42	18	56	103	119	138	534
MID. ATLANTIC	214	263	6,236	10,305	433	467	352	509	3,106	3,969	1,652
Upstate N.Y.	72	80	2,477	4,900	70	96	39	76	438	535	1,205
N.Y. City	12	19	119	401	252	269	83	133	1,591	2,035	U
N.J.	20	15	1,637	2,190	78	68	122	177	686	816	189
Pa.	110	149	2,003	2,814	33	34	108	123	391	583	258
E.N. CENTRAL	312	360	96	498	148	170	668	1,573	1,579	2,110	177
Ohio	121	116	61	32	19	15	211	584	244	301	116
Ind.	54	51	29	32	16	15	166	207	150	202	13
Ill.	28	38	6	10	55	83	71	420	752	1,060	20
Mich.	92	109	-	28	43	41	128	183	311	433	28
Wis.	17	46	U	396	15	16	92	179	122	114	-
W.N. CENTRAL	70	71	233	365	68	51	181	340	576	547	490
Minn.	3	15	196	251	36	26	23	47	152	131	61
Iowa	12	11	10	19	10	3	8	23	73	70	157
Mo.	31	18	20	52	11	11	113	224	239	224	25
N. Dak.	2	-	-	2	3	1	-	-	12	8	84
S. Dak.	2	3	1	-	3	-	1	-	19	19	74
Nebr.	15	18	2	5	1	3	7	10	22	22	2
Kans.	5	6	4	36	4	7	29	36	59	73	87
S. ATLANTIC	131	197	768	823	361	340	3,155	3,780	3,180	4,014	3,022
Del.	13	12	105	173	5	4	20	35	18	43	54
Md.	28	39	490	447	86	87	891	733	308	319	596
D.C.	5	9	10	3	20	9	112	123	103	139	5
Va.	27	54	62	57	68	60	232	393	305	349	667
W. Va.	N	N	10	12	1	6	3	9	54	57	88
N.C.	14	12	34	66	20	30	721	1,052	430	554	852
S.C.	8	8	3	9	18	13	360	384	260	350	175
Ga.	2	3	7	1	52	38	521	683	595	790	311
Fla.	33	60	47	55	91	93	295	368	1,107	1,413	274
E.S. CENTRAL	53	59	83	83	35	42	1,610	2,412	1,190	1,436	270
Ky.	12	11	14	26	8	12	136	154	184	259	28
Tenn.	33	26	44	24	11	14	747	850	358	504	149
Ala.	4	5	11	9	10	8	410	530	412	423	88
Miss.	4	17	14	24	6	8	317	878	236	250	5
W.S. CENTRAL	33	53	100	175	57	158	1,195	1,815	2,396	2,898	340
Ark.	-	1	25	27	5	2	140	262	179	225	54
La.	7	4	6	9	16	12	366	486	270	350	5
Okla.	3	16	34	42	8	3	117	177	173	200	112
Tex.	23	32	35	97	28	141	572	890	1,774	2,123	169
MOUNTAIN	63	58	23	9	66	65	179	165	510	711	188
Mont.	1	1	-	-	2	7	-	-	17	19	50
Idaho	2	-	4	2	1	-	1	4	16	15	-
Wyo.	1	7	5	3	2	7	-	2	2	7	31
Colo.	18	12	6	-	30	26	14	26	75	104	28
N. Mex.	3	2	1	1	8	3	16	8	53	89	12
Ariz.	12	21	4	-	11	9	134	102	269	282	53
Utah	19	8	1	1	3	5	5	3	32	58	6
Nev.	7	7	2	2	9	8	9	20	46	137	8
PACIFIC	75	57	206	102	492	423	319	555	3,927	4,998	305
Wash.	10	8	10	18	49	41	16	9	264	285	-
Oreg.	-	-	21	19	24	24	9	9	154	190	14
Calif.	64	43	173	64	405	343	292	533	3,291	4,227	262
Alaska	-	1	2	-	5	3	1	-	73	96	29
Hawaii	1	5	-	1	9	12	1	4	145	200	-
Guam	-	1	-	-	-	-	3	3	13	107	-
P.R.	-	-	-	-	6	2	238	209	212	222	66
V.I.	-	1	-	-	-	1	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	9	1	2	-	-

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending December 27, 1997, and December 28, 1996 (52nd Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	1,041	1,170	27,595	31,032	8,656	10,637	-	78	-	55	133	508
NEW ENGLAND	63	55	625	456	147	255	-	11	-	8	19	17
Maine	5	1	62	28	6	8	-	-	-	1	1	-
N.H.	12	13	34	22	17	21	-	1	-	-	1	-
Vt.	3	2	15	12	7	14	-	-	-	-	-	2
Mass.	38	36	241	229	56	111	-	10	-	6	16	12
R.I.	3	2	129	26	16	19	-	-	-	-	-	1
Conn.	2	1	144	139	45	82	-	-	-	1	1	2
MID. ATLANTIC	145	213	1,843	1,985	1,275	1,413	-	19	-	8	27	38
Upstate N.Y.	41	50	367	438	322	358	-	2	-	3	5	12
N.Y. City	35	57	694	609	428	491	-	9	-	2	11	11
N.J.	49	65	246	394	201	279	-	3	-	-	3	3
Pa.	20	41	536	544	324	285	-	5	-	3	8	12
E.N. CENTRAL	160	191	2,843	2,619	912	1,103	-	6	-	3	9	21
Ohio	86	95	328	785	93	120	-	-	-	-	-	6
Ind.	19	21	322	367	93	143	-	-	-	-	-	-
Ill.	38	50	702	763	227	335	-	6	-	1	7	3
Mich.	15	12	1,336	506	454	416	-	-	-	2	2	3
Wis.	2	13	155	198	45	89	-	-	-	-	-	9
W.N. CENTRAL	65	63	2,182	2,656	469	572	-	13	-	5	18	24
Minn.	44	48	196	176	44	94	-	3	-	5	8	19
Iowa	7	4	484	334	47	74	-	1	-	-	1	1
Mo.	10	8	1,100	1,414	323	326	-	1	-	-	1	3
N. Dak.	-	-	11	140	5	2	U	-	U	-	-	-
S. Dak.	2	1	24	43	1	5	-	8	-	-	8	-
Nebr.	1	1	114	156	16	39	-	-	-	-	-	-
Kans.	1	1	253	393	33	32	-	-	-	-	-	1
S. ATLANTIC	172	273	2,135	1,960	1,284	1,573	-	2	-	13	15	12
Del.	-	2	31	21	6	9	-	-	-	-	-	1
Md.	58	76	210	256	186	169	-	-	-	2	2	2
D.C.	-	5	36	39	30	32	-	-	-	1	1	-
Va.	13	11	229	218	127	163	-	-	-	1	1	3
W. Va.	4	11	12	19	16	36	-	-	-	-	-	-
N.C.	21	26	209	204	265	337	-	-	-	2	2	2
S.C.	4	5	108	57	97	101	-	-	-	1	1	-
Ga.	42	52	656	414	148	61	U	-	U	1	1	3
Fla.	30	85	644	732	409	665	-	2	-	5	7	1
E.S. CENTRAL	48	45	631	1,273	688	914	-	-	-	-	-	2
Ky.	6	6	75	53	40	76	-	-	-	-	-	-
Tenn.	27	25	400	778	446	516	-	-	-	-	-	2
Ala.	15	13	87	217	79	78	-	-	-	-	-	-
Miss.	-	1	69	225	123	244	-	-	-	-	-	-
W.S. CENTRAL	51	44	5,501	6,807	1,185	1,616	-	3	-	5	8	27
Ark.	1	-	216	500	62	93	-	-	-	-	-	-
La.	13	6	238	261	170	209	-	-	-	-	-	1
Okla.	32	32	1,416	2,586	51	56	-	-	-	1	1	-
Tex.	5	6	3,631	3,460	902	1,258	-	3	-	4	7	26
MOUNTAIN	94	57	4,333	4,573	887	1,164	-	6	-	2	8	157
Mont.	-	1	71	130	12	21	-	-	-	-	-	-
Idaho	1	1	144	247	54	88	-	-	-	-	-	1
Wyo.	4	-	41	41	40	45	U	-	U	-	-	1
Colo.	19	16	406	512	153	132	-	-	-	-	-	7
N. Mex.	10	11	354	355	258	417	-	-	-	-	-	17
Ariz.	33	20	2,353	1,767	201	237	-	5	-	-	5	8
Utah	3	8	547	1,073	92	129	-	-	-	1	1	118
Nev.	24	-	417	448	77	95	-	1	-	1	2	5
PACIFIC	243	229	7,502	8,703	1,809	2,027	-	18	-	11	29	210
Wash.	6	10	673	1,001	80	158	-	1	-	1	2	38
Oreg.	35	33	378	875	108	129	-	-	-	-	-	14
Calif.	188	178	6,283	6,653	1,589	1,710	-	15	-	8	23	46
Alaska	7	6	34	54	21	16	-	-	-	-	-	63
Hawaii	7	2	134	120	11	14	-	2	-	2	4	49
Guam	-	-	-	7	3	1	U	-	U	-	-	-
P.R.	-	2	257	292	1,376	1,195	-	-	-	-	-	3
V.I.	-	-	-	41	-	44	U	-	U	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	6	10	1	1	34	5	U	1	U	-	1	-

