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# Outbreak of Rift Valley Fever — Saudi Arabia, August-October, 2000

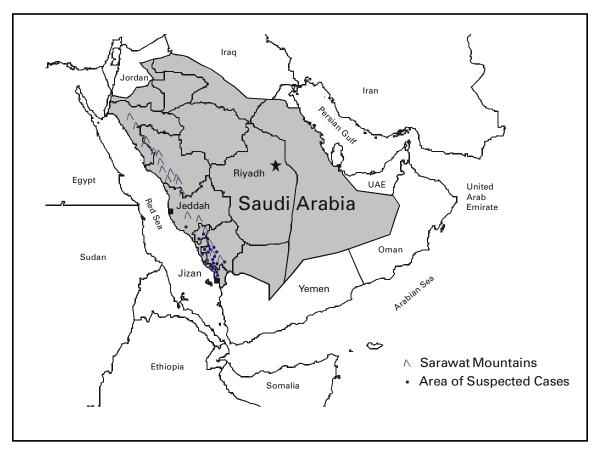
On September 10, 2000, the Ministry of Health (MOH), Kingdom of Saudi Arabia, and subsequently the Ministry of Health of Yemen received reports of unexplained hemorrhagic fever in humans and associated animal deaths from the southwestern border of Saudi Arabia and Yemen. Signs and symptoms of ill persons included low grade fever, abdominal pain, vomiting, diarrhea, jaundice with liver and renal dysfunction often progressing to disseminated intravascular coagulation, hepatorenal syndrome, and death. On September 15, using ELISA (antigen detection and IgM), polymerase chain reaction, virus isolation, and immunohistochemistry, CDC confirmed the diagnosis of Rift Valley fever (RVF) in all four serum samples submitted from Saudi Arabia. This report summarizes the preliminary results of the collaborative epidemiologic investigation performed by the Saudi Arabian MOH, CDC, and the National Institute of Virology, South Africa, of the first confirmed occurrence of RVF outside Africa.

As of October 9 in Saudi Arabia, 316 persons with suspected severe RVF\* have been reported from primary health-care centers and hospitals. All suspected severe cases have been hospitalized for care and management. Of the 316 case-patients, 245 (78%) were male; the median age was 46 years (range: 11–95 years); 15 (5%) were aged <16 years; 253 (80%) were Saudi citizens and 63 (20%) were Yemen citizens. At least 66 (21%) patients have died. Suspected severe case-patients investigated to date resided in or visited the floodplains of the wadis (i.e., seasonal riverbeds) that emanate from the foothills of the Sarawat mountains and extend south of Jeddah to the border of Yemen (Figure 1). Of the 316 suspected cases, 304 (96%) have been reported from the southern coastal province of Jizan (1992 population: 860,000) and the contiguous Asir and Al

<sup>\*</sup>Screening case definition for RVF: unexplained illness >48 hours in duration associated with three times elevation in transaminases (aspartate aminotransferase, alanine aminotrans ferase, and gamma glutamyl transpeptidase) or clinical jaundice; or unexplained illness >48 hours in duration associated with abortion or bleeding manifestations (e.g., from puncture sites, ecchymosis, petechiae, purpura, epistaxis, gastrointestinal bleeding, or menorrhagia); or unexplained acute visual loss or scotoma; or unexplained illness >48 hours in duration associated with neurologic manifestations (e.g., vertigo, confusion, disorientation, amnesia, lethargy, hallucination, meningismus, choreiform movements, ataxia, tremor, convulsions, hemiparesis, decerebrate posturing, locked-in syndrome, or coma); or unexplained illness >48 hours in duration associated with fever, diarrhea, nausea, vomiting, or abdominal pain and any one of the following laboratory values: 1) hemoglobin <8 gm/dL; 2) platelets <100,000 mm³ (<10 x 10¹⁰/L); 3) LDH 2 x upper limit of normal; 4) creatinine >150 mol/L; 5) CPK 2 x upper limit of normal; or unexplained death with history of fever, lethargy, diarrhea, abdominal pain, nausea, vomiting, or headache in the preceding 2 weeks.

Rift Valley Fever — Continued

FIGURE 1. Area of reported suspected cases of Rift Valley fever — Saudi Arabia, August-October 2000

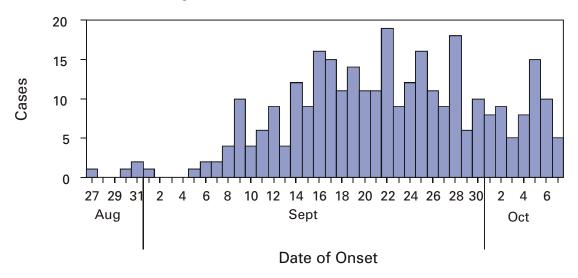


Quenfadah health regions. Cases from four other health regions have documented travel to these areas. The onset of the earliest suspected case was August 27 (Figure 2).

The activities of the MOH, Ministry of Agriculture and Water, and Ministry of Municipalities to contain the outbreak included an intensive mosquito-control program; restriction of movement of domestic animals; a comprehensive educational campaign to eliminate contact with sick animals and mosquitoes (including provision of free permethrin-impregnated bednets); encouragement to seek early medical evaluation of persons with febrile illnesses; and information for health-care providers on the clinical presentation and management of suspected cases. Studies are in progress to identify risk factors for infection, severe disease, and mortality. Animal, human, and vector surveillance is being strengthened throughout the country, including establishment of central human and veterinary virology laboratories in Riyadh and Jizan, respectively. A kingdomwide survey among domestic ungulates, primarily sheep and goats, is under way to define the boundaries for a veterinary vaccination program. Additional studies are planned to assess the magnitude of the outbreak, to define infection rates among high-risk groups, such as veterinarians and slaughterhouse workers, and to determine evidence for nosocomial transmission.

Rift Valley Fever — Continued

FIGURE 2. Number of suspected cases of Rift Valley fever under investigation, by date of onset — Saudi Arabia, August–October 2000\*



\*n=316

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**Editorial Note**: RVF is a mosquitoborne zoonotic viral disease predominantly causing abortion and deaths of young animals (e.g., sheep and goats) (1). Epizootic and epidemic transmission is associated with periodic heavy rainfall. Human infection is predominately not apparent or is associated with a brief self-limited febrile illness. However, complications such as retinitis, hemorrhagic fever, or encephalitis occur in some patients (approximately 15%, 1%, and 1%, respectively) (1). Transmission is primarily by contact with infected animal body fluids and mosquito bites, although virology laboratory workers also are at risk. Person-to-person transmission has not been reported. The Saudi Arabian MOH is evaluating the feasibility of a randomized, placebo-controlled trial using intravenous ribavirin in patients with suspected severe RVF. Although ribavirin has not been administered to humans with RVF, evidence suggests its efficacy in animal models (2). Intravenous ribavirin has been shown to treat effectively other viral hemorrhagic fevers, including Lassa fever, hemorrhagic fever with renal syndrome, and Crimean-Congo hemorrhagic fever (2).

Rift Valley Fever — Continued

This outbreak on the Arabian Peninsula represents the first cases of RVF outside Africa. The potential of RVF virus to establish transmission and cause disease in new areas first was documented during its emergence in Egypt in 1977; previously, the disease was limited to sub-Saharan Africa. The virus isolated from the blood of the first patients had a RNA sequence similar to the RVF viruses isolated during 1997–1998 East African outbreaks (3). Cross-sectional community surveys for asymptomatic and milder illnesses and laboratory evidence of infection are in progress to assess the magnitude and geographic extent of infection.

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# Measuring Childhood Asthma Prevalence Before and After the 1997 Redesign of the National Health Interview Survey — United States

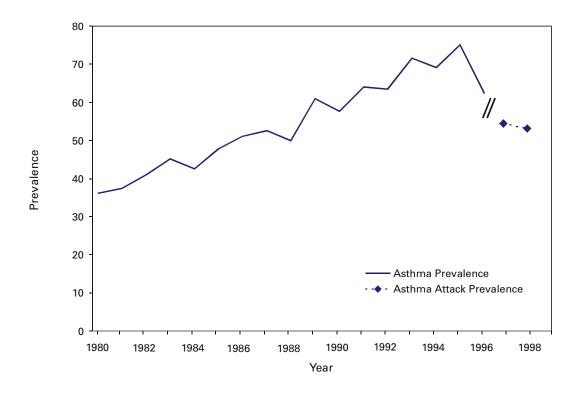
Asthma is the most common chronic disease of childhood and a leading cause of disability among children (1,2). Since 1980, asthma prevalence has increased dramatically in children (3,4). The National Health Interview Survey (NHIS), the principal source of asthma prevalence data for the United States, was redesigned in 1997. This report presents NHIS data from 1980–1998 to examine the effect of the redesign on measuring trends in asthma prevalence overall and among age and racial subgroups of children. The findings indicate that although asthma prevalence estimates for 1997–1998 are lower than those preceding changes in the survey design, estimates after 1997 are not comparable to previous estimates. Additional data are needed to establish a new trend after 1997.

