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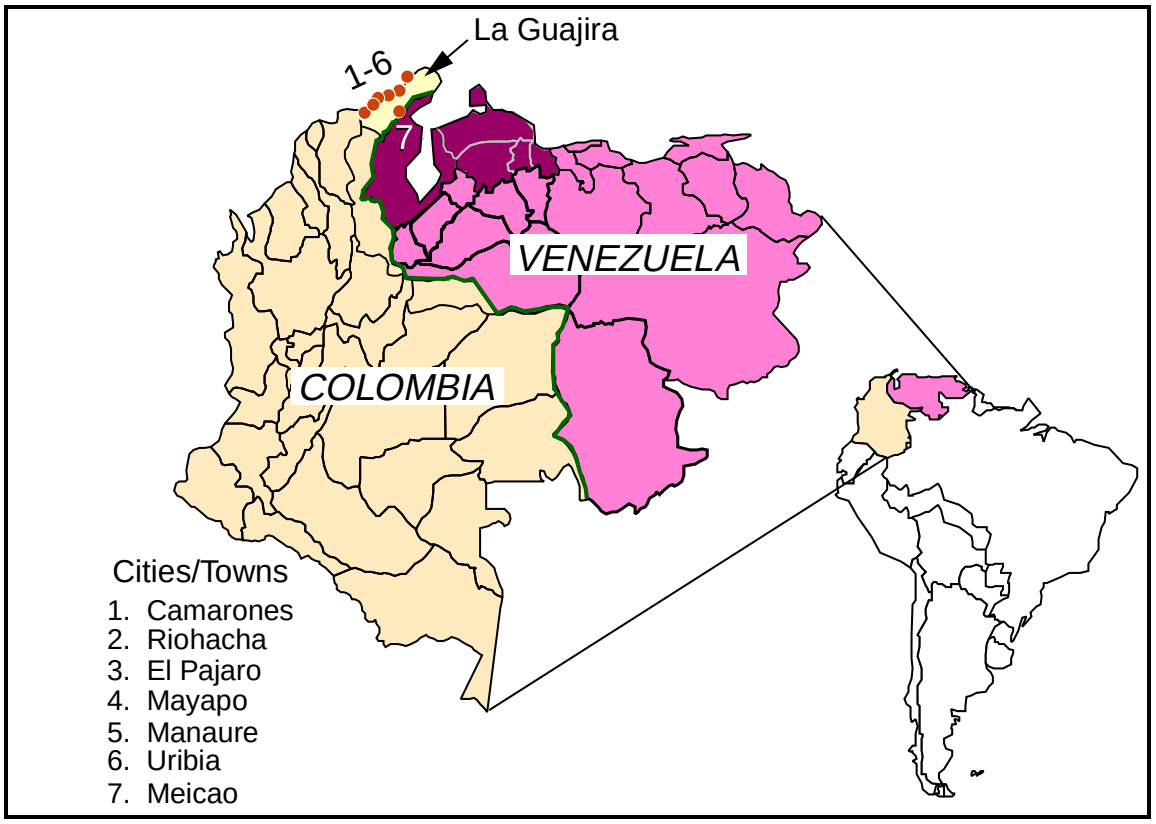
Venezuelan Equine Encephalitis — Colombia, 1995

An outbreak of Venezuelan equine encephalitis (VEE) that began in northwestern Venezuela in April 1995 has spread westward to the Guajira peninsula and to Colombia (Figure 1), resulting in an estimated minimum of 13,000 cases in humans and an undetermined number of equine deaths. Governments of both countries have initiated efforts to control the spread of this outbreak by quarantining and vaccinating equines and applying insecticides. This report summarizes the ongoing investigation of the outbreak in Colombia.

FIGURE 1. Location of outbreak of Venezuelan equine encephalitis — Colombia, April 1–October 1, 1995



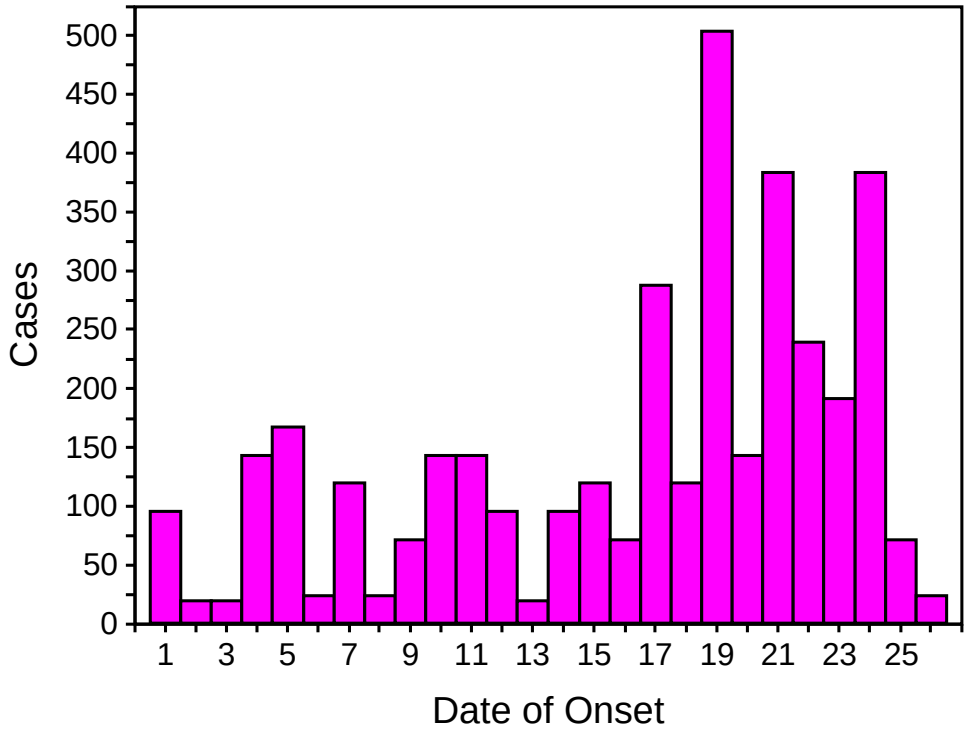
Venezuelan Equine Encephalitis — Continued

During the first week of September, rural health clinics in the towns of Mayapo, Manaure, and El Pajaro in the municipality of Manaure in La Guajira state reported an increased number of patients seeking care for acute febrile illnesses characterized by intense headache, muscle pain, prostration, and vomiting. Illness in some patients was complicated by convulsions and other neurologic symptoms.

As of September 28, a total of 8320 persons with acute febrile illness compatible with VEE had been treated at public hospitals and clinics in La Guajira, and large outbreaks had been reported from the towns of Manaure, Riohacha, El Pajaro, Mayapo, Uribia, and Meicao. Based on a random survey of 250 residents of Manaure, a recent history of acute illness compatible with VEE was present in 57% of respondents (Figure 2); 4% reported associated convulsions, and one person died (case-fatality rate=0.7%). All age groups were equally affected. In Manaure, the epidemic peaked on September 19, and malathion spraying was initiated on September 21.

In Riohacha, the state capitol, hospital visits for acute febrile illness increased steadily in September, reaching 143 visits on September 24 with no evidence of a decline. A similar pattern occurred in Uribia. Based on interviews and physical examinations of 23 inpatients at local hospitals on September 27–28, prominent manifestations included fever (100%); convulsions (98%); headache (56%); photophobia (56%); myalgias (56%); and chills, vomiting, and diarrhea (48% each). Ten associated deaths were reported statewide. Unidentified viral isolates have been recovered from four of 18 human blood samples submitted to the Colombian National Institute of Health.

FIGURE 2. Number of Venezuelan equine encephalitis cases estimated from a random household survey (n=250), by date of onset — Manaure,* Colombia, September 1–26, 1995



*Population 6283.

Venezuelan Equine Encephalitis — Continued

Because of a prolonged rainy season (the heaviest in 20 years in La Guajira), mosquito abundance has increased dramatically. *Aedes aegypti* house indices increased in August to 70% in Manaure and to 22% in Riohacha. Entomologic surveys in Manaure detected large numbers of *Psorophora confinnis* and *Ae. taeniorhynchus* breeding in estuarine waters in the town's vicinity. The equine population in La Guajira consists of approximately 70,000 unvaccinated horses, donkeys, and mules owned by native Wayuu people, who constitute approximately 35% of the inhabitants of Riohacha. Control measures instituted by the government of Colombia include vaccination of equines in La Guajira, restriction of equine movement from and within the state, large-scale application of insecticides, public education and community mobilization campaigns to eradicate mosquito breeding sites, issuance of guidelines on case-management and referral, and surveillance of humans and equines.

