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797 National Adult Immunization Awareness Week — October 11–17, 1998
797 Influenza and Pneumococcal Vaccination Levels Among Adults Aged ≥65 Years
803 National Fire Prevention Week
803 Deaths Resulting from Residential Fires and the Prevalence of Smoke Alarms
806 Outbreak of Cyclosporiasis — Ontario, Canada
809 Local Data for Local Decision Making — Selected Counties, Conn., Mass., and N.Y., 1997
814 Notice to Readers

National Adult Immunization Awareness Week — October 11–17, 1998

National Adult Immunization Awareness Week is October 11–17. This week emphasizes the importance of appropriately vaccinating adults against diphtheria, hepatitis A, hepatitis B, influenza, measles, mumps, pneumococcal disease, rubella, tetanus, and varicella. National Adult Immunization Awareness Week coincides with the beginning of the influenza vaccination season and emphasizes the need for intensified implementation of vaccination programs for adults.

Additional information about National Adult Immunization Awareness Week is available from the National Coalition for Adult Immunization, 4733 Bethesda Avenue, Suite 750, Bethesda, MD 20814; telephone (301) 656-0003; fax (301) 907-0878; e-mail adultimm@aol.com; and World-Wide Web site http://www.medscape.com/NCAI/publications/naiaw-kit/.

Influenza and Pneumococcal Vaccination Levels Among Adults Aged ≥65 Years — United States, 1997

In 1996, influenza and pneumonia were the fifth leading cause of death among persons aged ≥65 years in the United States (*1*). A national health objective for 2000 is to increase influenza and pneumococcal vaccination levels to ≥60% among persons at high risk for complications, including those aged ≥65 years (*2*). To monitor states' progress toward achieving this objective, data from the 1997 Behavioral Risk Factor Surveillance System (BRFSS) were analyzed. This report summarizes the BRFSS findings, which indicate the influenza vaccination objective was exceeded by 45 states and by the 50 states and the District of Columbia (DC) combined, but the pneumococcal vaccination objective was not reached by any state.

The BRFSS is an ongoing, state-based, random-digit–dialed telephone survey of U.S. noninstitutionalized civilian adults aged ≥18 years. In 1997, 52 reporting areas (50 states, DC, and Puerto Rico) participated in the survey. Overall vaccination level estimates were based on combined data from the 51 reporting areas that included the 50 states and DC. Data from Puerto Rico were included in the area-specific analysis. Responses for two questions related to adult vaccination were analyzed: "During the

Influenza and Pneumococcal Vaccination Levels — Continued

past 12 months, have you had a flu shot?" and "Have you ever had a pneumonia vaccination?" Of all 133,321 participants, 26,469 were aged ≥65 years. Respondents who did not report or did not know their vaccination status were excluded from the analysis (2% of respondents for the influenza vaccination question and 5% of respondents for the pneumococcal vaccination question). Previously published vaccination data from the 1995 BRFSS included in the denominator those respondents who did not report or did not know their vaccination status (*3*); for comparisons in this study, this group was excluded from the 1995 data. Data for racial/ethnic groups other than non-Hispanic whites, non-Hispanic blacks, and Hispanics were too small for analysis. Data were weighted by age and sex to reflect each state's most recent adult population estimate. SUDAAN was used to calculate point estimates and 95% confidence intervals (CIs).

During 1997, among persons aged ≥65 years, 65.5% (95% CI=64.6%–66.4%) reported receiving influenza vaccine during the preceding year, and 45.4% (95% CI=44.4%–46.3%) reported ever receiving pneumococcal vaccine (Table 1). Both percentages were higher than in 1995, when 58.7% (95% CI=57.6%–59.7%) and 36.9% (95% CI=35.9%–38.0%) reported receiving influenza and pneumococcal vaccine, respectively.

Among the 52 reporting areas, 45 had influenza vaccination levels ≥60%, and nine had levels ≥70% (range: 41.5% in Puerto Rico to 74.4% in Colorado) (Table 2). From 1995 to 1997, 48 of 50 states showed improvement in influenza vaccination levels (median percentage point difference: 6.1; range: –4.1 to 23.2).

Although all states reported pneumococcal vaccination levels <60% among persons aged ≥65 years, levels were ≥50% in 17 states; levels ranged from 32.2% in Louisiana to 59.4% in Arizona. All but four states showed improvement in the levels of pneumococcal vaccination from 1995 to 1997 (median percentage point difference: 8.8; range: –6.7 to 20.9).