NHIS is an ongoing household survey of a representative sample of the noninstitutionalized civilian U.S. population. For children aged <18 years, a knowledge-able adult family member, usually a parent, acts as a proxy respondent. Before 1997, one sixth of NHIS-sampled households were asked about chronic respiratory conditions, including asthma (approximately 4500 children in most years). Information on asthma was obtained by the question, "During the past 12 months, did anyone in the family have asthma?" Field testing of a redesigned survey began in 1996, resulting in a 40% decrease in the survey sample compared with previous years. Starting in 1997, information about asthma was collected for a randomly selected sample child in every household containing a child (approximately 14,000 children each year). The redesigned NHIS also specifically obtained information on asthma diagnoses by asking "Has a doctor or other health professional ever told you that your child had asthma?" To determine current asthma attack prevalence, persons answering yes were then asked "During the past 12 months, has your child had an episode of asthma or an asthma attack?" National estimates and standard errors were calculated using SUDAAN.

Overall, asthma prevalence among persons aged 0–17 years increased approximately 5% each year during 1980–1995 (Figure 1). The 1996 estimate of 62 per 1000 children (standard error [SE]=4.9) was 17% lower than in 1995 (75 [SE=4.3]). On the basis

Childhood Asthma — Continued

FIGURE 1. Prevalence\* of childhood asthma among persons aged 0–17 years, by year — National Health Interview Survey (NHIS), United States, 1980–1998<sup>†</sup>



<sup>\*</sup> Per 1000 population.

of the redesigned survey, the 1997 and 1998 prevalence estimates were 54 and 53, respectively, representing the beginning of a new trend.

During 1980–1996, prevalence among black non-Hispanic children was greater than that among either white non-Hispanic or Hispanic children (Table 1). The gap between non-Hispanic black and white children widened progressively, from a 15% higher prevalence among blacks during 1980–1981 to 26% during 1995–1996. In the redesigned survey, when compared with white non-Hispanic children, asthma attack prevalence among black non-Hispanic children was 29% higher in 1997 and 31% higher in 1998. From 1985–1986 to 1995–1996, prevalence among Hispanic children increased rapidly. Compared with non-Hispanic white children, asthma prevalence among Hispanic children was 38% lower during 1985–1986 but 17% greater during 1995–1996. In 1997 and 1998, asthma attack prevalence among Hispanic children was similar to that among non-Hispanic white children. Within the three pediatric age groups, prevalence generally increased during 1980–1996. Prevalence also increased with age; children aged ≥5 years had a higher prevalence than younger children. This pattern was similar for asthma attack prevalence in 1997 and 1998, although the difference between children aged 0–4 years and older children was not statistically significant in 1998.

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<sup>&</sup>lt;sup>†</sup> NHIS was redesigned in 1997, resulting in a discontinuation of the trend.

Childhood Asthma — Continued

TABLE 1. Estimated average annual prevalence\* of asthma during the previous 12 months among children aged <18 years, by selected years — National Health Interview Survey (NHIS), United States, 1980–1998

		Asthma prevalence								Asthma attack prevalence				
	1980	<u>–1981</u>	<u>1985</u>	<u>-1986</u>	1990	<u>1990-1991</u>		<u>-1996</u>	1997 <sup>§</sup>		1998 <sup>§</sup>			
Characteristic	%	(SE <sup>†</sup> )	%	(SE)	%	(SE)	%	(SE)	%	(SE)	%	(SE)		
Race/Ethnicity														
White, non-Hispanic	36.4	(2.7)	51.0	(4.0)	59.6	(3.6)	65.3	(4.2)	52.2	(2.9)	52.1	(3.0)		
Black, non-Hispanic	41.9	(5.1)	59.8	(8.5)	72.6	(7.9)	82.1	(8.3)	67.5	(5.6)	68.1	(6.7)		
Hispanic	N	ΙΑ¶	31.5	(7.2)	51.2	(7.3)	76.1	(6.9)	51.3	(4.3)	47.4	(4.6)		
Age (yrs)														
0- 4	29.4	(3.3)	31.9	(4.2)	43.0	(4.1)	50.3	(5.2)	41.2	(3.9)	46.5	(4.0)		
5–10	49.0	(4.6)	54.5	(5.0)	62.7	(4.7)	74.3	(5.9)	58.5	(4.1)	53.0	(4.0)		
11–17	32.1	(3.3)	58.0	(5.1)	71.4	(4.9)	77.4	(5.4)	60.4	(3.8)	58.0	(3.7)		
Overall prevalence	36.8	(2.5)	49.4	(3.1)	60.1	(3.0)	68.6	(3.2)	54.4	(2.2)	53.1	(2.3)		

<sup>\*</sup> Per 1000 population.

**Editorial Note**: Although estimates of asthma prevalence appear lower after 1995 than in earlier years, changes in the number of children surveyed and in the survey design in 1996 and 1997 preclude drawing conclusions about recent changes in childhood asthma. The 1996 survey had a smaller sample size than previous years, resulting in a greater sampling error. The redesigned survey specifically collected information about medical diagnosis of asthma and the frequency of asthma attacks.

The redesigned survey also may have differentially affected measurement of asthma prevalence among subgroups in the pediatric population. Among age subgroups, the pattern of asthma attack prevalence appeared unaffected: in 1997 and 1998, children aged 0–4 years continued to have lower asthma attack prevalence compared with older children. However, among race/ethnicity subgroups, asthma attack prevalence estimates declined more for Hispanic than non-Hispanic children.

Although the redesign of NHIS created a break in the trend of asthma prevalence, the changes will enable researchers and policy makers to better understand national trends in asthma prevalence. In contrast with the previous question, the redesigned survey measures physician-diagnosed asthma and produces a more specific estimate. In addition, estimating asthma attack prevalence is more helpful for planning public health interventions by measuring the population at risk for serious outcomes from asthma, including hospitalization and death.

To promote comparability of surveillance data, the Council of State and Territorial Epidemiologists (CSTE) recommends that a uniform case definition be used by all systems collecting data on self-reported asthma. The 1998 CSTE uniform case definition of self-reported asthma includes a positive response to the survey question, "Did a doctor or other health professional ever tell you (or any household member) that you (they) had asthma?" and a positive response to any one of the following: a) "Do you (or the household member) still have asthma?" b) "Have you (or the household member) taken prescription medications for asthma during the past year?" or c) "Have you (or the household member) had a wheeze episode in the past year?" In addition to the 1997 changes, the 2001 NHIS survey will be modified to adopt a similar case definition by including the question "Do you still have asthma?" Standardized questions for adult asthma prevalence, consistent with the case definition recommended by CSTE, were added to the

<sup>†</sup> Standard error.

Data for 1997 and 1998 were affected by a redesign of NHIS.

Not available. White and black estimates for 1980–1981 include Hispanic ethnicity.

#### Childhood Asthma — Continued

Behavioral Risk Factor Surveillance System (BRFSS) core module in 2000 and standard questions for child prevalence were added as part of a 2001 module. As a result, three comparable asthma questions for children in both the NHIS and the BRFSS surveys will allow comparisons between local and national asthma prevalence estimates in 2001. Improvements in national and state surveillance will help to identify the factors underlying development and exacerbation of asthma and to develop and target more effective treatment and prevention strategies.

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# Outbreak of *Escherichia coli* O157:H7 Infection Associated With Eating Fresh Cheese Curds — Wisconsin, June 1998

On June 15, 1998, the Division of Public Health, Wisconsin Department of Health and Family Services, was notified of eight laboratory-confirmed and four suspected *Escherichia coli* O157:H7 infections among west-central Wisconsin residents who became ill during June 8–12. This report summarizes the outbreak investigation, which implicated fresh (held <60 days) cheese curds from a dairy plant as the source of infection.

A primary case was defined as the first laboratory-confirmed case in a household; a secondary case was one that occurred 3–8 days after a primary case in the same household. A matched case-control study was conducted to assess potential sources of infection. For the purposes of the case-control study, a case was defined as culture-confirmed illness among residents of Chippewa and Eau Claire counties with illness onset during June 7–18. For each case-patient, two community controls matched by sex and age group (range: from <10 years within 2 years to ≥10 years within 5 years) were interviewed by telephone. Case-patients and controls were interviewed about food exposures and potential risk factors for *E. coli* O157:H7 infection within 7 days before onset of illness.

In response to the case-control study, the Wisconsin Department of Agriculture, Trade, and Consumer Protection visited dairy plant A to collect cheese samples, raw ingredients, and packaging materials; to review employee food handling and hygienic practices; and to assess potential sources of contamination from raw milk. Product and environmental samples (e.g., vat surfaces and floor drains) from the dairy plant were screened for phosphatase activity to identify evidence of raw milk.