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Editorial Note: Major epizootics and concurrent epidemics of VEE have occurred periodically in northern areas of South America, resulting in hundreds of thousands of human and equine cases. The current epidemic is the largest in the region since 1962–1971, when outbreaks affected Colombia, Ecuador, Peru, Venezuela, all the countries of Central America (except Panama), Mexico, and Texas (*1,2*). No major outbreaks had been recognized since the outbreak that occurred on La Guajira peninsula in 1973, suggesting that epizootic viral strains (subtypes IAB and IC) had become extinct. However, based on recent molecular phylogenetic studies, these strains may have evolved from enzootic ID strains maintained in silent cycles of rodent-mosquito transmission. This hypothesis predicts that strains with epidemic and epizootic potential will continue to emerge periodically from enzootic reservoirs (*1,3,4*). Partial nucleotide sequencing and antigenic analysis of three human isolates from the current epidemic indicates they are related to the IC epizootic strain of VEE virus isolated during a large outbreak in Venezuela and Colombia during 1962–1964 (S. Weaver, University of Texas, and R. Ricco-Hesse, Yale University, personal communications, 1995) and to a strain isolated from a mosquito pool in Venezuela in 1983 (*1*).

Although conditions leading to the emergence of VEE epidemics have not been clearly defined, previous outbreaks also were associated with heavy rains and flooding in arid rural areas, especially during the dry season. During epidemics and epizootics, VEE virus is transmitted rapidly among equines and from equines to humans by a variety of mosquito species. Horses are the principal amplifying hosts in epidemic transmission because they develop and sustain high levels of viremia and attract large numbers of biting mosquitoes. Cases among humans generally occur 2 weeks after epizootic infections in horses, and epidemic transmission ceases after susceptible horses have been either infected or vaccinated. Because the total number of horses and other equines in South America has declined since the last major outbreaks in 1971, the current outbreak suggests a possible role of human and other animal infections in sustaining the epidemic cycle. VEE virus levels in human blood

Venezuelan Equine Encephalitis — Continued

are sufficiently high to infect mosquitoes, and virus has been isolated from the pharynx of ill persons, indicating the virus could be transmitted between humans by mosquitoes or by close direct contact (*5*).

The clinical features of cases in the current outbreaks are consistent with those reported in previous VEE epidemics in which neurologic symptoms developed in 4% of cases, primarily among children and the elderly (*6*). VEE infections during pregnancy may result in fetal infection and malformations. VEE outbreaks have the potential for substantial social impact: for example, during the 1967 outbreak in Colombia, an estimated 220,000 human cases immobilized villages and local clinics (*7*).

The Pan American Health Organization coordinates a surveillance system for equine encephalitis in the Americas and is assisting countries of Latin America and the Caribbean in strengthening their diagnostic capacity. Equine vaccination with the live attenuated TC-83 vaccine provides rapid immunity and, when combined with restriction of equine movements, may limit the spread of epizootics and prevent their emergence (*1*).

No commercially licensed human VEE vaccine is available. Persons who cannot defer travel to these areas should use insect repellents, stay in air-conditioned or well-screened accommodations when possible, and wear long-sleeved shirts and long pants. The incubation period for VEE is 2–5 days. Health-care providers who suspect VEE in ill returned travelers can refer clinical specimens through state health departments to CDC for diagnosis.

References

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Outbreak of Gastrointestinal Illness Associated with Consumption of Seaweed — Hawaii, 1994

Seaweed is frequently served as a side dish at meals in the Pacific Islands and is a common component in the diet of many persons living in the Pacific Rim. Seaweed is often harvested at beaches, gathered in nearshore waters, or purchased at local markets. It is served either raw or cooked and is commonly prepared with salt and/or other

Seaweed-Related Illness — Continued

spices and herbs (e.g., chili pepper, ginger, and garlic). Previous reports have documented a toxic illness associated with seaweed harvested in some locations in the Pacific (*1,2*). This report summarizes the investigation of an outbreak of acute gastrointestinal illness associated with consumption of seaweed during a picnic in Hawaii in September 1994.

On September 9, 1994, a 60-year-old woman contacted the Maui County Health Department (MCHD) to report a burning sensation in her mouth and throat that occurred 15 minutes after she tasted a seaweed ("ogo") preparation. The woman had received the seaweed from a friend on September 1 and had prepared the seaweed on September 2 by washing it, then boiling it in water for 1–2 minutes, and finally mixing it with vinegar, sugar, soy sauce, and sliced cucumbers. The seaweed mixture then was refrigerated. Approximately 4 hours after preparation, she tasted the mixture and, 15 minutes later, had onset of a sore throat and mouth, and headache. She was examined by a physician on September 3; a throat culture obtained during the visit was negative.

MCHD determined that the seaweed from which the woman's portion had come was to be served at a picnic on September 5 on the island of Hawaii. When contacted by the Hawaii County Health Department, some picnic attendees reported having had onset of nausea and diarrhea soon after eating at the picnic.

To assess the role of different foods as risk factors for illness, the Hawaii Department of Health (HDOH) surveyed all 13 picnic attendees. A questionnaire was administered by telephone to the attendees regarding menu items consumed, onset of illness, and symptoms. Menu items included poi, two types of fish (mamo and awe), beef stew, ogo (seaweed), salmon salad, steak, rice, tuna salad, chips, crackers, beer, soda, and water. A case was defined as onset of a burning sensation in the mouth or throat or two or more of the following symptoms: vomiting, diarrhea, nausea, or lethargy within 2 hours after eating food items from the picnic.

The seaweed had been prepared on September 4 by washing, removing debris, and cooking in boiling water. It was then mixed with codfish, vinegar, onion, soy sauce, and chili peppers. The woman who had prepared the seaweed and her husband had tasted it soon after preparation, and both noted a burning sensation in their throats that lasted for 4 hours. They attributed the burning sensation to an excessive amount of chili peppers. Before preparation, the seaweed had been stored in previously unused plastic bags and refrigerated.

Of the 13 persons who attended the picnic, eight were aged ≥18 years. Illness in seven (54%) attendees met the case definition, and onset occurred 15–90 minutes after eating the meal. All seven ill persons were adults, and five were males. Symptoms included diarrhea (71%), nausea (71%), vomiting (60%), and a burning sensation (57%), and the mean duration of gastrointestinal symptoms was 22 hours. None of the ill persons were examined by a physician.

The only foods statistically associated with risk for illness were seaweed (illness in seven of seven who consumed versus none of six who did not [relative risk (RR)= undefined]) and salmon salad (RR=undefined). Two of the seven persons who had consumed seaweed had eaten less than one serving (i.e., one serving spoon) and experienced only a burning sensation in the mouth and throat; in comparison, the five persons who ate one or more servings experienced gastrointestinal illness.

Seaweed-Related Illness — Continued

A leftover sample of the seaweed served at the picnic and another sample harvested from the same site were examined at the University of Hawaii for species identification and toxicity studies. The seaweed was identified as *Gracilaria coronopifolia*. It was rinsed thoroughly with fresh water and extracted with acetone. The toxicity of the crude extract was assessed by intraperitoneal injection into mice; the mice were observed for symptoms of toxicity. Manifestations of toxicity in the mice included diarrhea at lower dosages and death within 15 minutes at the most concentrated dosages. The compound that induced the most extreme signs of toxicity in the mice was isolated using high-performance liquid chromatography; however, the isolate was not identified.

Bacterial organisms were identified microscopically both on the surface and in the seaweed. These bacteria were cultured or isolated using 2% NaCl Heart Infusion Agar (DIFCO,* Detroit, Michigan). Colonies of two different species of *Pseudomonas* and *Vibrio* grew on the culture media. Each culture was then extracted, and the extracted fraction was subjected to the mouse-toxicity test. Mice injected with the extracted fraction from these bacteria exhibited transient weakness but no other signs of toxicity.

The seaweed had been harvested from a site in a bay on a northeast-facing shore in Maui County in water at a depth of 3–5 feet. Two fresh-water streams flow into the bay, and discharge from storm drains pours into one of the streams. In addition, the tides carry tree branches and other debris into the bay. The State Wastewater Management Division of the Hawaii Department of Health collects water samples from this area on a monthly basis but had not documented increased levels of fecal coliforms or any other potential pollutants during the period before the seaweed was harvested. There was no evidence the seaweed had been exposed to pesticides.