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

*Of 241 cases among children aged <5 years, serotype was reported for 126 and of those, 48 were 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 December 27, 1997, and December 28, 1996 (52nd Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	3,078	3,437	5	606	751	55	5,461	7,796	3	160	238
NEW ENGLAND	198	171	-	12	5	6	974	1,866	1	2	27
Maine	18	15	-	-	-	-	11	55	-	-	-
N.H.	18	13	-	1	1	3	133	197	-	-	-
Vt.	4	4	-	-	1	2	256	280	-	-	2
Mass.	98	71	-	4	1	1	522	1,245	-	1	21
R.I.	20	18	-	6	1	-	17	40	-	-	-
Conn.	40	50	-	1	1	-	35	49	1	1	4
MID. ATLANTIC	318	381	-	57	96	1	384	952	-	31	13
Upstate N.Y.	73	102	-	12	28	1	152	533	-	4	5
N.Y. City	45	56	-	3	20	-	62	61	-	27	5
N.J.	72	79	-	7	4	-	11	31	-	-	2
Pa.	128	144	-	35	44	-	159	327	-	-	1
E.N. CENTRAL	456	475	-	80	135	14	517	837	-	5	3
Ohio	163	159	-	35	52	5	164	289	-	-	-
Ind.	58	64	-	14	8	9	85	128	-	-	-
Ill.	148	142	-	13	24	-	124	192	-	2	1
Mich.	53	51	-	15	48	-	61	59	-	-	2
Wis.	34	59	-	3	3	-	83	169	-	3	-
W.N. CENTRAL	229	264	-	18	24	16	579	573	1	2	-
Minn.	34	39	-	6	7	15	369	433	-	-	-
Iowa	48	56	-	10	3	-	108	32	-	-	-
Mo.	104	98	-	-	10	1	68	74	1	2	-
N. Dak.	2	5	U	-	2	U	2	1	U	-	-
S. Dak.	5	10	-	-	-	-	5	4	-	-	-
Nebr.	14	29	-	2	-	-	14	15	-	-	-
Kans.	22	27	-	-	2	-	13	14	-	-	-
S. ATLANTIC	555	659	2	85	131	6	436	793	1	83	101
Del.	5	3	-	-	-	-	1	26	-	-	-
Md.	42	58	-	10	37	4	124	278	-	-	-
D.C.	9	5	-	-	-	-	3	4	-	1	1
Va.	58	67	-	19	19	-	56	108	-	1	2
W. Va.	18	18	-	-	-	-	6	7	-	-	-
N.C.	97	79	-	12	27	-	118	186	-	59	86
S.C.	59	65	-	11	7	-	30	49	-	19	1
Ga.	105	147	U	10	9	U	13	35	U	-	-
Fla.	162	217	2	23	32	2	85	100	1	3	11
E.S. CENTRAL	236	246	-	27	23	-	141	202	-	-	2
Ky.	48	31	-	3	-	-	61	142	-	-	-
Tenn.	85	65	-	6	1	-	39	24	-	-	-
Ala.	84	95	-	9	6	-	33	26	-	-	2
Miss.	19	55	-	9	16	-	8	10	-	-	N
W.S. CENTRAL	278	365	-	75	67	-	295	201	-	4	9
Ark.	32	35	-	1	1	-	60	14	-	-	-
La.	47	66	-	16	21	-	20	15	-	-	1
Okla.	44	46	-	-	1	-	48	21	-	-	-
Tex.	155	218	-	58	44	-	167	151	-	4	8
MOUNTAIN	185	183	1	57	25	7	1,288	660	-	6	9
Mont.	9	9	-	-	-	-	19	37	-	-	-
Idaho	13	25	1	5	-	2	621	115	-	1	2
Wyo.	4	4	U	1	1	U	7	8	U	-	-
Colo.	49	44	-	3	5	1	342	336	-	-	3
N. Mex.	29	27	N	N	N	3	193	64	-	-	-
Ariz.	46	37	-	33	1	-	41	33	-	5	3
Utah	16	18	-	8	3	-	26	26	-	-	-
Nev.	19	19	-	7	15	1	39	41	-	-	1
PACIFIC	623	693	2	195	245	5	847	1,712	-	27	74
Wash.	92	116	-	21	26	5	406	830	-	5	15
Oreg.	126	123	N	N	N	-	10	64	-	-	1
Calif.	395	437	2	147	185	-	403	780	-	14	55
Alaska	3	9	-	4	3	-	14	3	-	-	-
Hawaii	7	8	-	23	31	-	14	35	-	8	3
Guam	1	5	U	1	10	U	-	-	U	-	-
P.R.	10	13	-	7	2	-	2	3	-	-	-
V.I.	-	-	U	-	2	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	4	-	U	-	-	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending December 27, 1997 (52nd Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	532	407	76	23	15	11	47
Boston, Mass.	177	129	31	8	7	2	21
Bridgeport, Conn.	32	22	4	5	1	-	2
Cambridge, Mass.	12	12	-	-	-	-	1
Fall River, Mass.	29	23	5	-	1	-	-
Hartford, Conn.	46	34	10	-	1	1	3
Lowell, Mass.	21	18	3	-	-	-	1
Lynn, Mass.	8	5	2	-	1	-	3
New Bedford, Mass.	17	14	3	-	-	-	-
New Haven, Conn.	54	41	4	3	2	4	4
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	3	3	-	-	-	-	-
Springfield, Mass.	44	37	6	-	-	1	1
Waterbury, Conn.	24	18	-	4	1	1	2
Worcester, Mass.	65	51	8	3	1	2	9
MID. ATLANTIC	2,284	1,587	396	202	69	30	136
Albany, N.Y.	45	35	5	1	3	1	4
Allentown, Pa.	27	20	7	-	-	-	1
Buffalo, N.Y.	74	58	12	3	-	1	7
Camden, N.J.	28	22	4	1	1	-	1
Elizabeth, N.J.	19	16	2	1	-	-	-
Erie, Pa.	47	39	4	2	2	-	2
Jersey City, N.J.	38	25	7	4	2	-	1
New York City, N.Y.	1,323	926	236	114	30	17	64
Newark, N.J.	59	27	17	8	3	4	3