Fifty-five laboratory-confirmed case-patients were identified, including two from secondary households. Case-patients were from seven Wisconsin counties (27 from Chippewa and 16 from Eau Claire counties); two case-patients were visiting from out of state. Median age was 27 years (range: 15 months–90 years) and 37 (67%) were female. The most frequently reported symptoms included bloody diarrhea (55 [100%]), cramps (50 [91%]), fatigue (39 [71%]), and nausea (38 [69%]). Mean duration of diarrhea was 5.1 and 4.5 days for 25 hospitalized and 30 nonhospitalized case-patients, respectively.

Cheese Curds — Continued

Eating fresh cheese curds during June 1–17 was reported by all 24 case-patients in Chippewa and Eau Claire counties and eight (18%) of 45 controls (matched odds ratio=undefined; 95% confidence interval=20.6–infinity). Illness was not linked to eating other cheese products (e.g., shredded, sliced, block, or string cheese). Of the 43 laboratory-confirmed case-patients whose cheese curd source could be identified, all had eaten fresh cheese curds produced at dairy plant A; 19 had purchased the curds from an unrefrigerated display at plant A, and 24 had purchased them refrigerated from retail stores that received shipments from plant A. Fifteen (50%) of 30 case-patients who recalled the purchase date had bought the curds on June 5 or 6. The median number of curds eaten was eight (range: one–28), the equivalent of approximately 1.6 oz of cheese.

Thirty-five specimens from plant A that were produced during the outbreak were tested: nine environmental samples, 18 unopened cheese samples, six opened retail packages of curds, and two unopened retail packages of curds. Five of the six opened retail packages of curds and four of the 18 unopened cheese samples were positive for nonbacterial phosphatase (Scharer method). *E. coli* O157:H7 was isolated from an opened package of curds that had been served at a party attended by nine persons with culture-confirmed illness. The contents of this package tested positive for nonbacterial phosphatase. Among 44 *E. coli* O157:H7 case-patient isolates available for pulsed-field gel electrophoresis, 42 were indistinguishable from each other and from the curd isolate.

Dairy plant A had produced four or five vats of pasteurized cheddar and Colby cheese products 5 days a week since 1977. Each vat yielded approximately 1500 pounds of cheese that was pressed into 40-lb blocks, daisies (rounds of cheese), or was packaged as fresh cheese curds. Dairy plant A also produced unpasteurized (raw milk) cheddar cheese daisies every June as part of Dairy Month. Certain raw milk cheese products can be produced and sold legally as long as the cheese is held at  $\geq$ 35 F ( $\geq$ 1.7 C) for at least 60 days before it is sold\*. Curds are sold fresh (held <60 days); therefore, curds must be made with pasteurized milk. At least one 1500-lbs vat of raw milk cheddar cheese was made on May 27 and June 2–5. These vats were used inadvertently to make fresh curds, which were incorrectly labeled "pasteurized" cheddar cheese curds, and distributed and sold in six Wisconsin counties.

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**Editorial Note**: Cheese is made in vats by coagulating milk with enzymes and/or acids. After whey is drained, the large cheese clumps are removed and milled into curds, salted, and packaged in small plastic bags for sale. Raw milk consumption has been associated with campylobacteriosis, salmonellosis, *E. coli* O157:H7, yersiniosis, listeriosis, tuberculosis, brucellosis, cryptosporidiosis, and staphylococcal enterotoxin poisoning (1). In 1950, the U.S. Food and Drug Administration (FDA) required manufacturers of soft and fresh cheeses to use pasteurized milk and allowed raw milk to be used only for certain aged cheeses (2). In 1986, *E. coli* O157:H7 illness was associated with consuming raw milk (3). In 1987, FDA banned the interstate sale of raw milk in retail packages. During 1973–1992, 40 (87%) of 46 raw milk-associated outbreaks occurred in the 28

<sup>\*</sup>Code of Federal Regulations Title 21, Part 133.

Cheese Curds — Continued

states that permitted the intrastate sale of raw milk (4). During the same period, 11 of 32 cheese-associated outbreaks were attributed to contamination before distribution (5).

This outbreak investigation illustrates the hazards of using raw milk to produce commercial products that may lead to mislabeling or contaminating pasteurized product by equipment or ingredients. This practice can result in pasteurized products contaminated by equipment or ingredients and in product mislabeling. States that allow the sale of unpasteurized milk or dairy products made from unpasteurized milk should take appropriate steps to reduce the risk for contamination and mislabeling to prevent similar outbreaks.

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# **Enterovirus Surveillance — United States, 1997–1999**

Enteroviruses account for an estimated 10–15 million symptomatic infections in the United States each year (1). At present, 66 serotypes of enteroviruses are recognized, including three poliovirus serotypes (2). A range of diseases is associated with nonpolio enterovirus infections, including aseptic meningitis, encephalitis, neonatal enteroviral disease, myocarditis, pericarditis, chronic infections among persons with compromised immune systems, poliomyelitis-like illness, hand-foot-and-mouth disease, nonspecific upper respiratory disease, and other manifestations (3). This report summarizes data from the National Enterovirus Surveillance System (NESS) and describes temporal trends of reported enterovirus infections in the United States during 1997–1999.

From January 1997 through December 1999, state public health laboratories reported to CDC 1741 enterovirus isolates, including 1672 isolates of nonpolio enteroviruses (Table 1) and 69 isolates of vaccine-related polioviruses. The number of states reporting enterovirus isolations declined from 14 in 1997 to eight in 1999.

Of the 1672 nonpolio enterovirus isolates, echovirus 30 was the predominant serotype and accounted for 27.5% of all isolates, followed by echovirus 11 (13.8%), echovirus 9 (8.7%), and echovirus 6 (6.9%). Enterovirus serotype was reported as unknown for 13.1% of the isolates. The 15 most common serotypes accounted for 88.6%–98.2% of all isolates each year. Of the 63 known nonpolio enterovirus serotypes, 38 were reported during 1997–1999. Of these, 15 serotypes (coxsackie viruses A9, B2, B3, B4, B5; echoviruses 4, 5, 6, 9, 11, 16, 18, 25, 30; and enterovirus 71) have been reported in each of the 3 years. Twelve of these serotypes were among the 15 most common enteroviruses reported during 1997–1999.

Enterovirus Surveillance — Continued

TABLE 1. Frequency of the most common nonpolio enterovirus isolates — United States, 1997–1999