HDOH has notified physicians throughout the state about the potential for seaweed-induced toxicity and has requested that physicians report any cases to HDOH. Seaweed samples will be collected from the same site from which the original samples were obtained for toxin surveillance.

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Editorial Note: The investigation of this outbreak in Hawaii indicated that consumption of seaweed was associated with acute illness in picnic attendees. In addition to the epidemiologic findings, this conclusion was supported by the isolation of toxin that caused both similar illness and more severe illness in mice. The toxin most likely was elaborated by the seaweed itself or by a coexistent microorganism and probably was heat resistant because both samples of seaweed were boiled before consumption.

Although this outbreak was the first reported episode of seaweed-related illness in Hawaii, this problem has been reported previously in other areas in the Pacific Rim. For example, in 1991, a total of 13 persons became ill, and three of them died after eating seaweed harvested in Guam (*3*); the seaweed species was identified as *Gracilaria tsudai*, and manifestations included gastrointestinal illness, fever, wheezing, muscle fasciculations, and hypotension. In 1992, three persons had onset of illness after

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

Seaweed-Related Illness — Continued

eating seaweed harvested on a beach in California (*4*); the seaweed species implicated in that episode was *Grasilariopsis lemanaeformis*. In 1993, two persons became ill, and one of them died after eating *Gracilaria verrucosa* seaweed in Japan (*1*). In the episodes in both Guam and California, the implicated seaweed previously had not been known to develop toxicity.

Although the mechanism of development of toxicity in seaweed has not been clearly determined, findings of previous studies suggest that some species of seaweed may become toxic at the end of their reproductive cycle, and thereby exhibit a seasonal variation in toxin production (*2*). Other suggested mechanisms are that stress from over-harvesting may cause seaweed to begin elaborating toxin as a method of protection (*5*) and that environmental changes and increased pollution promote colonization of toxin-producing bacteria.

State and local health departments should inform persons who may eat seaweed that seaweed consumption can be associated with illness and that varieties previously consumed with safety may undergo changes that increase their potential for causing illness. Episodes of seaweed-related illness should be reported promptly to state and local health departments.

References

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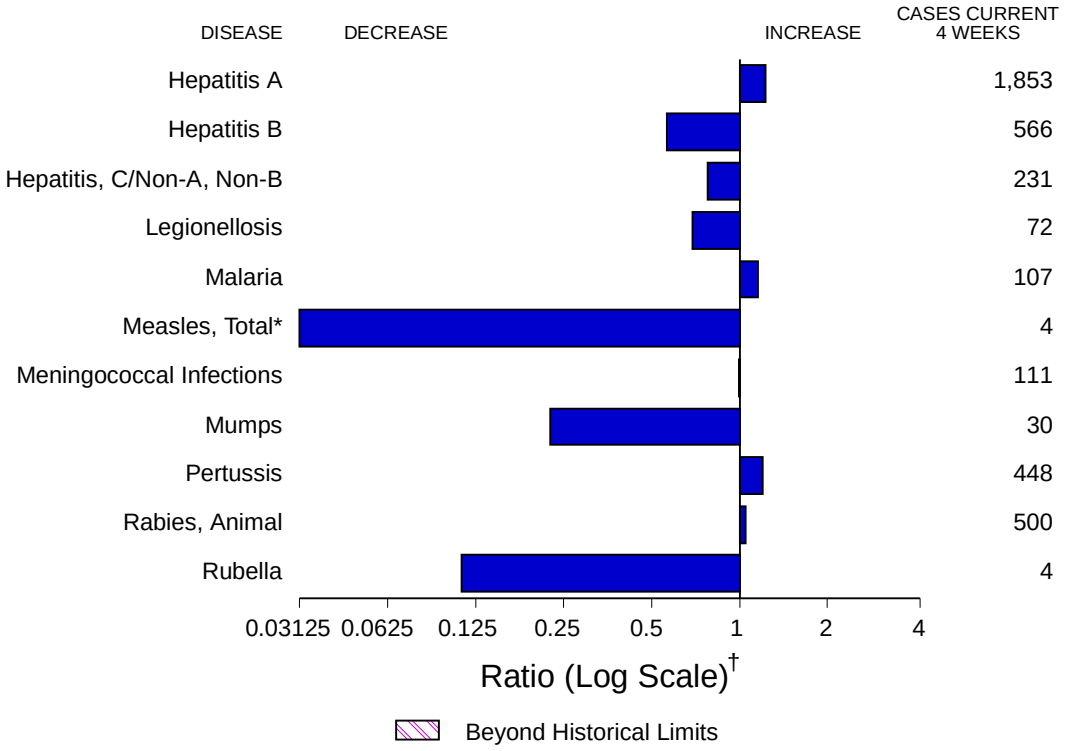
Acute Lower Respiratory Tract Illness in Illicit Drug Users — South Carolina, 1995

On July 31, 1995, the South Carolina Department of Health and Environmental Control was notified of a cluster of five patients with acute, severe lower respiratory illnesses among previously healthy residents of a small rural community in Berkeley County (1990 population: 128,776). All five patients were users of illicit drugs. This report summarizes the preliminary findings of an investigation initiated to describe the clinical features and epidemiology of this syndrome and to determine an etiology.

Based on information about the five cases obtained from interviews with the patients and reviews of records, a case was defined as an unexplained acute, severe respiratory illness in a previously healthy person aged <65 years characterized by shortness of breath and/or pleuritic pain with onset of symptoms during July 15–31. One additional case was identified by contacting local physicians, intensive-care units, and pulmonary and infectious disease specialists. No cases of similar acute respiratory illness were noted in household contacts of patients.

(Continued on page 733)

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending September 30, 1995, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

†Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending September 30, 1995 (39th Week)

	Cum. 1995		Cum. 1995
Anthrax	-	Psittacosis	50
Brucellosis	69	Rabies, human	1
Cholera	13	Rocky Mountain Spotted Fever	444
Congenital rubella syndrome	4	Syphilis, congenital, age < 1 year†	280
Diphtheria	-	Tetanus	22
*Haemophilus influenzae**	875	Toxic shock syndrome	140
Hansen Disease	101	Trichinosis	24
Plague	6	Typhoid fever	236
Poliomyelitis, Paralytic	-		

*Of 856 cases of known age, 204 (24%) were reported among children less than 5 years of age.
†Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through second quarter 1995.
-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending September 30, 1995, and October 1, 1994 (39th Week)