Paterson, N.J.	13	10	1	2	-	-	-
Philadelphia, Pa.	200	91	47	40	21	1	10
Pittsburgh, Pa.§	35	23	5	3	1	3	5
Reading, Pa.	43	33	5	3	1	1	2
Rochester, N.Y.	113	84	22	5	2	-	11
Schenectady, N.Y.	18	16	1	1	-	-	2
Scranton, Pa.	25	22	3	-	-	-	3
Syracuse, N.Y.	130	103	15	8	2	2	13
Trenton, N.J.	29	21	2	5	1	-	5
Utica, N.Y.	18	16	1	1	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,583	1,084	308	108	45	38	101
Akron, Ohio	38	29	4	2	2	1	-
Canton, Ohio	31	25	4	1	-	1	4
Chicago, Ill.	420	263	93	36	18	10	32
Cincinnati, Ohio	88	64	14	6	3	1	9
Cleveland, Ohio	111	71	27	8	-	5	5
Columbus, Ohio	182	127	35	13	5	2	20
Dayton, Ohio	94	71	19	3	1	-	5
Detroit, Mich.	135	85	33	9	5	3	8
Evansville, Ind.	U	U	U	U	U	U	U
Fort Wayne, Ind.	U	U	U	U	U	U	U
Gary, Ind.	4	1	1	2	-	-	-
Grand Rapids, Mich.	59	51	4	2	2	-	4
Indianapolis, Ind.	132	97	21	7	4	3	-
Lansing, Mich.	17	8	9	-	-	-	2
Milwaukee, Wis.	80	56	9	7	2	6	3
Peoria, Ill.	39	25	10	2	1	1	3
Rockford, Ill.	45	36	8	1	-	-	2
South Bend, Ind.	46	32	7	3	1	3	2
Toledo, Ohio	62	43	10	6	1	2	2
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	568	402	85	37	12	14	36
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	27	19	6	2	-	-	2
Kansas City, Kans.	8	6	-	2	-	-	-
Kansas City, Mo.	110	56	18	10	6	2	5
Lincoln, Nebr.	31	25	6	-	-	-	5
Minneapolis, Minn.	94	73	9	7	3	2	13
Omaha, Nebr.	85	63	18	3	-	1	3
St. Louis, Mo.	89	65	14	4	-	6	-
St. Paul, Minn.	79	61	10	7	-	1	4
Wichita, Kans.	45	34	4	2	3	2	4
S. ATLANTIC	817	554	161	61	21	19	52
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	159	100	32	13	3	11	11
Charlotte, N.C.	77	55	14	2	3	3	5
Jacksonville, Fla.	104	73	20	9	1	1	4
Miami, Fla.	U	U	U	U	U	U	U
Norfolk, Va.	U	U	U	U	U	U	U
Richmond, Va.	52	33	12	4	3	-	1
Savannah, Ga.	28	22	4	2	-	-	3
St. Petersburg, Fla.	74	57	14	1	1	1	8
Tampa, Fla.	157	113	29	9	6	-	18
Washington, D.C.	149	92	36	14	4	3	2
Wilmington, Del.	17	9	-	7	-	-	-
E.S. CENTRAL	568	372	127	37	19	13	32
Birmingham, Ala.	U	U	U	U	U	U	U
Chattanooga, Tenn.	69	47	13	7	1	1	5
Knoxville, Tenn.	91	66	21	3	-	1	2
Lexington, Ky.	37	20	8	5	1	3	3
Memphis, Tenn.	178	115	40	11	9	3	10
Mobile, Ala.	80	52	21	1	4	2	-
Montgomery, Ala.	49	35	8	1	4	1	8
Nashville, Tenn.	64	37	16	9	-	2	4
W.S. CENTRAL	1,075	688	230	98	30	25	69
Austin, Tex.	51	33	12	5	1	-	9
Baton Rouge, La.	50	29	11	4	3	3	3
Corpus Christi, Tex.	37	30	3	1	1	2	4
Dallas, Tex.	148	95	25	21	3	4	2
El Paso, Tex.	68	51	12	4	1	-	4
Ft. Worth, Tex.	56	40	14	1	1	-	-
Houston, Tex.	230	134	66	21	4	5	23
Little Rock, Ark.	42	32	8	2	-	-	3
New Orleans, La.	198	113	41	22	10	9	-
San Antonio, Tex.	126	84	26	10	4	1	15
Shreveport, La.	U	U	U	U	U	U	U
Tulsa, Okla.	69	47	12	7	2	1	6
MOUNTAIN	953	651	170	78	27	27	80
Albuquerque, N.M.	82	66	8	6	-	2	6
Boise, Idaho	38	28	5	4	1	-	4
Colo. Springs, Colo.	58	39	8	6	3	2	5
Denver, Colo.	141	87	26	13	8	7	11
Las Vegas, Nev.	180	108	54	13	3	2	9
Ogden, Utah	33	26	4	3	-	-	2
Phoenix, Ariz.	159	108	27	13	5	6	15
Pueblo, Colo.	18	14	1	2	-	1	-
Salt Lake City, Utah	116	81	17	10	4	4	20
Tucson, Ariz.	128	94	20	8	3	3	8
PACIFIC	1,207	876	180	93	30	28	113
Berkeley, Calif.	19	15	2	2	-	-	-
Fresno, Calif.	104	74	18	3	5	4	9
Glendale, Calif.	U	U	U	U	U	U	U
Honolulu, Hawaii	75	57	11	4	-	3	2
Long Beach, Calif.	69	52	13	4	-	-	13
Los Angeles, Calif.	U	U	U	U	U	U	U
Pasadena, Calif.	26	23	2	-	1	-	4
Portland, Oreg.	U	U	U	U	U	U	U
Sacramento, Calif.	202	147	32	15	6	2	21
San Diego, Calif.	107	77	14	11	2	3	9
San Francisco, Calif.	139	98	27	13	1	-	18
San Jose, Calif.	197	150	23	17	2	5	22
Santa Cruz, Calif.	41	30	5	3	2	1	4
Seattle, Wash.	112	64	23	14	8	3	1
Spokane, Wash.	29	23	2	2	-	2	2
Tacoma, Wash.	87	66	8	5	3	5	8
TOTAL	9,587¶	6,621	1,733	737	268	205	666