1997 (n=524) Rank Serotype %		1998 (n=7	'95)	1999 (n=3	353)	Total (n=1672)			
Serotype	%	Serotype	%	Serotype	%	Serotype	%		
echovirus 30	17.4	echovirus 30	45.9	echovirus 11	40.5	echovirus 30	27.5		
echovirus 6	15.6	unknown	14.7	unknown	14.4	echovirus 11	13.8		
echovirus 7	10.3	echovirus 9	12.1	echovirus 16	10.8	unknown	13.1		
unknown	9.7	echovirus 11	6.0	echovirus 9	8.8	echovirus 9	8.7		
echovirus 11	7.4	coxsackie B3	3.6	echovirus 14	4.8	echovirus 6	6.9		
echovirus 18	5.5	echovirus 6	3.5	echovirus 25	4.0	echovirus 7	3.4		
coxsackie B1	4.6	coxsackie B2	3.3	enterovirus 71	2.8	coxsackie B2	2.9		
coxsackie A9	4.2	coxsackie B1	2.1	coxsackie A9	2.5	coxsackie A9	2.8		
echovirus 9	3.6	coxsackie A9	2.0	coxsackie B3	2.0	echovirus 18	2.7		
coxsackie B2	3.6	echovirus 18	1.8	echovirus 6	1.7	echovirus 16	2.6		
echovirus 17	1.9	coxsackie B4	1.4	echovirus 30	1.1	coxsackie B1	2.5		
echovirus 4	1.5	echovirus 4	0.5	coxsackie B2	1.1	coxsackie B3	2.3		
coxsackie B4	1.3	enterovirus 71	0.5	coxsackie B4	0.9	enterovirus 71	2.1		
echovirus 5	1.0	echovirus 16	0.4	echovirus 4	0.9	coxsackie B4	1.3		
coxsackie A16	1.0	echovirus 25	0.4	echovirus 18	0.6	echovirus 25	1.1		
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ent	00 G		00.2		06.0		93.7		
•	echovirus 30 echovirus 6 echovirus 7 unknown echovirus 11 echovirus 18 coxsackie B1 coxsackie A9 echovirus 9 coxsackie B2 echovirus 17 echovirus 4 coxsackie B4 echovirus 5 coxsackie A16	echovirus 30 17.4 echovirus 6 15.6 echovirus 7 10.3 unknown 9.7 echovirus 11 7.4 echovirus 18 5.5 coxsackie B1 4.6 coxsackie A9 4.2 echovirus 9 3.6 coxsackie B2 3.6 echovirus 17 1.9 echovirus 4 1.5 coxsackie B4 1.3 echovirus 5 1.0 coxsackie A16 1.0 t ent	echovirus 30 17.4 echovirus 30 echovirus 6 15.6 unknown echovirus 7 10.3 echovirus 9 unknown 9.7 echovirus 11 echovirus 11 7.4 coxsackie B3 echovirus 18 5.5 echovirus 6 coxsackie B1 4.6 coxsackie B2 coxsackie A9 4.2 coxsackie B1 echovirus 9 3.6 coxsackie A9 coxsackie B2 3.6 echovirus 18 echovirus 17 1.9 coxsackie B4 echovirus 4 1.5 echovirus 4 coxsackie B4 1.3 enterovirus 71 echovirus 5 1.0 echovirus 16 coxsackie A16 1.0 echovirus 25 teent	echovirus 30 17.4 echovirus 30 45.9 echovirus 6 15.6 unknown 14.7 echovirus 7 10.3 echovirus 9 12.1 unknown 9.7 echovirus 11 6.0 echovirus 11 7.4 coxsackie B3 3.6 echovirus 18 5.5 echovirus 6 3.5 coxsackie B1 4.6 coxsackie B2 3.3 coxsackie A9 4.2 coxsackie B1 2.1 echovirus 9 3.6 coxsackie A9 2.0 coxsackie B2 3.6 echovirus 17 1.9 coxsackie B4 1.4 echovirus 4 1.5 echovirus 4 0.5 coxsackie B4 1.3 enterovirus 71 0.5 echovirus 5 1.0 echovirus 16 0.4 coxsackie A16 1.0 echovirus 25 0.4 teent	echovirus 30 17.4 echovirus 30 45.9 echovirus 11 echovirus 6 15.6 unknown 14.7 unknown echovirus 7 10.3 echovirus 9 12.1 echovirus 16 unknown 9.7 echovirus 11 6.0 echovirus 9 echovirus 11 7.4 coxsackie B3 3.6 echovirus 14 echovirus 18 5.5 echovirus 6 3.5 echovirus 25 coxsackie B1 4.6 coxsackie B2 3.3 enterovirus 71 coxsackie A9 4.2 coxsackie B1 2.1 coxsackie A9 echovirus 9 3.6 coxsackie A9 2.0 coxsackie B3 coxsackie B2 3.6 echovirus 18 1.8 echovirus 6 echovirus 17 1.9 coxsackie B4 1.4 echovirus 6 echovirus 4 1.5 echovirus 4 0.5 coxsackie B2 coxsackie B4 1.3 enterovirus 71 0.5 coxsackie B4 echovirus 5 1.0 echovirus 16 0.4 echovirus 4 echovirus 18 1.8 echovirus 4 echovirus 5 1.0 echovirus 16 0.4 echovirus 4 echovirus 4 echovirus 17 1.0 echovirus 25 0.4 echovirus 18 teent	echovirus 30 17.4 echovirus 30 45.9 echovirus 11 40.5 echovirus 6 15.6 unknown 14.7 unknown 14.4 echovirus 7 10.3 echovirus 9 12.1 echovirus 16 10.8 unknown 9.7 echovirus 11 6.0 echovirus 9 8.8 echovirus 11 7.4 coxsackie B3 3.6 echovirus 14 4.8 echovirus 18 5.5 echovirus 6 3.5 echovirus 25 4.0 coxsackie B1 4.6 coxsackie B2 3.3 enterovirus 71 2.8 coxsackie A9 4.2 coxsackie B1 2.1 coxsackie A9 2.5 echovirus 9 3.6 coxsackie A9 2.0 coxsackie B3 2.0 coxsackie B2 3.6 echovirus 18 1.8 echovirus 6 1.7 echovirus 17 1.9 coxsackie B4 1.4 echovirus 30 1.1 echovirus 4 1.5 echovirus 4 0.5 coxsackie B2 1.1 coxsackie B4 0.9 echovirus 5 1.0 echovirus 16 0.4 echovirus 4 0.9 echovirus 17 1.0 echovirus 16 0.4 echovirus 18 0.6 teent	echovirus 30 17.4 echovirus 30 45.9 echovirus 11 40.5 echovirus 30 echovirus 6 15.6 unknown 14.7 unknown 14.4 echovirus 11 echovirus 7 10.3 echovirus 9 12.1 echovirus 16 10.8 unknown unknown 9.7 echovirus 11 6.0 echovirus 9 8.8 echovirus 9 echovirus 11 7.4 coxsackie B3 3.6 echovirus 14 4.8 echovirus 6 echovirus 18 5.5 echovirus 6 3.5 echovirus 25 4.0 echovirus 7 coxsackie B1 4.6 coxsackie B2 3.3 enterovirus 71 2.8 coxsackie B2 coxsackie A9 4.2 coxsackie B1 2.1 coxsackie A9 2.5 coxsackie A9 echovirus 9 3.6 coxsackie A9 2.0 coxsackie B3 2.0 echovirus 18 coxsackie B2 a.6 echovirus 18 1.8 echovirus 6 1.7 echovirus 18 echovirus 17 1.9 coxsackie B4 1.4 echovirus 30 1.1 coxsackie B1 echovirus 4 1.5 echovirus 4 0.5 coxsackie B2 1.1 coxsackie B3 coxsackie B4 1.3 enterovirus 71 0.5 coxsackie B4 0.9 enterovirus 71 echovirus 5 1.0 echovirus 16 0.4 echovirus 4 0.9 coxsackie B4 echovirus 5 1.0 echovirus 25 0.4 echovirus 18 0.6 echovirus 25 teent		

Enterovirus Surveillance — Continued

During 1997–1999, the proportion of isolates for some serotypes, such as echoviruses 6, 7, 11, and 30, varied widely, and the proportion of isolates for some other serotypes (e.g., coxsackieviruses B2 and B4) remained relatively low but constant.

In addition to nonpolio enteroviruses, 69 isolates of vaccine-related polioviruses were reported (3.9% of all enterovirus isolates). The number of vaccine-related poliovirus isolates declined from 47 (8.2%) in 1997 to 19 (2.3%) in 1998, to three (0.8%) in 1999.

Of the 25.3% of reports that included clinical information, most of the reported diagnoses were aseptic meningitis (37.6%) or respiratory illness (9.3%) and a smaller percentage were encephalitis (4.1%) and carditis and paralytic illness (0.2%). The source for enterovirus isolation was the cerebrospinal fluid (44.2% of reports), a stool specimen or a rectal swab (24.2%), a nasopharyngeal specimen (20.9%), and a urine sample (1.1%). For 9.6% of reports, the source of enterovirus isolation was not noted. Children aged <1 year accounted for 45% of all reported enterovirus isolates.

Reported by: State virology laboratory directors. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

**Editorial note**: To monitor temporal patterns of enterovirus circulation, state public health laboratories voluntarily report enterovirus isolates by serotype to CDC through NESS. The findings in this report are consistent with previous observations on temporal variability of predominant serotypes. Some serotypes appear to circulate endemically and others circulate in a cyclical fashion with epidemic years followed by years with decreased activity (1). Of the 15 most common serotypes during 1997–1999, 10 serotypes (echoviruses 30, 11, 9, 6, and 7; coxsackieviruses B2, A9, B3, and B4; and enterovirus 71) were among the most common enteroviruses during 1993–1996 (4). Of these, only enterovirus 71 was not included among the predominating serotypes during 1970–1983 (1). The proportion of less common serotypes declined from 17.8% during 1993–1996 (4) to 6.3% during 1997–1999. The proportion of enterovirus isolates of unknown serotype increased from 3.8% of all isolates during 1993–1996 (4) to 13.1% during 1997–1999.

The decline in numbers of vaccine-related poliovirus isolates during 1997–1999 probably resulted from declining use of oral polio vaccine (OPV) in the United States. To prevent cases of vaccine-associated polio, CDC's Advisory Committee on Immunization Practices recommended transition from an all-OPV schedule to a sequential schedule of polio vaccination (i.e., two doses of inactivated polio vaccine followed by two doses of OPV) beginning in 1997 (5) with further narrowing of the options for administering OPV beginning in 1999 (6).

Enterovirus surveillance data provide information for detecting major temporal trends in enterovirus circulation in the United States. However, the data may not be representative of the general U.S. population because of the limited number of reporting laboratories. In addition, this number has declined from 25 in 1993, to 14 in 1996 (4), to eight in 1999. This decline is of concern, especially at a time when enterovirus antiviral drugs are being developed (7,8). Because of the variability in susceptibility of different enterovirus serotypes to some antiviral drugs (9), data about the circulating serotypes will be helpful in considering the impact of these drugs on enterovirus disease. Enterovirus surveillance data also are important for use in confirming that wild poliovirus has been eradicated from the United States. Finally, new methods, such as the polymerase chain reaction assay and sequencing studies, are improving the ability to diagnose and serotype enterovirus infections (2,10) and may improve surveillance for enterovirus serotypes.