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		C/NA,NB			
	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	54,704	257,118	302,033	20,137	18,077	7,289	8,571	3,173	3,124	924	1,176
NEW ENGLAND	2,653	4,313	6,340	211	223	163	259	89	116	23	58
Maine	81	63	66	23	20	7	11	-	-	5	4
N.H.	77	89	82	8	16	18	20	12	9	1	-
Vt.	30	46	23	5	8	1	6	1	12	-	-
Mass.	1,137	2,140	2,368	88	83	63	150	71	75	14	38
R.I.	192	400	355	25	19	8	6	5	20	3	16
Conn.	1,136	1,575	3,446	62	77	66	66	-	-	N	N
MID. ATLANTIC	14,696	25,277	34,101	1,186	1,278	909	1,113	311	362	146	181
Upstate N.Y.	1,736	3,846	8,044	314	438	296	293	167	174	39	44
N.Y. City	7,624	8,598	12,893	566	483	279	249	1	1	3	5
N.J.	3,575	3,256	3,922	140	228	190	287	108	157	21	34
Pa.	1,761	9,577	9,242	166	129	144	284	35	30	83	98
E.N. CENTRAL	4,122	56,160	60,894	2,188	1,793	709	882	210	261	247	338
Ohio	852	16,430	16,437	1,425	652	85	129	8	18	124	159
Ind.	429	6,182	6,511	132	297	179	161	6	8	59	36
Ill.	1,736	15,964	18,586	217	450	94	230	33	71	13	31
Mich.	825	13,285	13,541	279	215	310	287	163	164	24	59
Wis.	280	4,299	5,819	135	179	41	75	-	-	27	53
W.N. CENTRAL	1,266	14,719	16,922	1,417	910	454	499	95	69	90	79
Minn.	285	2,133	2,463	144	168	44	46	2	14	5	2
Iowa	71	1,151	1,094	50	47	33	24	11	9	17	28
Mo.	564	8,493	9,341	1,014	464	316	374	55	18	44	26
N. Dak.	6	20	32	23	5	4	-	8	1	4	4
S. Dak.	15	127	166	49	31	2	2	1	-	3	1
Nebr.	84	697	1,030	34	104	22	24	6	11	10	13
Kans.	241	2,098	2,796	103	91	33	29	12	16	7	5
S. ATLANTIC	14,155	75,291	80,057	938	936	1,043	1,568	251	335	167	285
Del.	241	1,670	1,451	7	21	2	12	1	1	2	31
Md.	2,250	7,471	14,100	166	136	198	261	4	17	27	65
D.C.	827	3,483	5,411	19	17	15	40	-	1	4	6
Va.	1,082	7,962	9,983	159	133	89	101	14	20	15	6
W. Va.	86	507	603	17	15	41	31	43	24	4	3
N.C.	816	18,048	20,525	88	100	224	216	46	50	31	19
S.C.	766	9,333	9,929	38	31	37	25	17	7	29	12
Ga.	1,784	11,257	U	55	26	63	516	15	171	23	100
Fla.	6,303	15,560	18,055	389	457	374	366	111	44	32	43
E.S. CENTRAL	1,763	31,492	35,469	1,193	474	624	887	753	716	43	71
Ky.	221	3,684	3,736	32	124	52	66	22	23	10	8
Tenn.	709	10,215	11,460	956	212	488	761	729	678	24	36
Ala.	484	12,798	12,079	69	77	84	60	2	15	6	12
Miss.	349	4,795	8,194	136	61	-	-	-	-	3	15
W.S. CENTRAL	4,691	23,326	36,232	3,018	2,340	1,245	957	508	249	12	35
Ark.	209	2,350	5,075	343	151	36	22	4	7	1	6
La.	785	8,475	9,072	94	120	152	133	132	139	2	12
Okla.	206	1,496	3,696	661	228	376	105	323	46	3	11
Tex.	3,491	11,005	18,389	1,920	1,841	681	697	49	57	6	6
MOUNTAIN	1,716	6,563	7,566	3,006	3,535	586	503	341	348	88	73
Mont.	17	55	71	100	18	19	18	12	10	4	14
Idaho	38	93	68	244	266	64	67	41	64	2	1
Wyo.	12	42	66	90	23	16	21	137	128	8	4
Colo.	523	2,176	2,632	409	388	93	78	54	58	33	15
N. Mex.	137	763	760	620	857	223	161	39	43	4	3
Ariz.	545	2,522	2,474	869	1,395	90	53	35	17	9	9
Utah	112	131	195	555	404	54	60	9	15	13	6
Nev.	332	781	1,300	119	184	27	45	14	13	15	21
PACIFIC	9,642	19,977	24,452	6,980	6,588	1,556	1,903	615	668	108	56
Wash.	717	1,957	2,214	593	850	137	177	152	193	20	10
Oreg.	347	224	764	1,486	764	62	117	29	32	-	-
Calif.	8,328	16,821	20,224	4,738	4,758	1,335	1,573	395	438	83	44
Alaska	60	544	695	40	176	9	12	1	-	-	-
Hawaii	190	431	555	123	40	13	24	38	5	5	2
Guam	-	58	97	2	22	1	4	-	-	1	1
P.R.	1,925	446	382	81	47	452	270	177	133	-	-
V.I.	27	6	25	-	3	2	7	-	1	-	-
Amer. Samoa	-	19	25	6	8	-	-	-	-	-	-
C.N.M.I.	-	23	41	15	6	7	1	-	-	-	-

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

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

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending September 30, 1995, and October 1, 1994 (39th Week)

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps	
					Indigenous		Imported*		Total					
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	6,197	9,264	883	807	-	241	1	24	265	860	2,275	2,083	603	1,097
NEW ENGLAND	1,559	2,185	37	59	-	6	1	2	8	27	104	100	10	19
Maine	16	18	5	4	-	-	-	-	-	5	8	19	4	3
N.H.	19	22	1	3	-	-	-	-	-	1	19	8	1	4
Vt.	8	14	1	3	-	-	-	-	-	3	8	2	-	-
Mass.	141	145	12	27	-	1	-	1	2	7	37	44	2	3
R.I.	279	312	4	7	-	5	-	-	5	7	-	-	1	2
Conn.	1,096	1,674	14	15	-	-	1	1	1	4	32	27	2	7
MID. ATLANTIC	3,750	5,549	236	160	-	7	-	5	12	212	269	223	93	93
Upstate N.Y.	1,904	3,560	52	43	-	1	-	-	1	17	82	73	24	27
N.Y. City	153	14	117	58	-	2	-	3	5	14	35	28	13	7
N.J.	770	1,074	50	35	-	4	-	2	6	173	74	49	12	13
Pa.	923	901	17	24	-	-	-	-	-	8	78	73	44	46
E.N. CENTRAL	64	463	83	88	-	7	-	3	10	102	315	307	104	186
Ohio	42	32	9	14	-	1	-	-	1	17	92	88	33	50
Ind.	14	15	14	12	-	-	-	-	-	1	59	40	4	7
Ill.	3	23	32	40	-	-	-	2	2	56	71	99	31	84
Mich.	5	5	15	19	-	4	-	1	5	25	56	46	36	35
Wis.	-	388	13	3	-	2	-	-	2	3	37	34	-	10
W.N. CENTRAL	180	214	19	35	-	2	-	-	2	170	149	134	30	56
Minn.	117	106	4	11	-	-	-	-	-	-	24	12	2	4
Iowa	10	13	1	5	-	-	-	-	-	7	26	18	-	13
Mo.	34	84	6	11	-	1	-	-	1	160	61	65	22	34
N. Dak.	-	-	1	1	-	-	-	-	-	-	1	1	1	4
S. Dak.	-	-	2	-	-	-	-	-	-	-	5	8	-	-
Nebr.	1	3	3	4	-	-	-	-	-	2	12	10	4	1
Kans.	18	8	2	3	-	1	-	-	1	1	20	20	1	-
S. ATLANTIC	431	648	187	162	-	10	-	1	11	62	409	305	88	157
Del.	7	101	1	3	-	-	-	-	-	-	6	5	-	-
Md.	267	209	52	57	-	-	-	1	1	4	30	26	20	44
D.C.	1	6	15	12	-	-	-	-	-	-	3	4	-	-
Va.	47	116	41	23	-	-	-	-	-	3	51	55	20	38
W. Va.	22	17	2	-	-	-	-	-	-	37	8	12	-	3
N.C.	47	69	15	9	-	-	-	-	-	3	64	42	16	35
S.C.	16	7	1	4	-	-	-	-	-	-	53	21	9	7
Ga.	12	109	22	29	-	2	-	-	2	3	80	66	8	8
Fla.	12	14	38	25	-	8	-	-	8	12	114	74	15	22
E.S. CENTRAL	40	37	20	29	-	-	-	-	-	28	144	148	13	18
Ky.	8	21	2	10	-	-	-	-	-	-	46	33	-	-
Tenn.	20	10	7	9	-	-	-	-	-	28	37	28	-	6
Ala.	7	6	8	9	-	-	-	-	-	-	32	57	4	5
Miss.	5	-	3	1	-	-	-	-	-	-	29	30	9	7
W.S. CENTRAL	84	97	39	36	-	21	-	3	24	16	281	247	39	196
Ark.	5	8	3	3	-	2	-	-	2	1	22	38	3	5
La.	4	1	4	6	-	17	-	1	18	1	39	31	9	23
Okla.	36	54	1	4	U	-	U	-	-	-	26	24	-	23
Tex.	39	34	31	23	-	2	-	2	4	14	194	154	27	145
MOUNTAIN	7	12	46	25	-	67	-	1	68	163	158	140	24	132
Mont.	-	-	3	-	-	-	-	-	-	-	2	6	1	-
Idaho	-	3	1	2	-	-	-	-	-	-	7	15	3	7
Wyo.	3	3	-	1	-	-	-	-	-	-	7	6	-	2
Colo.	-	1	22	11	-	26	-	-	26	19	42	27	1	3
N. Mex.	1	3	4	3	-	30	-	1	31	-	31	13	N	N
Ariz.	-	-	7	2	-	10	-	-	10	1	48	48	2	94
Utah	1	1	5	4	-	-	-	-	-	134	14	18	11	14
Nev.	2	1	4	2	-	1	-	-	1	9	7	7	6	12
PACIFIC	82	59	216	213	-	121	-	9	130	80	446	479	202	240
Wash.	10	1	16	23	-	16	-	4	20	3	73	75	10	14
Oreg.	4	6	9	14	-	-	-	1	1	2	70	106	N	N
Calif.	68	52	179	162	-	105	-	3	108	61	291	291	174	207
Alaska	-	-	2	2	-	-	-	-	-	10	8	2	13	3
Hawaii	-	-	10	12	-	-	-	1	1	4	4	5	5	16
Guam	-	-	-	-	U	-	U	-	-	228	3	-	3	6
P.R.	-	-	1	4	-	11	-	-	11	11	23	6	2	2
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	2	4
Amer. Samoa	-	-	-	-	U	-	U	-	-	-	-	-	-	2
C.N.M.I.	-	-	1	1	U	-	U	-	-	29	-	-	-	2