Overall, persons aged 65–74 years were significantly less likely than persons aged ≥75 years to report receipt of influenza (63.2% compared with 69.1%) or pneumococcal (41.7% compared with 51.3%) vaccines (Table 1). Among persons aged ≥65 years in different racial/ethnic groups, non-Hispanic whites were more likely to report receipt of influenza (67.2%) and pneumococcal (47.3%) vaccines than Hispanics (57.9% and 34.1%, respectively) and non-Hispanic blacks (50.2% and 29.7%, respectively). Influenza and pneumococcal vaccination levels in all racial/ethnic groups increased from 1995 to 1997 (for influenza, 6.6 percentage points for non-Hispanic whites, 7.0 for Hispanics, and 10.4 for non-Hispanic blacks, and for pneumococcal, 8.3 for Hispanics, 8.5 for non-Hispanic whites, and 9.1 for non-Hispanic blacks). Men had slightly higher coverage levels than women for influenza vaccine; pneumococcal vaccination levels did not differ by sex.

Other factors correlated with vaccination levels were level of education, length of time since last check-up, and self-reported index of health (Table 1). As level of education increased and as self-reported health declined, vaccination levels increased for both vaccines. Persons reporting having had a routine check-up within the previous 12 months (86.3% of all respondents aged ≥65 years) were more likely to report receipt of influenza and pneumococcal vaccines than persons reporting a longer interval since their last check-up.

Influenza and Pneumococcal Vaccination Levels — Continued

TABLE 1. Percentage of persons aged ≥65 years in the 50 states and the District of Columbia who reported receiving influenza or pneumococcal vaccine, by selected characteristics — Behavioral Risk Factor Surveillance System, 1997

	Influenza			Pneumococcal		
Characteristic	%	(95% CI*)	% point difference from 2000 objective	%	(95% CI)	% point difference from 2000 objective
Mean	**65.5**	**(64.6–66.4)**	**5.5**	**45.4**	**(44.4–46.3)**	**–14.6**
Age group (yrs)						
65–74	63.2	(62.0–64.3)	3.2	41.7	(40.4–42.9)	–18.3
≥75	69.1	(67.8–70.5)	9.1	51.3	(49.8–52.8)	– 8.7
Race/Ethnicity						
Non-Hispanic white	67.2	(66.3–68.1)	7.2	47.3	(46.3–48.3)	–12.7
Non-Hispanic black	50.2	(46.5–53.9)	– 9.8	29.7	(26.2–33.2)	–30.3
Hispanic	57.9	(52.0–63.8)	– 2.1	34.1	(28.6–39.6)	–25.9
Other†	64.2	(56.8–71.7)	4.2	42.6	(34.3–50.9)	–17.4
Sex						
Men	67.0	(65.6–68.4)	7.0	45.1	(43.5–46.6)	–14.9
Women	64.4	(63.3–65.6)	4.4	45.6	(44.4–46.8)	–14.4
Education level						
Less than high school	60.1	(58.4–61.9)	0.1	40.1	(38.3–41.9)	–19.9
High school	65.0	(63.5–66.5)	5.0	45.0	(43.5–46.6)	–15.0
More than high school	69.5	(68.1–70.9)	9.5	49.1	(47.6–50.7)	–10.9
Time since last checkup						
1–12 months	68.8	(67.9–69.8)	8.8	48.3	(47.3–49.3)	–11.7
>1 year	47.2	(44.6–49.7)	–12.8	29.3	(26.9–31.7)	–30.7
Self-reported health						
Poor	71.0	(68.3–73.6)	11.0	54.5	(51.4–57.6)	– 5.5
Fair	66.7	(64.7–68.7)	6.7	48.3	(46.2–50.5)	–11.7
Good	66.4	(64.9–67.9)	6.4	44.9	(43.3–46.5)	–15.1
Very good or excellent	62.9	(61.5–64.4)	2.9	42.2	(40.7–43.8)	–17.8

*Confidence interval.
†Numbers from other racial/ethnic groups were too small for meaningful analysis.

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Influenza and Pneumococcal Vaccination Levels — Continued

TABLE 2. Percentage of persons aged ≥65 years in the 50 states, the District of Columbia, and Puerto Rico who reported receiving influenza or pneumococcal vaccine, by reporting area — Behavioral Risk Factor Surveillance System (BRFSS), 1997