Enterovirus Surveillance — Continued

CDC is considering changes to promote more complete and timely reporting of enterovirus surveillance data and to include new approaches for detecting and serotyping enterovirus infections.

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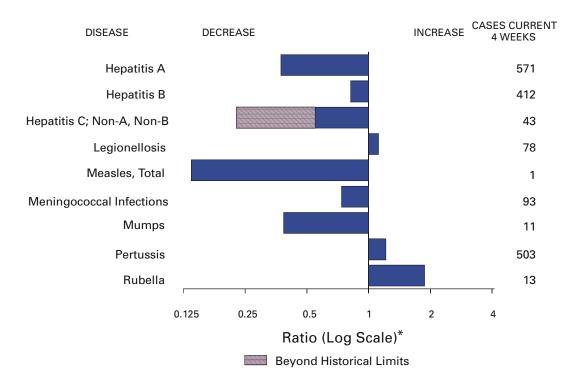
#### Erratum: Vol. 49, No. 39

In the Notice to Readers, "Updated Recommendations From the Advisory Committee on Immunization Practices in Response to Delays in Supply of Vaccine for the 2000–01 Season," on page 889 in the last sentence of the second paragraph, an age range was incorrect. The sentence should read, "More than 18,000 (>90%) of these deaths and approximately 48,000 of the P&I hospitalizations per year occur among persons aged ≥65 years who are at highest risk for influenza-related complications."

#### Erratum: Vol 49, No. 37

In the Table, "Reported cases of notifiable diseases, by geographic division and area, United States, 1999" on page 851, population and disease incidence data for Nevada were deleted inadvertently. The data should have been reported as follows: Total resident population (in thousands), 1,809; AIDS, 242; Botulism, foodborne 0; Botulism, infant 1; Brucellosis, 0; and Chancroid, 0.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending October 7, 2000, with historical data



<sup>\*</sup> 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 of provisional cases of selected notifiable diseases, United States, cumulative, week ending October 7, 2000 (40th Week)

		Cum. 2000		Cum. 2000
Anthrax		-	Poliomyelitis, paralytic	-
Brucellosis*		52	Psittacosis*	8
Cholera		1	Q fever*	16
Cyclosporiasis	*	36	Rabies, human	1
Diphtheria		1	Rocky Mountain spotted fever (RMSF)	354
Ehrlichiosis:	human granulocytic (HGE)*	144	Rubella, congenital syndrome	6
	human monocytic (HME)*	81	Streptococcal disease, invasive, group A	2,243
Encephalitis:	California serogroup viral*	86	Streptococcal toxic-shock syndrome*	62
•	eastern equine*	-	Syphilis, congenital <sup>¶</sup>	173
	St. Louis*	2	Tetanus	19
	western equine*	-	Toxic-shock syndrome	123
Hansen diseas	se (leprosy)*	47	Trichinosis	11
	Imonary syndrome*†	27	Tularemia*	101
Hemolytic ure	mic syndrome, postdiarrheal*	141	Typhoid fever	264
HIV infection,	pediatric*§	170	Yellow fever	-
Plague	•	5		

<sup>-:</sup> No reported cases.

\*Not notifiable in all states.

\*Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

\*Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update September 24, 2000.

Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

	AIDS		01.1		0 1		Escherichia coli O157:H7* NETSS PHLIS					
D (1 A	Cum.	Cum.	Chlan Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.		
Reporting Area UNITED STATES	<b>2000</b> § 30,346	<b>1999</b> 33,919	<b>2000</b> 493,045	<b>1999</b> 502,046	2000 1,863	2,060	<b>2000</b> 3,539	2,820	<b>2000</b> 2,406	1 <b>999</b> 2,206		
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	1,599 27 28 22 1,006 78 438	1,676 55 38 13 1,094 77 399	15,990 1,127 792 403 6,746 1,934 4,988	16,242 792 750 363 6,906 1,774 5,657	75 17 18 23 14 3	151 21 15 32 60 2 21	313 24 30 31 134 14 80	339 31 26 27 152 24 79	313 25 28 31 145 12 72	321 		
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	6,780 692 3,619 1,336 1,133	8,675 957 4,588 1,608 1,522	43,992 N 19,729 6,014 18,249	51,066 N 21,237 9,405 20,424	136 90 9 9 28	417 119 196 33 69	338 239 10 89 N	226 163 16 47 N	196 38 9 89 60	105 - 17 54 34		
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	2,871 427 286 1,569 437 152	2,304 376 257 1,104 454 113	79,900 20,659 9,556 21,520 19,338 8,827	83,916 22,813 9,165 25,242 16,346 10,350	625 210 52 7 85 271	535 45 34 80 42 334	785 219 113 153 116 184	814 167 72 474 101 N	454 165 71 - 82 136	428 170 53 81 74 50		
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	681 130 70 316 2 7 53 103	762 138 68 370 6 13 57 110	27,897 5,396 3,618 9,384 577 1,366 2,901 4,655	28,719 5,794 3,404 10,245 703 1,198 2,689 4,686	217 24 67 22 9 15 72 8	171 64 51 19 16 6 13	559 139 166 110 15 49 58 22	440 143 96 36 16 38 85 26	412 139 76 82 17 52 32	473 158 68 55 16 57 107		
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	8,394 156 1,060 570 574 47 529 660 983 3,815	9,346 128 1,113 408 600 53 632 790 1,377 4,245	97,440 2,205 10,080 2,475 12,026 1,379 17,270 7,991 19,729 24,285	106,063 2,103 9,969 N 11,180 1,406 17,403 14,350 25,512 24,140	358 5 10 15 15 3 21 - 133 156	298 - 13 7 21 3 15 - 115 124	302 1 26 1 57 13 74 19 38 73	255 6 26 - 62 11 55 18 26 51	185 1 1 U 50 10 58 14 26 25	157 3 2 U 50 6 49 14 1 32		
E.S. CENTRAL Ky. Tenn. Ala. Miss.	1,533 160 657 397 319	1,530 220 585 398 327	37,150 6,122 11,149 12,016 7,863	35,799 5,795 10,985 9,976 9,043	40 5 10 14 11	27 6 9 10 2	110 36 49 8 17	111 33 49 21 8	80 27 38 7 8	85 23 38 20 4		
W.S. CENTRAL Ark. La. Okla. Tex.	3,049 150 510 257 2,132	3,507 131 663 102 2,611	76,402 4,396 14,124 6,367 51,515	70,627 4,642 12,827 6,165 46,993	82 10 10 14 48	72 1 22 8 41	157 55 9 14 79	88 12 12 19 45	188 30 42 11 105	121 10 13 20 78		
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	1,131 12 19 7 258 116 367 112 240	1,339 8 19 10 235 74 694 116 183	28,658 1,023 1,394 597 8,296 3,530 9,286 1,626 2,906	26,045 1,133 1,355 598 5,209 3,916 9,720 1,641 2,473	135 10 12 5 60 15 11 18	83 10 7 1 11 37 10 N 7	360 29 59 14 134 19 43 50	238 17 35 14 92 11 25 30	196 - 2 86 15 32 61	186 - 21 14 70 5 19 42		
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	4,308 394 113 3,693 15 93	4,780 281 151 4,274 13 61	85,616 9,531 3,754 68,233 1,881 2,217	83,569 9,089 4,721 65,828 1,472 2,459	195 N 16 179	306 N 86 220	615 185 132 260 24 14	309 128 57 111 1	382 173 103 95 1	330 155 63 101 1		
Guam P.R. V.I. Amer. Samoa C.N.M.I.	15 1,028 27 - -	11 1,013 25 - -	3,025 U U U	355 U U U U	- U U U	- U U U	N 6 U U	N 5 U U U	U U U U	U U U U		

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

\*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update September 24, 2000.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