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

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending September 30, 1995, and October 1, 1994 (39th Week)

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	90	2,849	2,924	1	117	208	11,213	16,003	14,466	16,433	5,298	5,764
NEW ENGLAND	22	379	341	-	34	128	139	169	380	379	1,195	1,415
Maine	1	27	15	-	1	-	2	4	12	23	39	-
N.H.	3	31	66	-	1	-	1	4	15	13	120	118
Vt.	-	59	38	-	-	-	-	-	3	6	141	107
Mass.	8	238	190	-	7	124	46	73	208	194	360	541
R.I.	-	2	5	-	-	2	3	12	38	35	260	40
Conn.	10	22	27	-	25	2	87	76	104	108	275	609
MID. ATLANTIC	12	250	458	-	12	6	626	1,070	3,011	3,356	995	1,529
Upstate N.Y.	9	126	191	-	4	5	43	143	368	424	367	1,136
N.Y. City	-	21	84	-	7	-	287	471	1,600	1,944	-	-
N.J.	-	13	12	-	1	1	129	172	573	577	275	214
Pa.	3	90	171	-	-	-	167	284	470	411	353	179
E.N. CENTRAL	10	270	432	-	4	9	1,981	2,377	1,442	1,564	68	52
Ohio	3	111	116	-	-	-	664	905	201	261	10	4
Ind.	1	19	47	-	-	-	214	194	176	142	12	12
Ill.	4	67	89	-	1	1	743	802	711	777	3	17
Mich.	2	61	47	-	3	8	228	229	299	338	35	11
Wis.	-	12	133	-	-	-	132	247	55	46	8	8
W.N. CENTRAL	-	180	132	-	-	2	596	935	438	432	265	167
Minn.	-	88	51	-	-	-	34	37	100	97	19	14
Iowa	-	-	9	-	-	-	37	49	48	44	90	68
Mo.	-	43	35	-	-	2	490	796	166	194	19	18
N. Dak.	-	8	4	-	-	-	-	1	3	8	24	10
S. Dak.	-	11	15	-	-	-	-	1	20	21	72	29
Nebr.	-	8	8	-	-	-	9	11	20	16	5	-
Kans.	-	22	10	-	-	-	26	40	81	52	36	28
S. ATLANTIC	28	276	257	-	26	15	2,864	4,172	2,503	2,975	1,625	1,533
Del.	-	10	2	-	-	-	11	22	42	32	74	44
Md.	1	28	58	-	-	-	137	229	241	240	265	419
D.C.	-	5	7	-	-	-	84	172	82	95	11	2
Va.	-	15	30	-	-	-	476	614	167	255	320	313
W. Va.	-	-	4	-	-	-	9	8	56	61	94	61
N.C.	26	110	58	-	1	-	862	1,292	333	366	366	130
S.C.	-	20	12	-	1	-	456	622	234	287	100	142
Ga.	-	24	24	-	1	2	544	635	323	526	204	296
Fla.	1	64	62	-	23	13	285	578	1,025	1,113	191	126
E.S. CENTRAL	-	253	119	-	-	-	2,908	2,917	1,133	1,148	222	156
Ky.	-	11	58	-	-	-	156	156	232	242	23	19
Tenn.	-	204	18	-	-	-	658	796	294	378	72	34
Ala.	-	35	31	-	-	-	507	522	319	314	118	99
Miss.	-	3	12	N	N	N	1,587	1,443	288	214	9	4
W.S. CENTRAL	4	227	151	-	7	13	1,426	3,465	1,743	2,079	527	517
Ark.	-	28	22	-	-	-	82	388	113	204	21	25
La.	2	15	10	-	-	-	774	1,346	6	11	25	55
Okla.	U	14	22	U	-	4	54	123	146	193	31	30
Tex.	2	170	97	-	7	9	516	1,608	1,478	1,671	450	407
MOUNTAIN	13	421	377	-	5	5	201	206	464	421	145	123
Mont.	-	3	6	-	-	-	4	3	10	9	41	15
Idaho	1	81	44	-	-	-	-	1	12	11	3	3
Wyo.	-	1	-	-	1	-	4	-	2	7	22	17
Colo.	9	77	185	-	-	-	95	107	37	51	9	11
N. Mex.	3	86	20	-	-	-	33	18	64	43	5	6
Ariz.	-	149	97	-	3	-	33	39	234	168	45	51
Utah	-	19	23	-	1	4	4	10	24	38	14	12
Nev.	-	5	2	-	-	1	28	28	81	94	6	8
PACIFIC	1	593	657	1	29	30	472	692	3,352	4,079	256	272
Wash.	-	206	91	-	2	-	11	29	181	207	5	15
Oreg.	1	27	86	-	1	4	7	30	33	90	-	9
Calif.	-	319	465	1	23	22	453	627	2,951	3,543	247	215
Alaska	-	-	-	-	-	-	1	3	59	51	4	33
Hawaii	-	41	15	-	3	4	-	3	128	188	-	-
Guam	U	-	2	U	-	1	5	3	35	62	-	-
P.R.	-	12	2	-	-	-	231	242	165	150	44	67
V.I.	U	-	-	U	-	-	2	25	-	-	-	-
Amer. Samoa	U	-	1	U	-	-	-	1	3	4	-	-
C.N.M.I.	U	-	-	U	-	-	4	1	13	25	-	-

U: Unavailable -: no reported cases

TABLE III. Deaths in 121 U.S. cities,* week ending September 30, 1995 (39th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	569	389	94	58	13	15	31
Boston, Mass.	141	84	33	15	4	5	7
Bridgeport, Conn.	32	17	5	5	3	2	-
Cambridge, Mass.	19	15	1	2	-	1	1
Fall River, Mass.	25	18	7	-	-	-	-
Hartford, Conn.	46	31	7	6	2	-	3
Lowell, Mass.	23	18	3	2	-	-	1
Lynn, Mass.	19	15	3	1	-	-	-
New Bedford, Mass.	28	21	3	2	-	2	1
New Haven, Conn.	29	19	5	2	2	1	-
Providence, R.I.	54	36	9	7	1	1	5
Somerville, Mass.	5	5	-	-	-	-	-
Springfield, Mass.	49	36	4	8	-	1	6
Waterbury, Conn.	42	34	4	3	-	1	3
Worcester, Mass.	57	40	10	5	1	1	4
MID. ATLANTIC	2,426	1,629	410	302	49	36	124
Albany, N.Y.	52	43	4	3	1	1	4
Allentown, Pa.	21	15	6	-	-	-	1
Buffalo, N.Y.	113	80	16	13	4	-	4
Camden, N.J.	28	17	4	6	1	-	2
Elizabeth, N.J.	21	16	4	1	-	-	1
Erie, Pa.§	42	35	3	3	1	-	2
Jersey City, N.J.	31	17	12	1	1	-	-
New York City, N.Y.	1,243	808	212	185	24	14	49
Newark, N.J.	59	28	16	13	2	-	2
Paterson, N.J.	U	U	U	U	U	U	U
Philadelphia, Pa.	398	257	71	48	8	14	20
Pittsburgh, Pa.§	84	64	15	1	2	2	6
Reading, Pa.	15	11	4	-	-	-	2
Rochester, N.Y.	116	89	13	8	5	1	15
Schenectady, N.Y.	17	15	2	-	-	-	1
Scranton, Pa.§	23	18	2	3	-	-	-
Syracuse, N.Y.	79	59	12	5	-	3	5
Trenton, N.J.	36	20	5	11	-	-	4
Utica, N.Y.	23	16	7	-	-	-	2
Yonkers, N.Y.	25	21	2	1	-	1	4
E.N. CENTRAL	2,306	1,486	457	213	66	66	124
Akron, Ohio	36	23	9	2	1	1	-
Canton, Ohio	44	33	9	2	-	-	1
Chicago, Ill.	495	267	106	76	22	22	21
Cincinnati, Ohio	192	132	32	20	3	5	10
Cleveland, Ohio	153	93	32	15	7	6	3
Columbus, Ohio	184	117	49	11	4	3	20
Dayton, Ohio	126	91	27	3	3	2	8
Detroit, Mich.	227	129	55	27	10	6	7
Evansville, Ind.	45	31	10	1	1	2	2
Fort Wayne, Ind.	62	41	5	-	-	-	-
Gary, Ind.	8	6	2	-	-	-	-
Grand Rapids, Mich.	52	39	10	1	1	1	2
Indianapolis, Ind.	242	160	44	22	5	11	12
Madison, Wis.	55	43	7	3	-	2	2
Milwaukee, Wis.	119	93	12	12	1	1	12
Peoria, Ill.	39	21	12	2	2	2	3
Rockford, Ill.	47	30	8	8	1	-	9
South Bend, Ind.	37	32	2	1	2	-	5
Toledo, Ohio	84	58	16	7	1	2	6
Youngstown, Ohio	59	47	10	-	2	-	1
W.N. CENTRAL	733	519	105	59	25	12	36
Des Moines, Iowa	52	32	15	4	1	-	4
Duluth, Minn.	38	31	3	4	-	-	1
Kansas City, Kans.	30	24	1	3	2	-	-
Kansas City, Mo.	107	60	16	10	5	3	6
Lincoln, Nebr.	33	27	4	1	-	1	2
Minneapolis, Minn.	140	106	19	8	3	4	13
Omaha, Nebr.	83	61	12	7	3	-	5
St. Louis, Mo.	115	82	15	12	6	-	2
St. Paul, Minn.	52	46	2	2	-	2	2
Wichita, Kans.	83	50	18	8	5	2	1