U: Unavailable -: no reported cases

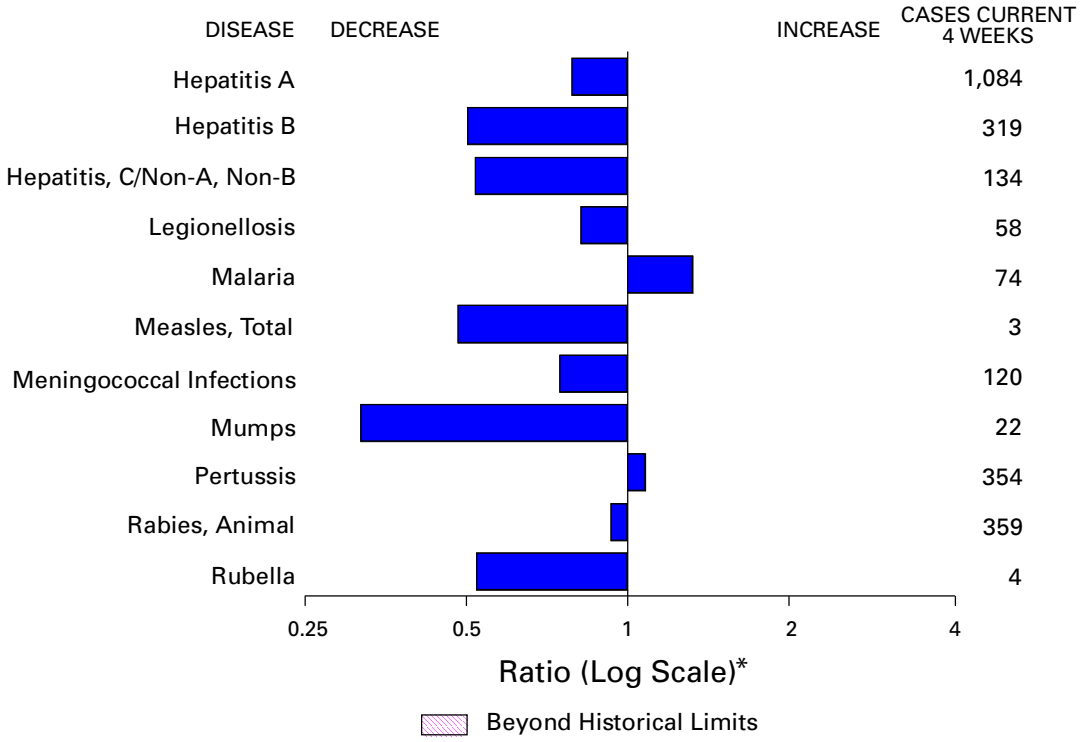
*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†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.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending January 3, 1998, 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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending January 3, 1998 (53rd Week)

	Cum. 1997		Cum. 1997
Anthrax	0	Plague	4
Brucellosis	76	Poliomyelitis, paralytic¶	1
Cholera	10	Psittacosis	37
Congenital rubella syndrome	4	Rabies, human	2
Cryptosporidiosis*	1,963	Rocky Mountain spotted fever (RMSF)	400
Diphtheria	5	Streptococcal disease, invasive Group A	1,431
Encephalitis: California*	120	Streptococcal toxic-shock syndrome*	33
eastern equine*	10	Syphilis, congenital**	548
St. Louis*	12	Tetanus	43
western equine*	-	Toxic-shock syndrome	134
Hansen Disease	109	Trichinosis	9
Hantavirus pulmonary syndrome*†	18	Typhoid fever	346
Hemolytic uremic syndrome, post-diarrheal*	61	Yellow fever	-
HIV infection, pediatric*§	231		