	Gonorrhea			tis C;				Ly	me
-	Gono Cum.	rrhea Cum.	Non-A, Cum.	Non-B Cum.	Legione Cum.	llosis Cum.	Listeriosis Cum.	Dis Cum.	Cum.
Reporting Area UNITED STATES	2000 <sup>§</sup> 257,522	<b>1999</b> 275,086	<b>2000</b> 2,399	<b>1999</b> 2,178	<b>2000</b> 727	<b>1999</b> 758	<b>2000</b> 544	<b>2000</b> 10,427	<b>1999</b> 12,235
NEW ENGLAND Maine N.H. Vt. Mass. R.I.	4,465 69 81 51 1,834 477	5,106 60 89 37 1,917 457	2,333 14 2 - 4 3 5	14 2 - 6 3 3	40 2 2 4 12 5	62 3 6 12 24 7	41 2 2 3 21	3,372 50 21 920 384	3,650 34 10 18 678 350
Conn. MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	1,953 26,923 5,323 8,597 4,478 8,525	2,546 30,651 5,129 9,768 5,940 9,814	443 56 - 352 35	100 48 - - 52	15 156 62 - 14 80	10 185 49 32 15 89	13 131 71 21 21 18	1,997 5,424 2,923 14 1,304 1,183	2,560 6,497 3,000 130 1,468 1,899
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	48,587 12,307 4,493 14,720 13,432 3,635	52,635 13,870 4,882 17,775 11,568 4,540	175 9 1 13 152	755 3 1 42 693 16	188 89 33 9 35 22	213 59 34 29 55 36	88 44 8 11 22 3	318 77 30 11 - 200	545 40 17 17 11 460
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak.	12,520 2,142 811 6,074 35 224	12,621 2,189 932 6,110 69 136	481 5 1 460 -	193 7 - 183 - -	51 3 12 27 - 2	42 6 12 16 1 2	13 5 3 4 1	258 176 21 42 1	254 151 21 58 1
Nebr. Kans.	1,143 2,091	1,168 2,017	6 9	3	3 4	5 -	-	4 14	10 13
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	72,364 1,312 6,941 1,979 7,766 451 14,152 10,128 12,739 16,896	80,296 1,323 7,426 2,893 7,474 447 15,361 10,817 17,280 17,275	101 - 18 3 3 14 13 2 3 45	141 - 19 1 10 17 32 22 1 39	151 8 51 4 28 N 13 4 6 37	105 13 24 3 26 N 13 7 1	87 1 18 - 7 3 - 9 21 28	831 140 449 5 125 26 42 5	1,029 85 741 3 95 15 63 4
E.S. CENTRAL Ky. Tenn. Ala. Miss.	27,103 2,684 8,912 9,383 6,124	28,754 2,631 8,866 8,956 8,301	346 30 77 7 232	230 15 89 1 125	27 15 10 2	41 15 21 3 2	16 3 10 3	42 9 27 6	86 16 48 18 4
W.S. CENTRAL Ark. La. Okla. Tex.	40,153 2,407 10,455 2,835 24,456	40,571 2,429 10,261 3,018 24,863	403 9 289 7 98	428 24 255 15 134	15 6 2 7	10 1 5 3 1	14 1 - 6 7	36 4 3 - 29	45 4 7 7 27
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	7,745 31 64 41 2,427 793 3,096 166 1,127	7,472 34 68 23 1,877 773 3,512 163 1,022	275 4 3 207 20 13 15 1	149 5 6 39 28 27 30 6 8	33 1 4 2 11 1 7 7	39 - 2 - 11 1 5 14 6	26 - 1 5 1 12 4 3	27 - 3 9 9 - - 2 4	13 - 3 3 2 1 - 2 2
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	17,662 1,696 525 14,888 257 296	16,980 1,569 686 14,137 239 349	161 26 25 108 - 2	168 13 14 141 -	66 16 N 50 -	61 11 N 49 1	128 5 5 115 - 3	119 7 8 102 2 N	116 7 12 97 - N
Guam P.R. V.I. Amer. Samoa C.N.M.I.	529 U U U	41 264 U U U	1 U U	1 U U	1 U U U	- U U U	- - - -	N U U	N U U U

N: Not notifiable.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

	TOCKS CITE	ing Outo	501 7, 20	oo, ana o	1	Salmo	nellosis*	
	Mal	aria	Rabies	s, Animal	NE	TSS		HLIS
Reporting Area	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	907	1,133	4,623	5,225	27,386	29,516	22,288	26,451
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	44 6 1 2 10 8 17	50 3 2 4 16 4 21	639 106 9 49 213 51 211	689 132 40 83 163 74 197	1,751 106 109 97 987 117 335	1,761 113 114 78 965 86 405	1,664 78 101 107 920 114 344	1,804 91 110 67 977 134 425
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	175 62 57 31 25	323 54 186 47 36	850 583 U 153 114	1,005 715 U 149 141	3,147 949 716 685 797	4,009 1,020 1,175 821 993	3,282 971 723 444 1,144	4,161 1,067 1,201 915 978
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	98 17 4 42 25 10	136 18 19 60 32 7	134 46 - 20 60 8	147 31 12 9 76 19	3,925 1,114 503 1,094 693 521	4,279 990 407 1,336 800 746	2,517 1,004 462 1 720 330	3,821 878 386 1,292 801 464
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	38 13 3 7 2 - 7 6	62 33 12 12 - - 1 4	445 73 67 41 105 75 2 82	609 86 128 24 125 153 4	1,884 402 298 578 48 80 186 292	1,811 481 206 569 40 75 159 281	1,823 498 185 697 63 92 50 238	2,003 604 187 715 52 104 143 198
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	249 4 79 15 45 3 30 2 16 55	275 1 80 16 55 2 24 13 21 63	1,858 42 323 - 421 97 455 123 272 125	1,698 47 322 - 437 92 355 119 178 148	6,041 89 652 52 791 135 866 560 1,059 1,837	6,462 125 685 65 1,043 133 948 502 1,029 1,932	4,016 106 600 U 697 120 806 436 1,155 96	5,197 126 733 U 877 129 1,100 397 1,320 515
E.S. CENTRAL Ky. Tenn. Ala. Miss.	37 13 10 13 1	23 7 8 7 1	167 18 87 62	216 32 77 107	1,690 303 464 506 417	1,629 323 449 473 384	1,184 209 482 423 70	1,155 217 477 383 78
W.S. CENTRAL Ark. La. Okla. Tex.	18 3 7 8	15 3 10 2	70 20 - 50 -	377 14 - 80 283	2,434 559 243 324 1,308	2,890 512 606 366 1,406	2,818 329 485 205 1,799	2,143 153 455 287 1,248
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	40 1 3 - 21 - 7 4 4	38 4 3 1 15 2 6 4 3	212 57 9 47 - 18 63 10 8	180 52 - 40 1 8 66 7 6	2,281 72 98 51 605 190 641 404 220	2,394 49 82 51 614 323 708 411 156	1,675 - 32 550 167 550 376	2,129 1 82 47 600 254 659 437 49
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	208 24 34 145 5	211 22 18 159 1	248 - 7 220 21	304 - 3 294 7	4,233 432 254 3,306 54 187	4,281 514 357 3,084 46 280	3,309 547 301 2,271 23 167	4,038 683 394 2,698 30 233
Guam P.R. V.I. Amer. Samoa C.N.M.I.	4 U U U	- U U U	- 65 U U U	ន ប ប ប	440 U U U	31 443 U U U	U U U	U U U U

N: Not notifiable. U: Unavailable. -: No reported cases.

\* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

	CCKS CITUI		llosis*	oo, and o		<u>1999 (40t</u> philis	II VVCCK/	
ļ	NET			HLIS	(Primary 8	Secondary)		rculosis
Reporting Area	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	15,103	12,411	7,749	7,473	4,556	5,193	9,340	11,968
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	316 11 4 4 225 24 48	658 4 15 6 561 21 51	304 12 8 - 208 28 48	625 - 14 4 538 17 52	55 1 1 - 36 4 13	48 - 1 3 26 2 16	318 12 15 4 191 27 69	327 13 10 2 187 32 83
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	1,670 618 607 270 175	834 230 275 199 130	1,032 180 426 235 191	587 59 202 179 147	210 11 101 35 63	233 17 97 56 63	1,727 226 939 409 153	2,008 246 1,032 415 315
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	3,145 291 1,325 795 543 191	2,319 349 235 932 337 466	899 213 133 2 504 47	1,233 113 84 714 262 60	869 63 291 259 218 38	927 69 338 333 152 35	951 205 75 472 133 66	1,264 198 104 642 242 78
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	1,746 508 420 535 14 6 104 159	957 188 42 601 3 11 69 43	1,402 614 217 391 37 4 49 90	639 200 37 301 2 6 57 36	49 9 10 23 - - 2 5	109 9 9 75 - 6 10	357 113 27 146 2 14 18 37	398 148 37 147 6 12 15 33
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	2,211 18 163 67 351 4 196 106 192 1,114	1,873 12 129 45 105 8 165 101 178 1,130	785 19 89 U 259 3 201 74 78 62	429 8 45 U 51 4 74 52 68 127	1,502 8 217 38 105 2 394 156 292 290	1,676 7 304 39 122 3 395 213 330 263	1,998 192 23 326 23 228 104 435 667	2,430 23 210 37 221 35 351 206 466 881
E.S. CENTRAL Ky. Tenn. Ala. Miss.	797 325 274 54 144	998 209 591 98 100	367 59 269 36 3	592 135 394 53 10	691 63 416 100 112	907 81 509 176 141	575 83 250 242	807 146 280 239 142
W.S. CENTRAL Ark. La. Okla. Tex.	1,695 165 133 94 1,303	2,025 70 162 458 1,335	2,000 44 138 31 1,787	879 23 94 148 614	641 75 172 105 289	833 56 243 156 378	853 140 74 105 534	1,586 135 U 140 1,179
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	935 7 43 5 201 114 391 68 106	802 7 20 3 152 98 395 48 79	510 - 2 135 67 235 71	555 9 1 117 72 297 53 6	186 - 1 1 9 20 149 1	179 1 1 2 8 161 2 4	380 10 10 2 57 29 163 38 71	403 10 12 3 55 47 177 30 69
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	2,588 369 149 2,028 8 34	1,945 90 72 1,756 2 25	450 339 84 - 3 24	1,934 87 67 1,752 2 26	353 51 5 296 - 1	281 57 5 215 1 3	2,181 180 25 1,797 78 101	2,745 192 85 2,290 42 136
Guam P.R. V.I. Amer. Samoa C.N.M.I.	23 U U U	11 121 U U U	U U U U	U U U U	122 U U U	128 U U U	238 U U U	52 161 U U U