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,394	841	301	180	43	29	70
Atlanta, Ga.	178	104	38	24	6	6	6
Baltimore, Md.	280	157	59	51	6	7	25
Charlotte, N.C.	88	55	16	14	2	1	1
Jacksonville, Fla.	121	76	25	17	3	-	5
Miami, Fla.	135	79	35	17	2	2	1
Norfolk, Va.	35	24	4	3	1	3	2
Richmond, Va.	89	57	22	3	3	4	2
Savannah, Ga.	62	46	13	-	3	-	6
St. Petersburg, Fla.	51	38	7	4	1	1	3
Tampa, Fla.	156	107	29	10	6	4	14
Washington, D.C.	192	92	53	36	10	1	5
Wilmington, Del.	7	6	-	1	-	-	-
E.S. CENTRAL	815	532	168	72	25	17	55
Birmingham, Ala.	139	79	31	20	6	2	4
Chattanooga, Tenn.	77	53	19	2	1	2	5
Knoxville, Tenn.	70	39	20	7	3	1	7
Lexington, Ky.	86	54	24	2	2	4	6
Memphis, Tenn.	189	126	34	19	5	5	15
Mobile, Ala.	107	83	17	6	1	-	5
Montgomery, Ala.	41	31	6	3	1	-	3
Nashville, Tenn.	106	67	17	13	6	3	10
W.S. CENTRAL	1,345	853	293	141	25	33	86
Austin, Tex.	70	51	8	10	-	1	2
Baton Rouge, La.	46	34	6	6	-	-	3
Corpus Christi, Tex.	49	32	12	2	1	2	6
Dallas, Tex.	188	106	42	25	9	6	5
El Paso, Tex.	82	52	22	4	2	2	7
Ft. Worth, Tex.	95	63	12	17	2	1	9
Houston, Tex.	378	243	87	38	5	5	29
Little Rock, Ark.	66	39	18	5	1	3	5
New Orleans, La.	83	46	22	10	2	3	-
San Antonio, Tex.	172	115	39	13	2	3	14
Shreveport, La.	32	21	5	4	-	2	5
Tulsa, Okla.	84	51	20	7	1	5	1
MOUNTAIN	815	528	165	76	30	14	47
Albuquerque, N.M.	130	87	26	10	5	2	2
Colo. Springs, Colo.	48	29	9	8	1	1	3
Denver, Colo.	111	71	24	14	-	2	11
Las Vegas, Nev.	138	89	36	10	2	1	8
Ogden, Utah	21	17	-	3	-	1	2
Phoenix, Ariz.	139	84	26	15	10	2	7
Pueblo, Colo.	30	21	5	4	-	-	2
Salt Lake City, Utah	78	44	23	3	6	2	7
Tucson, Ariz.	120	86	16	9	6	3	5
PACIFIC	1,624	1,057	314	164	49	39	127
Berkeley, Calif.	18	9	3	6	-	-	-
Fresno, Calif.	90	51	23	5	3	8	5
Glendale, Calif.	14	12	2	-	-	-	-
Honolulu, Hawaii	79	60	8	9	1	1	17
Long Beach, Calif.	81	48	14	12	1	6	11
Los Angeles, Calif.	239	143	49	31	15	-	11
Pasadena, Calif.	24	16	7	1	-	-	6
Portland, Oreg.	124	80	28	6	6	4	6
Sacramento, Calif.	187	111	49	18	4	5	18
San Diego, Calif.	149	105	25	11	5	3	15
San Francisco, Calif.	154	89	38	22	3	2	10
San Jose, Calif.	163	113	22	16	5	7	14
Santa Cruz, Calif.	20	10	5	4	1	-	-
Seattle, Wash.	142	105	20	13	3	1	7
Spokane, Wash.	43	31	6	5	1	-	5
Tacoma, Wash.	97	74	15	5	1	2	2
TOTAL	12,027¶	7,834	2,307	1,265	325	261	700

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.
U: Unavailable -: no reported cases

Lower Respiratory Tract Illness — Continued

Five of the six case-patients were male; patients ranged in age from 30 to 37 years. Five resided in Berkeley County and one in adjacent Charleston County. All had onset of symptoms during July 19–23 and reportedly had recently used illicit drugs. Five had been hospitalized. Predominant clinical features included nonproductive cough, fever (maximum: 103 F [39.4 C]), pleuritic chest pain, and progressively severe shortness of breath. Laboratory findings included a polymorphonuclear leukocytosis (range: 9100 mm^3–23,600 mm^3) in all six patients and severe hypoxia (PO_2 range: 49–81) in five. All patients had bibasilar or diffuse pulmonary infiltrates on chest radiographs. Of the five patients who were hospitalized, three developed respiratory failure within 1–4 days of admission and within 7–10 days of onset of symptoms; two died.

Diagnostic studies included sputum gram stain and cultures, blood cultures, serologic tests, and pathologic examination of tissue obtained by open lung biopsy or postmortem. These tests were negative for common bacterial pathogens and for *Mycoplasma* sp*, Chlamydia* sp, *Legionella* sp, *Pneumocystis carinii*, *Mycobacterium tuberculosis*, human immunodeficiency virus, respiratory syncytial virus, cytomegalovirus, adenoviruses, Epstein-Barr virus, and influenza virus. Fungal cultures of sputum from the two deceased patients and open lung biopsy from another were positive for molds believed to be contaminants; final identification is pending. Histopathologic analysis of lung tissue from the two deceased patients indicated diffuse alveolar damage with microemboli and minimal inflammatory cell infiltrate. Tissue from the open lung biopsy of the third patient indicated severe organizing fibrinous pneumonia with bronchiolitis obliterans and diffuse alveolar damage. Analyses of blood (five patients) and lung tissue (three patients) specimens and of samples taken from drug paraphernalia (i.e., homemade "pipes" of one patient) were negative for potential toxins.

Although interviews with patients, relatives, and acquaintances suggested several potential exposures (e.g., rodents and herbicides), the only exposure common to all patients was nonparenteral use of drugs during the week before onset of symptoms. Five reported use of crack cocaine and one reported smoking marijuana. Several of the patients were acquainted; however, investigation has not detected a single event attended by all the patients or a common source for the crack cocaine. The ongoing investigation includes following up all possible drug-related contacts of the patients and continued surveillance.

Reported by: L Lettau, MD, S Miller, MD, D Handshoe, MD, J Chambers, MD, Trident Health District, Charleston; L Bell, MD, E Brenner, MD, J Gibson, MD, State Epidemiologist, South Carolina Dept of Health and Environmental Control. Div of Environmental Health and Hazard Effects, National Center for Environmental Health; Div of Field Epidemiology, Epidemiology Program Office, CDC.