-: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 to the Division of HIV/AIDS Prevention–Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update December 23, 1997.
¶One suspected case of polio with onset in 1997 has also been reported to date.
**Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 3, 1998, and December 28, 1996 (53rd Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	56,492	66,213	467,792	437,869	2,316	1,552	289,870	322,818	3,164	3,719
NEW ENGLAND	2,353	2,746	17,436	16,967	204	127	5,671	6,296	58	113
Maine	51	49	1,067	931	17	-	66	55	-	-
N.H.	55	93	812	752	14	16	96	162	8	7
Vt.	35	19	434	398	8	3	53	47	3	26
Mass.	832	1,306	7,330	6,791	111	93	2,077	2,163	39	74
R.I.	158	171	1,857	1,832	10	-	397	486	8	6
Conn.	1,222	1,108	5,936	6,263	44	15	2,982	3,383	-	-
MID. ATLANTIC	16,880	18,114	61,423	57,172	144	52	38,337	41,735	380	337
Upstate N.Y.	2,645	2,422	N	N	99	-	6,249	7,606	293	272
N.Y. City	8,941	9,942	31,669	26,455	16	8	14,841	13,008	-	3
N.J.	3,206	3,584	9,593	12,261	29	25	7,251	8,721	-	-
Pa.	2,088	2,166	20,161	18,456	N	19	9,996	12,400	87	62
E.N. CENTRAL	4,221	5,171	71,549	83,652	406	281	43,813	57,320	503	490
Ohio	802	1,153	20,866	20,653	108	52	13,016	14,946	20	35
Ind.	523	591	9,487	10,100	81	46	6,175	6,458	11	8
Ill.	1,841	2,192	10,941	22,459	71	31	5,322	15,776	83	93
Mich.	812	964	21,287	20,277	146	103	15,302	15,267	389	354
Wis.	243	271	8,968	10,163	N	49	3,998	4,873	-	-
W.N. CENTRAL	1,109	1,600	33,107	31,705	519	405	14,936	15,822	165	111
Minn.	214	304	7,502	5,608	214	206	2,782	2,698	4	10
Iowa	110	92	4,647	4,165	119	74	1,245	1,144	35	53
Mo.	512	851	12,154	12,020	55	69	7,851	8,492	109	23
N. Dak.	13	12	766	1,022	15	12	55	42	3	-
S. Dak.	11	14	1,472	1,536	29	32	177	176	-	-
Nebr.	90	93	2,567	2,878	61	-	1,089	1,213	3	9
Kans.	159	234	3,999	4,476	26	12	1,737	2,057	11	16
S. ATLANTIC	13,628	16,514	92,133	53,331	218	136	89,775	95,569	279	235
Del.	229	285	1,276	1,148	5	4	1,250	1,432	-	1
Md.	1,875	2,246	7,750	U	26	14	13,129	11,316	22	4
D.C.	998	1,257	N	N	2	-	4,277	4,470	-	-
Va.	1,116	1,146	11,617	11,754	N	41	8,730	9,292	24	17
W. Va.	125	121	2,883	2,301	N	1	928	850	18	9
N.C.	850	898	17,680	U	74	38	17,149	18,229	51	46
S.C.	800	842	12,433	U	13	9	11,288	10,984	38	34
Ga.	1,722	2,422	12,957	13,333	41	-	14,969	19,810	U	-
Fla.	5,913	7,297	25,537	24,795	49	29	18,055	19,186	126	124
E.S. CENTRAL	2,061	2,280	31,736	32,507	96	39	31,883	35,982	336	590
Ky.	360	401	6,302	6,687	30	-	4,004	4,229	16	29
Tenn.	784	821	12,456	13,121	47	39	10,990	11,710	233	400
Ala.	570	608	8,706	8,352	15	-	12,032	13,334	13	8
Miss.	347	450	4,272	4,347	4	-	4,857	6,709	74	153
W.S. CENTRAL	6,283	6,793	59,917	59,215	79	27	39,219	40,942	489	515
Ark.	242	267	2,128	1,663	10	5	3,571	5,050	11	8
La.	1,031	1,464	10,030	7,330	14	12	9,777	7,976	241	292
Okla.	294	261	7,413	7,219	13	7	4,754	4,792	7	7
Tex.	4,716	4,801	40,346	43,003	42	3	21,117	23,124	230	208
MOUNTAIN	1,799	2,014	23,884	29,642	239	132	8,391	7,459	492	555
Mont.	41	34	1,121	1,232	24	-	51	35	24	20
Idaho	52	38	1,680	1,505	38	23	157	98	86	99
Wyo.	16	7	635	621	17	12	54	41	230	179
Colo.	380	519	1,896	7,282	83	57	2,138	1,367	42	64
N. Mex.	168	206	3,381	3,862	7	-	1,137	891	60	77
Ariz.	405	591	11,529	10,686	N	30	4,045	3,705	26	76
Utah	152	194	1,761	1,554	59	-	278	280	5	19
Nev.	585	425	1,881	2,900	11	10	531	1,042	19	21
PACIFIC	8,158	10,980	76,607	73,678	411	347	17,845	21,693	462	773
Wash.	678	762	9,551	9,236	130	145	1,962	2,020	31	66
Oreg.	305	461	5,009	5,347	84	95	735	871	4	8
Calif.	7,029	9,522	58,705	55,926	185	95	14,282	17,842	266	479
Alaska	52	36	1,587	1,345	12	3	381	459	-	3
Hawaii	94	199	1,755	1,824	N	9	485	501	161	217
Guam	2	4	193	355	N	-	27	63	-	6
P.R.	2,040	2,238	U	U	41	U	532	648	150	180
V.I.	99	18	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	1	-	N	N	N	U	17	11	2	-

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

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention, last update December 23, 1997.

†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 January 3, 1998, and December 28, 1996 (53rd Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	1,054	1,198	10,979	16,455	1,772	1,800	7,917	11,344	17,158	21,168	7,853
NEW ENGLAND	85	80	3,038	4,095	96	84	132	195	445	485	1,255
Maine	2	5	11	63	1	10	2	2	13	21	226
N.H.	7	4	39	47	10	4	-	1	17	21	48
Vt.	13	5	8	26	2	8	-	-	6	4	113
Mass.	27	34	387	321	30	32	70	85	254	262	282
R.I.	16	32	409	534	11	12	2	4	36	39	41
Conn.	20	N	2,184	3,104	42	18	58	103	119	138	545
MID. ATLANTIC	227	263	6,421	10,305	442	467	364	509	3,180	3,969	1,719
Upstate N.Y.	74	80	2,557	4,900	72	96	41	76	449	535	1,227
N.Y. City	13	19	122	401	259	269	87	133	1,622	2,035	U
N.J.	20	15	1,639	2,190	78	68	122	177	701	816	190
Pa.	120	149	2,103	2,814	33	34	114	123	408	583	302
E.N. CENTRAL	312	360	96	498	148	170	695	1,573	1,616	2,110	177
Ohio	121	116	61	32	19	15	213	584	270	301	116
Ind.	54	51	29	32	16	15	166	207	150	202	13
Ill.	28	38	6	10	55	83	71	420	755	1,060	20
Mich.	92	109	-	28	43	41	153	183	318	433	28
Wis.	17	46	U	396	15	16	92	179	123	114	-
W.N. CENTRAL	72	71	233	365	70	51	181	340	594	547	492
Minn.	3	15	196	251	36	26	23	47	158	131	61
Iowa	12	11	10	19	10	3	8	23	73	70	158
Mo.	32	18	20	52	13	11	113	224	238	224	25
N. Dak.	2	-	-	2	3	1	-	-	12	8	84
S. Dak.	2	3	1	-	3	-	1	-	19	19	74
Nebr.	15	18	2	5	1	3	7	10	22	22	2
Kans.	6	6	4	36	4	7	29	36	72	73	88
S. ATLANTIC	133	197	778	823	363	340	3,226	3,780	3,227	4,014	3,102
Del.	13	12	105	173	5	4	22	35	18	43	67
Md.	28	39	499	447	87	87	920	733	314	319	603
D.C.	5	9	10	3	20	9	117	123	106	139	5
Va.	27	54	62	57	68	60	236	393	305	349	669
W. Va.	N	N	10	12	1	6	3	9	54	57	89
N.C.	14	12	34	66	21	30	736	1,052	464	554	893
S.C.	8	8	3	9	18	13	360	384	260	350	175
Ga.	2	3	7	1	52	38	537	683	595	790	325
Fla.	35	60	48	55	91	93	295	368	1,111	1,413	276
E.S. CENTRAL	53	59	85	83	35	42	1,610	2,412	1,194	1,436	270
Ky.	12	11	15	26	8	12	136	154	184	259	28
Tenn.	33	26	45	24	11	14	747	850	358	504	149
Ala.	4	5	11	9	10	8	410	530	416	423	88
Miss.	4	17	14	24	6	8	317	878	236	250	5
W.S. CENTRAL	34	53	100	175	59	158	1,196	1,815	2,449	2,898	341
Ark.	-	1	25	27	5	2	141	262	179	225	55
La.	8	4	6	9	18	12	366	486	277	350	5
Okla.	3	16	34	42	8	3	117	177	176	200	112
Tex.	23	32	35	97	28	141	572	890	1,817	2,123	169
MOUNTAIN	63	58	23	9	66	65	192	165	515	711	190
Mont.	1	1	-	-	2	7	-	-	17	19	52
Idaho	2	-	4	2	1	-	1	4	17	15	-
Wyo.	1	7	5	3	2	7	-	2	2	7	31
Colo.	18	12	6	-	30	26	14	26	76	104	28
N. Mex.	3	2	1	1	8	3	16	8	53	89	12
Ariz.	12	21	4	-	11	9	147	102	272	282	53
Utah	19	8	1	1	3	5	5	3	32	58	6
Nev.	7	7	2	2	9	8	9	20	46	137	8
PACIFIC	75	57	205	102	493	423	321	555	3,938	4,998	307
Wash.	10	8	10	18	49	41	17	9	264	285	-
Oreg.	-	-	21	19	24	24	9	9	154	190	14
Calif.	64	43	172	64	406	343	293	533	3,297	4,227	264
Alaska	-	1	2	-	5	3	1	-	73	96	29
Hawaii	1	5	-	1	9	12	1	4	150	200	-
Guam	-	1	-	-	-	-	3	3	13	107	-
P.R.	-	-	-	-	6	2	240	209	212	222	66
V.I.	-	1	-	-	-	1	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	9	1	2	-	-