N: Not notifiable. U: Unavailable. -: No reported cases.
\*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

No.   No.
New Part
UNITED STATES
Maine
N.H. 12 133 18 144 155 133 - 2 - 1 1 33 1 3 1 8 144 155 133 - 2 - 1 1 33 1 3 1 8 144 155 133 - 2 - 3 3 3 3 - 4
Mass.         36         29         102         90         9         40         -         9         2         2         2         2         -         -         9         2         2         -         -         9         2         2         -         -         9         2         2         -         -         9         2         2         1         1         1 <th< td=""></th<>
R.I. 4 4 21 14 15 26 2 Conn. 18 16 106 106 104 28 37 2 Conn. 18 16 106 106 104 28 37 2 Conn. 18 16 106 106 104 28 37 2 Conn. 18 101 107 107 107 107 107 107 107 107 107
MID. ATLANTIC
Upstate N.Y. 78 66 171 210 109 1449 - 9 9 - 4 9 2 N.Y.City 28 50 261 310 349 206 - 5 - 4 9 9 3 N.J. 29 39 158 122 105 106 - 5 1 1 1 1 2
N.J. 29 39 158 122 105 106
E.N.CENTRAL 117 157 1,070 2,383 547 568 - 8 8 2 Ohio 44 51 220 533 88 77 - 2 2 - 2 Ind. 26 20 77 86 40 35 1 III. 40 65 399 617 100 48 - 4 4 4 Mich. 7 16 361 1,082 318 381 - 2 2 2 1 Wis 5 13 66 11 27 2 W.N.CENTRAL 53 59 688 619 554 213 - 2 - 1 3 3 W.N.CENTRAL 53 59 6688 619 554 213 - 2 - 1 1 3 Iowa - 2 62 115 27 35 - 2 1 1 1 Iowa - 2 66 332 372 440 115 N.Dak. 1 1 3 3 2 2 2 2 N.Dak. 1 1 3 3 2 2 2 N.Dak. 1 1 3 3 2 2 N.Dak. 1 1 3 3 2 2 Nebr. 3 4 29 43 33 15 Nebr. 3 4 29 43 33 15 Nebr. 3 4 29 43 33 15 Nebr. 4 6 6 88 18 21 7 7 Nebr. 5 3 178 250 90 122 U - U - U Nd. 6 8 15 178 250 90 122 U - U - U Nd. 6 8 15 178 250 90 122 U - U - U N.C. 20 28 116 127 384 157 127 N.C. 12 5 5 23 373 447 345 271 U 1 U 1 U - U 1 1 2  E.S.CENTRAL 39 53 312 319 357 367 N.C. 20 28 116 127 384 157 127
Ohio         44         51         '220         533         88         77         -         2         -         -         2         -         1         2         -         1         2         -         1         4         -         -         -         -         -         1         4         -         -         -         -         1         4         -         -         -         2         4         1         -         -         -         -         2         1         -         <
III.   40   65   399   617   100   48   -   4   -   -   4     -
Mich.         7         16         361         1,082         318         381         -         2         -         -         2         1         -         2         -         -         2         1         2         -         -         2         -         -         2         1         1         3         -
W.N. CENTRAL   53   59   688   619   554   213   - 2   - 1   3   - 1   1   1   1   1   1   1   1   1
Minn.   29   38   173   61   30   40   -   -   -   1   1   1   1   1   1   1
Mo.         15         6         332         372         440         115         - <t< td=""></t<>
S. Dak.         1         2         1         8         1         1         - </td
Nebr. Kans.         3         4         29         43         33         15         -
S. ATLANTIC 234 202 1,128 1,468 954 894 - 3 - 3 - 3 14 Del 2 - 1 - 2 - 1
Del.         -         5         1-         2         9         12         -
D.C.
W. Va.         7         7         52         32         10         22         -
S.C.       12       5       52       39       13       61       -
Ga.         56         55         217         384         157         127         -         <
E.S. CENTRAL 39 53 312 319 357 367 2 2 Ky. 12 6 37 59 57 36 2 2 Tenn. 18 29 116 125 174 182 2 2 Ala. 8 15 47 44 45 72 Ala. 8 15 47 44 45 72
Ky.         12         6         37         59         57         36         -         -         -         -         -         2         2           Tenn.         18         29         116         125         174         182         -
Ala.       8       15       47       44       45       72       -
W.S. CENTRAL     54     53     1,480     2,497     613     921     -     -     -     -     -     -     9       Ark.     2     2     104     39     71     57     -     -     -     -     -     -     2       La.     11     12     55     188     86     150     -
Ark.     2     2     104     39     71     57     -     -     -     -     -     2       La.     11     12     55     188     86     150     -
Okla.     39     35     220     416     122     116     -     -     -     -     -     -     -     7       MOUNTAIN     81     89     774     1,014     403     465     -     11     -     1     12     1       Mont.     1     2     5     17     7     17     -     -     -     -     -     -     -
Tex. 2 4 1,101 1,854 334 598 7  MOUNTAIN 81 89 774 1,014 403 465 - 11 - 1 12 1  Mont. 1 2 5 17 7 17
Mont. 1 2 5 17 7 17
Coʻlo. 11 13 166 188 72 80 - 1 - 1 2 -
N. Mex. 18 18 60 42 80 148 Ariz. 37 46 385 564 154 116 1
Utah 8 5 45 39 19 26 - 3 3 - Nev. 2 3 53 121 40 41 - 7 - 7 -
PACIFIC     86     99     2,599     3,221     988     1,116     -     14     -     7     21     35       Wash.     5     4     231     261     86     55     -     2     -     1     3     5       Oreg.     24     32     144     208     83     86     -     -     -     -     -     -     -     12
Calif. 28 50 2,202 2,723 801 947 - 11 - 3 14 17
Alaska 6 5 9 10 8 15 - 1 - 1 - 1 - Hawaii 23 8 13 19 10 13 3 3 1
Guam 1 - 2 U - U 1
P.R. 3 2 195 255 201 181 V.I. U U U U U U U U U
Amer. Samoa U U U U U U U U U U C.N.M.I. U U U U U U U U U U U U U U U U U U

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

†Of 179 cases among children aged <5 years, serotype was reported for 76 and of those, 20 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending October 7, 2000, and October 9, 1999 (40th Week)