	Influenza				Pneumococcal			
			% Point difference				% Point difference	
Reporting area	%	(95% CI*)	1995 to 1997†	1997 to 2000 objective	%	(95% CI)	1995 to 1997†	1997 to 2000 objective
Alabama	62.6	(57.6–67.5)	17.5	2.6	47.5	(42.3–52.6)	14.3	–12.5
Alaska	58.3	(46.9–69.7)	8.5	– 1.7	39.2	(28.2–50.3)	–6.7	–20.8
Arizona	72.9	(67.5–78.3)	7.6	12.9	59.4	(53.4–65.5)	10.2	– 0.6
Arkansas	61.1	(55.8–66.3)	0.1	1.1	39.1	(33.7–44.4)	1.9	–20.9
California	65.5	(61.7–69.3)	5.5	5.5	49.8	(45.8–53.9)	5.5	–10.2
Colorado	74.4	(69.0–79.9)	7.7	14.4	53.3	(47.2–59.5)	6.7	– 6.7
Connecticut	67.2	(62.2–72.3)	4.7	7.2	43.0	(37.6–48.4)	4.8	–17.0
Delaware	68.6	(64.4–72.8)	11.4	8.6	52.6	(47.9–57.3)	11.1	– 7.4
District of Columbia	54.3	(47.2–61.3)	NA§	– 5.7	32.3	(25.6–38.9)	NA	–27.7
Florida	62.3	(58.9–65.8)	0.7	2.3	45.5	(42.0–49.0)	6.0	–14.5
Georgia	58.5	(52.7–64.3)	11.5	– 1.5	48.5	(42.8–54.2)	8.9	–11.5
Hawaii	71.1	(65.9–76.3)	8.8	11.1	51.7	(45.8–57.7)	8.8	– 8.3
Idaho	66.4	(62.9–69.9)	2.3	6.4	50.2	(46.5–54.0)	10.0	– 9.8
Illinois	67.8	(61.3–74.3)	9.9	7.8	44.7	(38.1–51.3)	15.8	–15.3
Indiana	62.5	(57.3–67.8)	3.3	2.5	38.0	(32.7–43.4)	3.9	–22.0
Iowa	69.7	(66.3–73.1)	6.1	9.7	51.5	(47.6–55.3)	6.6	– 8.5
Kansas	61.5	(56.3–66.7)	–0.7	1.5	43.7	(38.4–49.0)	–1.0	–16.3
Kentucky	61.2	(57.5–64.9)	7.8	1.2	38.6	(34.8–42.3)	13.3	–21.4
Louisiana	58.4	(52.3–64.5)	6.2	– 1.6	32.2	(26.4–38.1)	6.3	–27.8
Maine	72.1	(66.7–77.4)	7.5	12.1	50.0	(44.3–55.7)	14.5	–10.0
Maryland	63.4	(59.0–67.8)	5.2	3.4	41.0	(36.6–45.4)	7.4	–19.0
Massachusetts	66.0	(60.1–72.0)	6.7	6.0	52.7	(46.4–59.0)	20.3	– 7.3
Michigan	63.6	(58.5–68.6)	6.8	3.6	45.6	(40.4–50.8)	5.7	–14.4
Minnesota	69.0	(65.7–72.2)	5.7	9.0	48.3	(44.8–51.8)	8.2	–11.7
Mississippi	61.1	(55.6–66.6)	4.1	1.1	45.9	(39.9–51.9)	6.5	–14.1
Missouri	70.3	(65.3–75.3)	3.7	10.3	44.3	(38.6–50.0)	12.1	–15.7
Montana	68.4	(63.0–73.7)	4.4	8.4	50.8	(45.0–56.7)	15.9	– 9.2
Nebraska	65.8	(61.7–69.9)	1.4	5.8	49.8	(45.4–54.2)	13.8	–10.2
Nevada	56.5	(46.3–66.7)	4.0	– 3.5	53.5	(43.1–64.0)	13.3	– 6.5
New Hampshire	64.6	(58.4–70.8)	8.7	4.6	49.6	(43.1–56.1)	9.1	–10.4
New Jersey	60.7	(55.9–65.5)	12.7	0.7	33.9	(29.3–38.6)	20.9	–26.1
New Mexico	72.8	(67.9–77.7)	3.8	12.8	50.1	(44.5–55.8)	10.6	– 9.9
New York	64.5	(60.3–68.7)	8.5	4.5	38.9	(34.5–43.4)	12.8	–21.1
North Carolina	64.6	(60.8–68.4)	12.0	4.6	50.6	(46.7–54.6)	19.4	– 9.4
North Dakota	64.8	(60.0–69.6)	7.4	4.8	40.8	(36.0–45.7)	7.6	–19.2
Ohio	65.4	(61.3–69.5)	2.4	5.4	38.5	(34.0–43.1)	–2.2	–21.5
Oklahoma	69.3	(65.1–73.5)	8.2	9.3	40.4	(36.1–44.6)	3.2	–19.6
Oregon	69.8	(65.8–73.9)	2.9	9.8	55.9	(51.5–60.2)	10.0	– 4.1
Pennsylvania	65.8	(62.0–69.6)	7.2	5.8	47.1	(42.9–51.2)	8.6	–12.9
Puerto Rico	41.5	(36.2–46.8)	NA	–18.5	33.7	(28.5–38.8)	NA	–26.3
Rhode Island	67.7	(62.4–73.0)	1.1	7.7	43.0	(37.4–48.6)	12.2	–17.0
South Carolina	74.3	(70.1–78.5)	23.2	14.3	41.6	(36.8–46.4)	15.1	–18.4
South Dakota	65.6	(61.0–70.1)	5.5	5.6	40.6	(36.1–45.2)	9.1	–19.4
Tennessee	69.1	(65.0–73.2)	5.9	9.1	45.0	(40.5–49.5)	15.1	–15.0
Texas	68.0	(62.9–73.2)	11.3	8.0	44.4	(38.8–50.0)	–0.3	–15.6
Utah	66.1	(60.5–71.8)	–4.1	6.1	48.5	(42.3–54.8)	5.8	–11.5
Vermont	69.5	(65.4–73.5)	5.4	9.5	51.6	(47.1–56.2)	15.7	– 8.4
Virginia	67.7	(62.8–72.5)	15.2	7.7	53.6	(48.0–59.2)	14.1	– 6.4
Washington	70.3	(66.3–74.2)	3.6	10.2	51.6	(47.1–56.1)	5.5	– 8.4
West Virginia	58.2	(53.7–62.6)	5.0	– 1.8	41.3	(36.9–45.6)	4.3	–18.7
Wisconsin	66.1	(60.7–71.4)	9.1	6.1	42.6	(36.9–48.3)	6.8	–17.4
Wyoming	72.4	(67.6–77.2)	5.6	12.4	50.9	(45.5–56.2)	7.0	– 9.1
Range	*41.5–74.4*				*32.2–59.4*			
Median	*65.9*				*45.8*			