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending January 3, 1998, and December 28, 1996 (53rd Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	1,056	1,170	27,799	31,032	8,749	10,637	-	78	2	57	135	508
NEW ENGLAND	65	55	632	456	153	255	-	11	-	8	19	17
Maine	5	1	66	28	6	8	-	-	-	1	1	-
N.H.	12	13	35	22	18	21	-	1	-	-	1	-
Vt.	3	2	15	12	10	14	-	-	-	-	-	2
Mass.	40	36	241	229	56	111	-	10	-	6	16	12
R.I.	3	2	130	26	18	19	-	-	-	-	-	1
Conn.	2	1	145	139	45	82	-	-	-	1	1	2
MID. ATLANTIC	147	213	1,917	1,985	1,315	1,413	-	19	-	8	27	38
Upstate N.Y.	41	50	373	438	331	358	-	2	-	3	5	12
N.Y. City	35	57	705	609	434	491	-	9	-	2	11	11
N.J.	51	65	287	394	222	279	-	3	-	-	3	3
Pa.	20	41	552	544	328	285	-	5	-	3	8	12
E.N. CENTRAL	161	191	2,858	2,619	916	1,103	-	6	-	3	9	21
Ohio	86	95	332	785	94	120	-	-	-	-	-	6
Ind.	19	21	322	367	93	143	-	-	-	-	-	-
Ill.	38	50	706	763	227	335	-	6	-	1	7	3
Mich.	15	12	1,342	506	456	416	-	-	-	2	2	3
Wis.	3	13	156	198	46	89	-	-	-	-	-	9
W.N. CENTRAL	65	63	2,201	2,656	472	572	-	13	-	5	18	24
Minn.	44	48	196	176	44	94	-	3	-	5	8	19
Iowa	7	4	492	334	47	74	-	1	-	-	1	1
Mo.	10	8	1,109	1,414	326	326	-	1	-	-	1	3
N. Dak.	-	-	11	140	5	2	-	-	-	-	-	-
S. Dak.	2	1	27	43	1	5	-	8	-	-	8	-
Nebr.	1	1	109	156	16	39	-	-	-	-	-	-
Kans.	1	1	257	393	33	32	-	-	-	-	-	1
S. ATLANTIC	174	273	2,154	1,960	1,302	1,573	-	2	2	15	17	12
Del.	-	2	31	21	6	9	-	-	-	-	-	1
Md.	58	76	215	256	195	169	-	-	-	2	2	2
D.C.	-	5	36	39	30	32	-	-	2	3	3	-
Va.	13	11	233	218	128	163	-	-	-	1	1	3
W. Va.	4	11	12	19	16	36	-	-	-	-	-	-
N.C.	21	26	211	204	265	337	-	-	-	2	2	2
S.C.	4	5	110	57	98	101	-	-	-	1	1	-
Ga.	42	52	657	414	148	61	-	-	-	1	1	3
Fla.	32	85	649	732	416	665	-	2	-	5	7	1
E.S. CENTRAL	48	45	637	1,273	692	914	-	-	-	-	-	2
Ky.	6	6	76	53	40	76	-	-	-	-	-	-
Tenn.	27	25	402	778	449	516	-	-	-	-	-	2
Ala.	15	13	90	217	80	78	-	-	-	-	-	-
Miss.	-	1	69	225	123	244	U	-	U	-	-	-
W.S. CENTRAL	54	44	5,515	6,807	1,188	1,616	-	3	-	5	8	27
Ark.	1	-	221	500	63	93	-	-	-	-	-	-
La.	14	6	239	261	171	209	-	-	-	-	-	1
Okla.	34	32	1,424	2,586	52	56	-	-	-	1	1	-
Tex.	5	6	3,631	3,460	902	1,258	U	3	U	4	7	26
MOUNTAIN	99	57	4,369	4,573	898	1,164	-	6	-	2	8	157
Mont.	-	1	72	130	12	21	-	-	-	-	-	-
Idaho	1	1	150	247	54	88	-	-	-	-	-	1
Wyo.	4	-	41	41	40	45	-	-	-	-	-	1
Colo.	21	16	407	512	154	132	-	-	-	-	-	7
N. Mex.	10	11	359	355	263	417	-	-	-	-	-	17
Ariz.	36	20	2,376	1,767	206	237	-	5	-	-	5	8
Utah	3	8	547	1,073	92	129	-	-	-	1	1	118
Nev.	24	-	417	448	77	95	U	1	U	1	2	5
PACIFIC	243	229	7,516	8,703	1,813	2,027	-	18	-	11	29	210
Wash.	6	10	673	1,001	80	158	-	1	-	1	2	38
Oreg.	35	33	378	875	109	129	-	-	-	-	-	14
Calif.	188	178	6,296	6,653	1,592	1,710	-	15	-	8	23	46
Alaska	7	6	34	54	21	16	-	-	-	-	-	63
Hawaii	7	2	135	120	11	14	-	2	-	2	4	49
Guam	-	-	-	7	3	1	U	-	U	-	-	-
P.R.	-	2	257	292	1,376	1,195	-	-	-	-	-	3
V.I.	-	-	-	41	-	44	U	-	U	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	6	10	1	1	34	5	U	1	U	-	1	-