		aı	na Oct	ober 9,	1999	(4Uth )	vveek)				
		ococcal ease		Mumps			Pertussis			Rubella	
Reporting Area	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999
UNITED STATES	1,630	1,903	1	273	287	95	4,771	4,746	-	125	236
NEW ENGLAND	105	89	-	4	6	9	1,069	572	-	12	7
Maine N.H.	9 11	5 11	-	-	- 1	- 1	35 87	- 78	-	2	-
Vt. Mass.	2 59	4 51	-	- 1	1 4	7 1	189 704	53 401	-	- 8	- 7
R.I.	8	4 14	-	1	-	-	14	24	-	1	-
Conn. MID. ATLANTIC	16 156	14 179	-	2 20	35	20	40 481	16 762	-	1 9	- 31
Upstate N.Y.	52	53	-	9	7	12	228	597	-	2	18
N.Y. City N.J.	31 34	50 40	-	4 3	10 1	-	44 35	46 22	-	7 -	6 4
Pa.	39	36	-	4	17	8	174	97	-	-	3
E.N. CENTRAL Ohio	275 72	340 115	-	<b>2</b> 8 7	38 13	5 -	519 265	418 166	-	1 -	2
Ind. III.	41 64	48 91	-	1 6	4 9	1	79 59	54 67	-	- 1	1 1
Mich.	78	53	-	14	8	4	61	46	-	-	-
Wis. W.N. CENTRAL	20 141	33 189	-	- 19	4 10	- 6	55 417	85 326	-	- 1	126
Minn.	17	43	-	-	1	5	248	157	-	-	5
lowa Mo.	26 77	33 69	-	7 5	5 1	-	44 57	48 58	-	-	30 2
N. Dak. S. Dak.	2 5	3 11	-	-	-	-	6 4	4 5	-	-	-
Nebr.	7 7	10 20	-	4 3	- 3	- 1	25 33	4 50	-	1	89
Kans. S. ATLANTIC	260	316	1	3 41	3 41	18	381	334	-	- 73	- 35
Del.	1	9	-	-	-	-	8	4	-	-	-
Md. D.C.	25 -	45 3	U -	10	3 2	U -	87 3	107 -	U -	-	1 -
Va. W. Va.	36 12	42 6	1 -	9	9	16 -	87 1	19 2	-	-	-
N.C. S.C.	32 19	36 41	-	5 10	8 4	- 1	77 24	86 15	-	64 7	34
Ga.	40	52 82	- U	2 5	4	1 U	35 59	34	-	- 2	-
Fla. E.S. CENTRAL	95 113	132	-	5 7	11 11	-	59 88	67 80	U	5	2
Ky.	24	26	-	1	-	-	41	23	-	1	-
Tenn. Ala.	47 32	54 32	-	2 2	8	-	28 18	34 20	-	1 3	2
Miss.	10	20	-	2	3	-	1	3	-	-	-
W.S. CENTRAL Ark.	111 12	186 31	-	24 2	37 -	-	280 31	170 20	-	5 -	13 4
La. Okla.	34 24	57 <b>2</b> 8	-	4	10 1	-	12 14	9 33	-	1	- 1
Tex.	41	70	-	18	26	-	223	108	-	4	8
MOUNTAIN Mont.	115 4	120 2	-	19 1	22	16	632 35	595 2	-	2	16
ldaho	7	9	-	-	1	1	54	132	-	-	-
Wyo. Colo.	30	4 31	-	2 1	6	11	6 359	2 221	-	1	1
N. Mex. Ariz.	8 <b>56</b>	13 40	-	1 4	N 7	1 1	79 70	84 93	-	- 1	13
Utah Nev.	7	14 7	-	4 6	3 5	1 1	17 12	55 6	-	-	1
PACIFIC	354	352	_	111	87	21	904	1,489	_	17	4
Wash. Oreg.	44 57	59 61	- N	10 N	2 N	12 1	304 103	580 42	-	7	-
Calif.	237	220	-	80	70	8	449	830	-	10	4
Alaska Hawaii	8 8	6 6	-	7 14	2 13	-	19 29	4 33	-	-	-
Guam	-	1	U	-	1	U	-	2	U	-	-
P.R. V.I.	9 U	10 U	Ū	Ū	Ū	Ū	4 U	21 U	Ū	Ū	Ū
Amer. Samoa C.N.M.I.	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U

N: Not notifiable.

U: Unavailable.

<sup>-:</sup> No reported cases.

TABLE IV. Deaths in 122 U.S. cities,\* week ending October 7, 2000 (40th Week)

	,	All Cau	ses. By	Age (Y		<u> </u>		All Causes, By Age (Years)							
Reporting Area	All Ages		45-64	25-44	1-24	<1	P&I <sup>†</sup> Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I <sup>†</sup> Total
NEW ENGLAND Boston, Mass. Bridgeport, Conn Cambridge, Mass Fall River, Mass.	. 11 17	398 114 21 9 15	40 6 1 1	33 12 - 1 1	12 4 - -	17 6 1 -	51 16 3	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla		676 U 113 49 95	211 U 35 18 29	94 U 18 8 9	22 U 3 1	17 U 1 3	63 U 14 5 9
Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Ma New Haven, Conn Providence, R.I. Somerville, Mass.	. 27 52	38 20 12 25 18 40 2	4 2 4 7 10	2 2 2 1 - 1	2 - 1 1	4 - - 1 1	1 5 2 3 2 9	Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, F Tampa, Fla.	168	54 34 60 40 48 112 64	19 10 17 11 8 38 26	11 5 6 8 7 14 8	2 4 2 2 2 3	2 1 3 1 - 2	7 2 8 4 3 4 6
Springfield, Mass Waterbury, Conn. Worcester, Mass. MID. ATLANTIC Albany, N.Y.	. 30	14 26 44 1,606 39	9 9 11	5 2 4 130 4	2 2 46 1	1 3 32	3 1 4 115 3	Washington, D.C Wilmington, Del E.S. CENTRAL Birmingham, Ala Chattanooga, Te Knoxville, Tenn.	l. 8 823 a. 181	554 128 67 52	173 42 10 17	49 7 5 3	26 3 2	1 21 1 3 2	56 16 2 5
Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J. Erie, Pa.§	17 67 30 30 53	15 49 22 20 42	1 12 5 6 8	1 4 1 3 2	2	2 - 1 1	1 3 1 - 1	Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, Al Nashville, Tenn.	63 156 67	48 95 46 28 90	10 40 11 7 36	3 12 5 4 10	1 6 2 2 8	1 3 3 - 8	4 10 1 3 15
Jersey City, N.J. New York City, N. Newark, N.J. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§	34 Y. 1,023 68 6 399 36	24 723 31 4 283 24	206 20 - 77	2 60 13 2 25	24 2 - 10 1	4 10 2 - 4 2	31 2 1 20 3	W.S. CENTRAL Austin, Tex. Baton Rouge, La Corpus Christi, T Dallas, Tex.	Tex. 46 202	882 44 38 32 118	261 21 9 9	122 10 5 4 23	63 1 3 - 8	44 3 1 1 7	84 6 - 1 11
Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y.	29 121 . 31 35 156 28 22	23 96 26 27 122 21 15	4 17 5 7 23 5 6	5 - 1 6 1	2 1 - 2 - 1	2 - - 3 1	2 14 4 3 19 5 2	El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La San Antonio, Te Shreveport, La.	x. 198 66	58 68 192 49 U 140 45	13 17 62 15 U 39 11	7 7 39 3 U 11 4	3 1 35 4 U 5	1 13 3 U 3 5	4 26 2 U 14 5
Yonkers, N.Y. E.N. CENTRAL Akron, Ohio Canton, Ohio Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio	2,126 48 53 406 125 152 213	1,451 30 40 254 69 105 141	82 35	U 141 - - 34 10 9 16	U 45 1 - 12 5 4 9	U 61 4 1 22 6 10 2	U 137 2 3 31 14 - 21	Tulsa, Okla.  MOUNTAIN Albuquerque, N Boise, Idaho Colo. Springs, C Denver, Colo. Las Vegas, Nev. Ogden, Utah	34 olo. 59 100 180 20	98 562 U 26 37 70 122 15	19 171 U 6 8 22 40 2	9 68 U 1 10 5 13 2	2 27 U - 2 2 5 1	7 20 U 1 2 1	13 64 U 2 5 10 10
Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mi	131 212 37 71 14 ch. 45	95 134 33 44 7 34	2 23 3	5 21 - 2 2 2	1 1 1 1 2	2 1 1 1 1	8 13 2 3 2 7	Phoenix, Ariz. Pueblo, Colo. Salt Lake City, U Tucson, Ariz. PACIFIC	152 1,503	116 13 62 101 1,038	38 6 17 32 299	22 3 4 8	8 - 9 33	8 - 6 2 27	21 1 9 5
Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohi	174 39 118 43 55 40 81	120 33 87 36 41 31 57 60	37 5 16 4 6 4 17	10 1 12 2 5 4 5	4 1 1 3 -	2 - 1 2 -	9 4 8 2 4 - 2 2	Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawa Long Beach, Cal Los Angeles, Cal Pasadena, Calif. Portland, Oreg. Sacramento, Cal	if. 56 lif. 383 24 115	15 78 14 43 33 268 17 82 U	3 22 3 12 17 73 4 26 U	1 8 1 3 4 25 6 U	2 1 2 2 10	1 - 2 - 7 3 1 U	2 3 1 5 7 8 2 8 U
W.N. CENTRAL Des Moines, lowa Duluth, Minn. Kansas City, Kans Kansas City, Mo. Lincoln, Nebr. Minneapolis, Min	686 U 33 . 37 107 41 n. 154	496 U 22 26 78 29 116	U 9 19 9 28	27 U - 1 3 3 5	20 U - 1 4 - 5	10 U 2 - 2	42 U - 3 7 1 8	San Diego, Calif San Francisco, C San Jose, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Tacoma, Wash.	. 155 alif. 101 147 f. 42 119	102 66 100 32 80 45 63	30 27 30 7 22 10 13	16 5 8 3 12 3 6	3 1 6 - 4 - 2	4 2 2 - 1 4	19 13 12 3 9 8
Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	69 94 69 82	50 59 54 62	20 14	3 6 1 5	4 5 - 1	4 - 2	12 3 2 6	TOTAL	11,191	7,663	2,210	765	294	249	714

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.

A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. Pneumonia and influenza.

\*Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

\*Total includes unknown ages.

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