Editorial Note: The clinical features of the cluster of cases of acute lower respiratory illness in South Carolina are similar to those reported previously in crack cocaine users who have sustained inhalational injuries. These cases have been characterized by a variety of clinical syndromes including pulmonary edema, interstitial pneumonitis, obliterative bronchitis, and pulmonary hemorrhage (*1–6*). However, the cluster of cases in South Carolina is the first known outbreak of acute, severe respiratory tract illnesses associated with crack cocaine. Potential explanations for the cases in South Carolina include an idiosyncratic reaction to crack cocaine or the effects of a contaminant or adulterant introduced during the preparation or smoking of the crack.

Lower Respiratory Tract Illness — Continued

The temporal and geographic clustering of the cases and the similarity of their clinical features suggest a common exposure to a unique yet unidentified toxin or microbiologic agent associated with inhalational drug abuse. Cases of similar severe illnesses should be reported to the Division of Disease Control, South Carolina Department of Health and Environmental Control, telephone (803) 737-4165.

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Patterns of Homicide — Cali, Colombia, 1993–1994

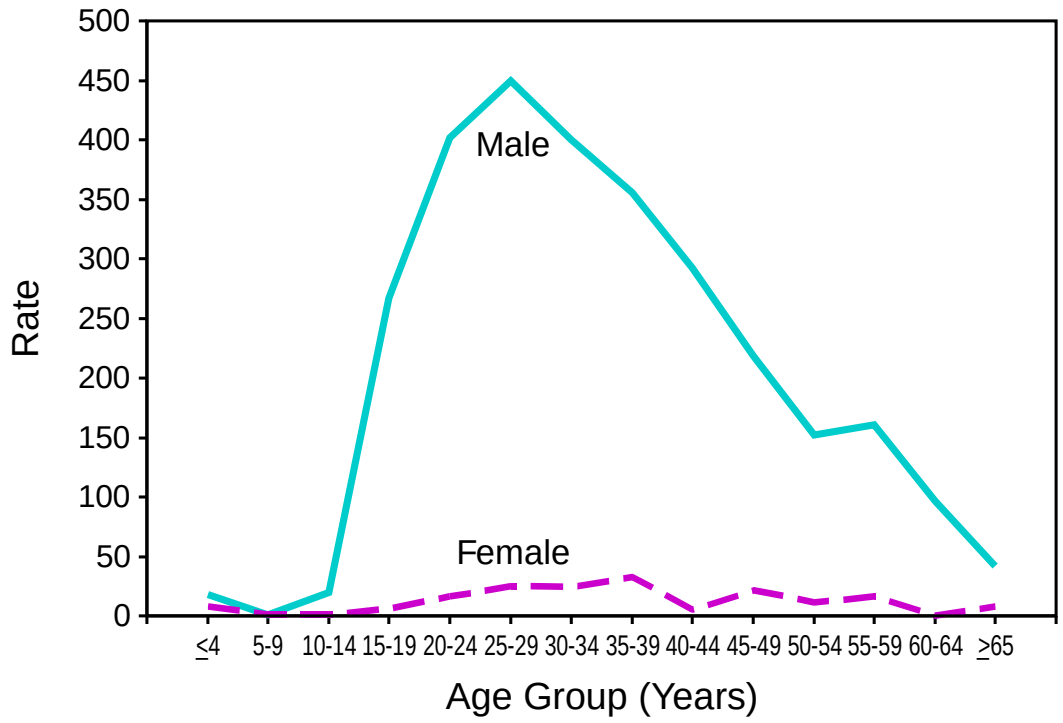
In Colombia, as in the United States, homicide occurs disproportionately among urban residents (*1,2*). Homicide rates in the city of Cali, Colombia (1994 population: 1,776,436), increased fivefold from 1985 through 1992, reaching levels of 100 per 100,000 persons. Because of this increase, in 1992 the city of Cali established the Development, Security, and Peace Program (DESEPAZ) to implement a series of strategies to prevent violence and improve security among the residents of Cali. An important element of this program was the establishment of a surveillance system to enable characterization of patterns and determinants of homicide to provide information to decision makers for formulating policies and programs. This report summarizes findings from this system for January 1993–May 1994.

Data about homicide are collected daily and reviewed weekly by a committee with representatives from the police department, the public health service, the district attorney's office, the ombudsman's office, the National Institute of Legal Medicine and Forensic Sciences, and the department of transportation, under the coordination of an epidemiologist assigned by the mayor's office (*3*). The list of cases is developed by comparing reports from the different sources represented on the committee. Tabulation and mapping of homicides are distributed weekly to the participating groups and to the news media.

In 1993, a total of 1829 homicides occurred in Cali, representing a crude rate of 104 homicides per 100,000 residents. In 1994, a total of 866 homicides occurred during January–May, compared with 625 for the same 5-month period in 1993. In 1993, age group-specific rates were highest among men aged 25–29 years (450 per 100,000) (Figure 1). Overall, the risk for homicide among males was 16-fold higher than that among females (209 per 100,000 and 13 per 100,000, respectively).

Homicide — Continued

FIGURE 1. Rate* of homicide, by age group and sex — Cali, Colombia, 1993



*Per 100,000 population.

Homicides were clustered in specific areas of the city: more than one half (54%) occurred in 59 neighborhoods in which 37% of the population resided. Homicide rates varied inversely with the socioeconomic status of the neighborhood of residence of victims and was greatest in three areas: an inner-city location near downtown Cali (rate: 254 per 100,000), a large area of immigrant settlements on the east side (rate: 245 per 100,000), and an area on the west side of the city (rate: 167 per 100,000). In most (89%) cases, homicides occurred in the same neighborhood in which the victim resided.

Of the 2695 total homicides during January 1993–May 1994, for 2461 (91%) no suspect was charged with the murder. For 641 (24%) of all homicides, the suspected perpetrator was identified as a "hit man" (i.e., a hired assassin) (458 [71%]), gang member (91 [14%]), or a relative/acquaintance (62 [10%]). The circumstance was determined for 835 (31%) homicides; of these, the most frequently cited categories were assaults (309 [37%]) and brawls (261 [31%]). Most (2544 [94%]) homicides occurred in streets or other public places; 6% occurred in homes or other residential settings. A total of 2134 (79%) homicides were committed using firearms. During 1994, blood alcohol concentration (BAC) was determined for 98% of the decedents; the BAC was >0.15 g/dL in 23% of the persons.

Homicides occurred more commonly (43%) during weekend days (Friday, Saturday, and Sunday)—especially during weekends coinciding with biweekly paydays. The hour of death was known for 2631 homicides; of these, 51% occurred between 9 p.m. and 6 a.m.

Homicide — Continued

Reported by: V Espitia, MS, Office for the Epidemiology of Violence, Municipality of Cali; R Guerrero, MD, Pan American Health Organization, Cali, Colombia. A Concha, MD, National Center for Injury Surveillance and Research; C Sanchez, MD, VM Cardenas, MD, Colombian Field Epidemiology Training Program, National Institute of Health. Div of Violence Prevention, National Center for Injury Prevention and Control, CDC.

Editorial Note: The data summarized in this report are from the first population-based homicide surveillance system established in Latin America. These findings are being used to develop and evaluate the policies and programs of DESEPAZ, which include efforts to enhance public security by enforcing state and city regulations and using the Mayor's office to issue decrees and laws that further enhance security (*4*). For example, in response to the relation between homicide and alcohol use, the mayor restricted the hours during which alcoholic beverages could be sold. Similarly, the high proportion of homicides committed with guns prompted institution of prohibitions on carrying guns in public during high-risk weekends, holidays, and election days. In addition, the city initiated efforts to educate members of the community through the news media, schools, and families about resolving conflicts without violence.

To address homicide in areas of the city where the risk has been highest and the socioeconomic status of residents lowest, social and economic development projects are being implemented to provide housing, primary health care, and job opportunities for residents, especially persons in high-risk groups (e.g., prostitutes, street children, and members of youth gangs). Other actions include improving the quality of the relationship between the police and the community, the modernization of the judicial system, and the promotion and protection of human rights. The homicide surveillance data are being used to evaluate the impact of these policies and programs on homicide rates.

Violence is a problem that affects urban areas throughout the Americas. In 1991, the average homicide rate for the 15 largest cities in Colombia (excluding Medellin [rate: 435 per 100,000]) was 61 per 100,000 (*1*). In comparison, in the United States in 1991, the crude homicide rate was 32 per 100,000 for cities with populations ≥1 million (*2*). The Pan American Health Organization with assistance from CDC and other organizations is working to promote the application of public health surveillance, analysis, and evaluation methods to assist countries in this region in reducing the problem.