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

*Of 242 cases among children aged <5 years, serotype was reported for 126 and of those, 47 were 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 January 3, 1998, and December 28, 1996 (53rd Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	3,117	3,437	4	612	751	59	5,519	7,796	-	161	238
NEW ENGLAND	205	171	-	12	5	10	990	1,866	-	2	27
Maine	18	15	-	-	-	-	11	55	-	-	-
N.H.	18	13	-	1	1	10	143	197	-	-	-
Vt.	4	4	-	-	1	-	262	280	-	-	2
Mass.	102	71	-	4	1	-	522	1,245	-	1	21
R.I.	21	18	-	6	1	-	17	40	-	-	-
Conn.	42	50	-	1	1	-	35	49	-	1	4
MID. ATLANTIC	325	381	-	59	96	-	409	952	-	32	13
Upstate N.Y.	75	102	-	13	28	-	161	533	-	5	5
N.Y. City	46	56	-	3	20	-	62	61	-	27	5
N.J.	73	79	-	7	4	-	11	31	-	-	2
Pa.	131	144	-	36	44	-	175	327	-	-	1
E.N. CENTRAL	461	475	-	80	135	3	544	837	-	5	3
Ohio	164	159	-	35	52	1	165	289	-	-	-
Ind.	58	64	-	14	8	-	85	128	-	-	-
Ill.	148	142	-	13	24	2	126	192	-	2	1
Mich.	53	51	-	15	48	-	62	59	-	-	2
Wis.	38	59	-	3	3	-	106	169	-	3	-
W.N. CENTRAL	235	264	-	18	24	17	599	573	-	2	-
Minn.	34	39	-	6	7	15	384	433	-	-	-
Iowa	48	56	-	10	3	2	113	32	-	-	-
Mo.	109	98	-	-	10	-	68	74	-	2	-
N. Dak.	2	5	-	-	2	-	2	1	-	-	-
S. Dak.	6	10	-	-	-	-	5	4	-	-	-
Nebr.	14	29	-	2	-	-	14	15	-	-	-
Kans.	22	27	-	-	2	-	13	14	-	-	-
S. ATLANTIC	558	659	-	85	131	-	438	793	-	83	101
Del.	5	3	-	-	-	-	1	26	-	-	-
Md.	42	58	-	10	37	-	125	278	-	-	-
D.C.	9	5	-	-	-	-	3	4	-	1	1
Va.	58	67	-	19	19	-	56	108	-	1	2
W. Va.	18	18	-	-	-	-	6	7	-	-	-
N.C.	97	79	-	12	27	-	118	186	-	59	86
S.C.	61	65	-	11	7	-	30	49	-	19	1
Ga.	106	147	-	10	9	-	14	35	-	-	-
Fla.	162	217	-	23	32	-	85	100	-	3	11
E.S. CENTRAL	237	246	1	28	23	3	144	202	-	-	2
Ky.	48	31	-	3	-	-	61	142	-	-	-
Tenn.	85	65	1	7	1	1	40	24	-	-	-
Ala.	85	95	-	9	6	2	35	26	-	-	2
Miss.	19	55	U	9	16	U	8	10	U	-	N
W.S. CENTRAL	282	365	-	75	67	1	296	201	-	4	9
Ark.	34	35	-	1	1	-	60	14	-	-	-
La.	48	66	-	16	21	-	20	15	-	-	1
Okla.	45	46	-	-	1	1	49	21	-	-	-
Tex.	155	218	U	58	44	U	167	151	U	4	8
MOUNTAIN	190	183	2	59	25	25	1,252	660	-	6	9
Mont.	9	9	-	-	-	-	19	37	-	-	-
Idaho	15	25	1	6	-	14	570	115	-	1	2
Wyo.	4	4	-	1	1	-	7	8	-	-	-
Colo.	51	44	-	3	5	2	348	336	-	-	3
N. Mex.	30	27	N	N	N	5	198	64	-	-	-
Ariz.	46	37	1	34	1	4	45	33	-	5	3
Utah	16	18	-	8	3	-	26	26	-	-	-
Nev.	19	19	U	7	15	U	39	41	U	-	1
PACIFIC	624	693	1	196	245	-	847	1,712	-	27	74
Wash.	92	116	-	21	26	-	406	830	-	5	15
Oreg.	126	123	N	N	N	-	10	64	-	-	1
Calif.	396	437	-	147	185	-	403	780	-	14	55
Alaska	3	9	-	4	3	-	14	3	-	-	-
Hawaii	7	8	1	24	31	-	14	35	-	8	3
Guam	1	5	U	1	10	U	-	-	U	-	-
P.R.	10	13	-	7	2	-	2	3	-	-	-
V.I.	-	-	U	-	2	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	4	-	U	-	-	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending January 3, 1998 (53rd Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	619	452	96	44	11	16	47
Boston, Mass.	169	112	26	20	1	10	14
Bridgeport, Conn.	U	U	U	U	U	U	U
Cambridge, Mass.	16	14	1	1	-	-	1
Fall River, Mass.	25	20	3	1	1	-	-
Hartford, Conn.	57	36	11	7	2	1	2
Lowell, Mass.	31	26	5	-	-	-	4
Lynn, Mass.	20	12	4	3	1	-	-
New Bedford, Mass.	24	18	4	2	-	-	1
New Haven, Conn.	34	22	6	3	2	1	1
Providence, R.I.	68	53	9	2	2	2	-
Somerville, Mass.	9	7	2	-	-	-	-
Springfield, Mass.	44	35	4	3	1	1	4
Waterbury, Conn.	41	35	6	-	-	-	5
Worcester, Mass.	81	62	15	2	1	1	15
MID. ATLANTIC	2,582	1,815	449	216	60	38	133
Albany, N.Y.	60	45	8	2	2	3	3
Allentown, Pa.	25	20	3	-	2	-	1
Buffalo, N.Y.	79	61	10	5	1	2	8
Camden, N.J.	35	13	11	6	4	1	8
Elizabeth, N.J.	34	20	5	6	-	3	-
Erie, Pa.	29	21	6	1	1	-	2
Jersey City, N.J.	54	37	8	5	-	4	3
New York City, N.Y.	1,408	995	246	121	31	15	61
Newark, N.J.	64	28	17	13	5	1	3
Paterson, N.J.	23	10	3	4	1	1	-
Philadelphia, Pa.	400	282	70	35	8	5	19
Pittsburgh, Pa.§	45	33	6	2	3	1	2
Reading, Pa.	38	30	3	5	-	-	4
Rochester, N.Y.	124	94	23	6	1	-	11
Schenectady, N.Y.	35	26	7	2	-	-	1
Scranton, Pa.	24	21	3	-	-	-	1
Syracuse, N.Y.	60	46	10	1	1	2	2
Trenton, N.J.	32	23	7	2	-	-	4
Utica, N.Y.	13	10	3	-	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,939	1,394	361	110	37	37	111
Akron, Ohio	60	44	12	3	1	-	1
Canton, Ohio	48	41	5	1	-	1	1
Chicago, Ill.	418	276	94	31	9	8	26
Cincinnati, Ohio	63	49	9	5	-	-	8
Cleveland, Ohio	119	86	21	5	2	5	1
Columbus, Ohio	133	94	26	8	1	4	10
Dayton, Ohio	88	68	14	4	2	-	11
Detroit, Mich.	230	149	49	19	8	5	12
Evansville, Ind.	46	42	2	2	-	-	3
Fort Wayne, Ind.	49	38	8	1	2	-	2
Gary, Ind.	5	2	2	1	-	-	-
Grand Rapids, Mich.	55	43	5	4	2	1	5
Indianapolis, Ind.	151	104	32	6	5	4	-
Lansing, Mich.	37	25	10	1	1	-	2
Milwaukee, Wis.	107	81	19	4	1	2	7
Peoria, Ill.	44	34	10	-	-	-	3
Rockford, Ill.	67	53	10	3	1	-	4
South Bend, Ind.	62	45	10	4	-	3	5
Toledo, Ohio	83	60	12	7	2	2	7
Youngstown, Ohio	74	60	11	1	-	2	3
W.N. CENTRAL	764	573	108	38	20	14	51
Des Moines, Iowa	135	103	19	6	5	2	12
Duluth, Minn.	27	18	8	-	-	1	4
Kansas City, Kans.	39	26	8	4	1	-	2
Kansas City, Mo.	74	47	10	3	2	1	8
Lincoln, Nebr.	32	26	3	2	1	-	4
Minneapolis, Minn.	101	81	14	5	-	1	3
Omaha, Nebr.	65	51	6	4	2	2	2
St. Louis, Mo.	137	102	15	9	6	5	4
St. Paul, Minn.	64	53	10	1	-	-	10
Wichita, Kans.	90	66	15	4	3	2	2

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
S. ATLANTIC	817	525	141	99	30	22	49
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	154	92	33	19	6	4	15
Charlotte, N.C.	99	67	21	5	2	4	9
Jacksonville, Fla.	134	96	17	12	5	4	9
Miami, Fla.	96	52	21	17	5	1	1
Norfolk, Va.	U	U	U	U	U	U	U
Richmond, Va.	86	53	13	10	6	4	6
Savannah, Ga.	42	31	6	4	1	-	3
St. Petersburg, Fla.	59	46	8	5	-	-	3
Tampa, Fla.	U	U	U	U	U	U	U
Washington, D.C.	120	75	22	13	5	5	3
Wilmington, Del.	27	13	-	14	-	-	-
E.S. CENTRAL	600	410	120	40	18	10	52
Birmingham, Ala.	118	71	24	14	6	1	13
Chattanooga, Tenn.	28	16	10	-	1	1	2
Knoxville, Tenn.	67	51	14	-	2	-	8
Lexington, Ky.	58	38	12	5	-	3	5
Memphis, Tenn.	106	72	25	5	1	3	11
Mobile, Ala.	93	66	11	8	7	1	1
Montgomery, Ala.	1	1	-	-	-	-	-
Nashville, Tenn.	129	95	24	8	1	1	12
W.S. CENTRAL	1,260	828	252	113	42	24	67
Austin, Tex.	65	44	9	7	-	5	2
Baton Rouge, La.	26	15	7	4	-	-	1
Corpus Christi, Tex.	27	22	3	1	1	-	3
Dallas, Tex.	163	105	36	11	6	5	7
El Paso, Tex.	61	38	10	10	2	-	7
Ft. Worth, Tex.	79	51	11	7	4	6	2
Houston, Tex.	293	192	63	29	6	3	20
Little Rock, Ark.	71	49	16	3	1	2	3
New Orleans, La.	121	60	30	16	14	1	-
San Antonio, Tex.	184	127	40	13	3	1	13
Shreveport, La.	46	30	10	2	3	1	2
Tulsa, Okla.	124	95	17	10	2	-	7
MOUNTAIN	664	479	110	44	12	19	58
Albuquerque, N.M.	76	59	10	6	1	-	3
Boise, Idaho	35	25	6	3	1	-	1
Colo. Springs, Colo.	U	U	U	U	U	U	U
Denver, Colo.	80	63	9	4	-	4	10
Las Vegas, Nev.	122	73	38	8	3	-	5
Ogden, Utah	14	10	1	1	1	1	2
Phoenix, Ariz.	89	61	11	4	3	10	6
Pueblo, Colo.	25	20	4	1	-	-	1
Salt Lake City, Utah	95	73	7	10	2	3	15
Tucson, Ariz.	128	95	24	7	1	1	15
PACIFIC	1,151	826	205	77	23	20	108
Berkeley, Calif.	25	19	4	-	-	2	2
Fresno, Calif.	U	U	U	U	U	U	U
Glendale, Calif.	4	4	-	-	-	-	1
Honolulu, Hawaii	71	48	17	3	3	-	2
Long Beach, Calif.	83	66	10	4	1	2	15
Los Angeles, Calif.	214	160	41	6	4	3	11
Pasadena, Calif.	29	15	10	4	-	-	7
Portland, Oreg.	83	52	18	10	3	-	2
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	128	84	26	8	5	5	16
San Francisco, Calif.	149	102	29	14	2	2	19
San Jose, Calif.	135	113	9	7	1	5	13
Santa Cruz, Calif.	29	19	3	5	2	-	4
Seattle, Wash.	130	85	30	12	2	1	6
Spokane, Wash.	71	59	8	4	-	-	10
Tacoma, Wash.	U	U	U	U	U	U	U
TOTAL	10,396¶	7,302	1,842	781	253	200	676

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.

HIV Case Surveillance — Continued

CDC has recommended that all states and territories conduct HIV case surveillance as an extension of their AIDS surveillance systems (*1*). In addition, CDC is developing technical guidance to enhance security practices, standardize confidentiality laws and regulations, and promote uniform standards for HIV case surveillance systems. These guidelines will assist states and territories in implementing HIV case surveillance using data-collection and data-storage methods that provide high quality HIV surveillance data while assuring the confidentiality of surveillance information.

References

1. CDC. Update: trends in AIDS incidence, 1996. MMWR 1997;46:861–7.
2. Carpenter CC, Fischl MA, Hammer SM, et al. Antiretroviral therapy for HIV infection in 1997: updated recommendations of the International AIDS Society-USA panel. JAMA 1997;277:1962–9.
3. Council of State and Territorial Epidemiologists. CSTE: position statement ID-4. National HIV surveillance: addition to the National Public Health Surveillance System. Atlanta, Georgia: Council of State and Territorial Epidemiologists, 1997.
4. Klaucke DN. Evaluating public health surveillance. In: Teutsch SM, Churchill RE, eds. Principals and practices of public health surveillance. New York, New York: Oxford University Press, 1994:158–74.
5. Rosenblum L, Buehler JW, Morgan ME, et al. The completeness of AIDS case reporting, 1988: a multisite collaborative surveillance project. Am J Public Health 1992;82:1495–9.
6. CDC. HIV/AIDS surveillance report. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, 1997. (Vol 8, no. 1).
7. Meyer PA, Jones JL, Garrison CZ. Completeness of reporting of diagnosed HIV-infected hospital inpatients. J AIDS 1994;7:1067–73.
8. Gostin LO, Lazzarini Z, Neslund VS, Osterholm MT. The public health information infrastructure: a national review of the law on health information privacy. JAMA 1996;275:1921–7.

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