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Homicide — Continued

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Notice to Readers

National Surveillance for Infectious Diseases, 1995

On October 13, CDC will release the annual *Summary of Notifiable Diseases, United States, 1994* (*1*). A notifiable disease traditionally has been considered to be a condition for which regular, frequent, and timely information about individual cases is necessary for the prevention and control of the disease. During 1994, a total of 49 infectious diseases were considered notifiable at the national level and were reported to CDC; 41 were reported weekly, and eight were reported monthly.

During November 30–December 2, 1994, the Council of State and Territorial Epidemiologists (CSTE) and CDC held a conference to review the status of national infectious disease surveillance. At this conference, 10 diseases were proposed for deletion from the list of nationally notifiable diseases: amebiasis, aseptic meningitis, primary encephalitis (except for arboviral encephalitis), postinfectious encephalitis, granuloma inguinale, unspecified hepatitis, leptospirosis, lymphogranuloma venereum, rheumatic fever, and tularemia. In addition, nine diseases were proposed for addition to the list during 1995: genital *Chlamydia trachomatis* infections, coccidioidomycosis (for regional surveillance), cryptosporidiosis, hantavirus disease, (postdiarrheal) hemolytic uremic syndrome, pediatric infection with human immunodeficiency virus, invasive group A streptococcal infections, streptococcal toxic-shock syndrome, and drug-resistant *Streptococcus pneumoniae* invasive disease. These changes were approved by a vote of the full membership of CSTE in March 1995. However, these conditions are currently not reportable in all states, and the mechanism for reporting may not involve clinicians or consist of weekly reports of individual cases (i.e., traditional notification methods); rather, some may be reported directly by laboratories or in summary form on a monthly basis.

As of October 1, 1995, 52 infectious diseases were designated as notifiable at the national level (Table 1).

Reported by: Council of State and Territorial Epidemiologists. Div of Surveillance and Epidemiology, Epidemiology Program Office, CDC.

Editorial Note: In 1878, Congress authorized the U.S. Marine Hospital Service (the precursor to the Public Health Service [PHS]) to collect morbidity reports on cholera, smallpox, plague, and yellow fever from U.S. consuls overseas; this information was used to implement quarantine measures to prevent the introduction and spread of these diseases into the United States. In 1879, Congress approved appropriations explicitly for the collection and publication of reports of these notifiable diseases. The authority for weekly reporting and publication was expanded by Congress in 1893 to include information from states and municipal authorities. To increase the uniformity of the data, Congress enacted a law in 1902 directing the Surgeon General to provide forms for the collection and compilation of data and for the publication of reports at the national level.

Surveillance for Infectious Diseases — Continued

TABLE 1. Infectious diseases designated as notifiable at the national level* — United States, 1995

Acquired immunodeficiency syndrome	*Haemophilus influenzae*, invasive disease	Rabies, human
Anthrax	Hansen disease (Leprosy)	Rocky Mountain spotted fever
Botulism†	Hantavirus disease†	Rubella
Brucellosis	Hepatitis A	Salmonellosis†
Chancroid†	Hepatitis B	Shigellosis†
Chlamydia trachomatis, genital infections†	Hepatitis, C/non-A, non-B	Streptococcal disease, invasive, Group A†
Cholera	HIV infection, pediatric†	*Streptococcus pneumoniae*, drug-resistant†
Coccidioidomycosis†	Legionellosis	Streptococcal toxic-shock syndrome†
Congenital rubella syndrome	Leprosy	Syphilis
Congenital syphilis	Lyme disease	Tetanus
Cryptosporidiosis†	Malaria	Toxic-shock syndrome
Diphtheria	Measles	Trichinosis
Encephalitis, California†	Meningococcal disease	Tuberculosis
Encephalitis, eastern equine†	Mumps	Typhoid fever
Encephalitis, St. Louis†	Pertussis	Yellow fever†
Encephalitis, western equine†	Plague	
Escherichia coli O157:H7†	Poliomyelitis	
Gonorrhea	Psittacosis	
	Rabies, animal	

*Although varicella is not a nationally notifiable disease, the Council of State and Territorial Epidemiologists recommends reporting of cases of this disease to CDC.
†Not currently published in the weekly tables.

In 1912, state and territorial health authorities—in conjunction with PHS—recommended immediate telegraphic reporting of five infectious diseases and monthly reporting by letter of 10 additional diseases. The first annual summary of *The Notifiable Diseases* in 1912 included reports of 10 diseases from 19 states, the District of Columbia, and Hawaii. By 1928, all states, the District of Columbia, Hawaii, and Puerto Rico were participating in national reporting of nearly 30 specified conditions. At their meeting in 1950, the State and Territorial Health Officers authorized a conference of state and territorial epidemiologists whose purpose was to determine which diseases should be reported to PHS. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases.

The list of nationally notifiable diseases is revised periodically. Diseases may be added to the list as new pathogens emerge and deleted as their incidence declines. Public health officials at state health departments and CDC collaborate in determining which diseases should be nationally notifiable; CSTE, in conjunction with CDC, makes recommendations annually for additions and deletions to the list of nationally notifiable diseases. However, reporting of nationally notifiable diseases to CDC by the states is voluntary. Reporting is currently mandated (by state legislation or regulation) only at the state level. Therefore, the list of diseases that are considered notifiable varies slightly by state. All states generally report the internationally quarantinable diseases (i.e., cholera, plague, and yellow fever) in compliance with the World Health Organization's International Health Regulations.

The *Summary of Notifiable Diseases, United States, 1994* contains summary tables of the official statistics for the reported occurrence of nationally notifiable diseases during 1994. Data are presented in tables by month, geographic location, and patient

Surveillance for Infectious Diseases — Continued

age and race/ethnicity and in maps and graphs for many conditions. New features included in this year's annual summary include written highlights of important developments in the reported occurrences of selected nonnotifiable diseases, data from the Public Health Laboratory Information System, and short statements under each map or graph that underscore their important public health messages. Tables presenting historical notifiable disease data since 1945 and a table on deaths associated with specific notifiable diseases reported to CDC's National Center for Health Statistics also are included.

Reference

1. CDC. Summary of notifiable diseases, United States, 1994. MMWR 1995;43(no. 53).

Monthly Immunization Table

To track progress toward achieving the goals of the Childhood Immunization Initiative (CII), CDC publishes monthly a tabular summary of the number of cases of all diseases preventable by routine childhood vaccination reported during the previous month and year-to-date (provisional data). In addition, the table compares provisional data with final data for the previous year and highlights the number of reported cases among children aged <5 years, who are the primary focus of CII. Data in the table are reported through the National Electronic Telecommunications System for Surveillance (NETSS).

Number of reported cases of diseases preventable by routine childhood vaccination — United States, August 1994 and 1994–1995*

Disease	No. cases, August 1995	Total cases January–August 1994	Total cases January–August 1995	No. cases among children aged <5 years† January–August 1994	No. cases among children aged <5 years† January–August 1995
Congenital rubella syndrome (CRS)	0	**2**	**4**	2	4
Diphtheria	0	**2**	**0**	1	0
Haemophilus influenzae§	71	**763**	**798**	215	185
Hepatitis B¶	746	**7486**	**6491**	78	54
Measles	16	**833**	**255**	197	92
Mumps	33	**992**	**554**	157	108
Pertussis	506	**2454**	**2241**	1454	1,301
Poliomyelitis, paralytic**	0	**1**	**0**	0	0
Rubella	15	**202**	**113**	22	16
Tetanus	5	**22**	**18**	0	1

*Data for 1994 and 1995 are provisional.

†For 1994 and 1995, age data were available for ≥92% cases.

§Invasive disease; *H. influenzae* serotype is not routinely reported through the National Electronic Telecommunications System for Surveillance. Of 185 cases among children aged <5 years, serotype was reported for 49 cases, and of those, 28 were type b, the only serotype of *H. influenzae* preventable by vaccination.

¶Because most hepatitis B virus infections among infants and children aged <5 years are asymptomatic (although likely to become chronic), acute disease surveillance does not reflect the incidence of this problem in this age group or the effectiveness of hepatitis B vaccination in infants.

**One case with onset in July 1994 has been confirmed; this case was vaccine-associated. An additional six suspected cases are under investigation. In 1993, three of 10 suspected cases were confirmed; two of the confirmed cases were vaccine-associated, and one was imported. The imported case occurred in a 2-year-old Nigerian child brought to the United States for care of his paralytic illness; no poliovirus was isolated from the child.

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