* Confidence Interval.
† Percentage point difference from 1995 to 1997 excluded don't know and unknown responses.
§ Not available. Puerto Rico and District of Columbia did not participate in the 1995 BRFSS.

Influenza and Pneumococcal Vaccination Levels — Continued

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Editorial Note: The findings in this report indicate that in 1997, influenza and pneumococcal vaccination rates overall, by state, and by racial/ethnic group continued to increase from levels in 1995. The national health objective for influenza vaccination was exceeded by 45 states and by the 50 states and DC combined. No state met the national health objective for pneumococcal vaccination, but if state-specific coverage continues to increase at rates observed from 1995 to 1997, 28 states would reach or exceed the 60% coverage goal by 2000.

Vaccination rates varied substantially by state. Possible reasons for these differences include state differences in demographic distribution, provision of adult vaccination programs, physician practice patterns, and patient attitudes.

In the 50 states and DC combined, several factors were independently associated with self-reported receipt of influenza and pneumococcal vaccines. Racial/ethnic disparities in vaccination levels among Hispanics and non-Hispanic blacks continued and were not explained by differences in age, sex, education level, health-care access, or perceived health status. To understand reasons for disparity in vaccination by race/ethnicity, CDC and other federal agencies have implemented a national Eliminating Racial and Ethnic Disparities Initiative, with the goal of eliminating by 2010 disparities in infant mortality, diabetes, cancer screening and management, heart disease, human immunodeficiency virus infection/acquired immunodeficiency syndrome, and child and adult vaccinations.

Persons aged 65–74 years were less likely than persons aged ≥75 years to report receipt of influenza and pneumococcal vaccines, and this was not explained by differences in race/ethnicity, sex, education level, health-care access, or perceived health status. Increasing age may represent increased opportunity for encounters with the health-care system by patients, increased offers for vaccination by providers, and increased perception of need for vaccination by both patients and providers. Awareness of the need for routine vaccination should be increased among all persons aged ≥65 years.

Although most persons aged ≥65 years had had a routine check-up during the previous year, many were not vaccinated against influenza and pneumococcal disease. Routine check-ups provide an ideal opportunity to review a patient's need for clinical preventive services and 1) provide pneumococcal vaccine to those not previously vaccinated or not documented to be vaccinated and 2) to recommend influenza vaccination or provide it if the check-up occurs during the influenza vaccination season usually beginning in September. A doctor's recommendation for vaccination services can have a strong influence on the patient's decision to be vaccinated (*4–6*).

The findings in this study are subject to at least two limitations. First, self-reports about vaccination status were not validated. However, in one study, the predictive value and accuracy of self-report of influenza vaccination within the previous year was up to 91% when vaccination status was validated by record review (*7*). Accuracy of recall of pneumococcal vaccination is under investigation by CDC. Second, persons residing in nursing homes and in households without telephones are not included in this survey, therefore results may not reflect vaccination levels in these groups.

Influenza and Pneumococcal Vaccination Levels — Continued

Although the BRFSS was not designed to produce national estimates, overall vaccination levels from previous years have been similar to estimates from the National Health Interview Survey (NHIS) (in 1995, the BRFSS estimate was 0.8 percentage points higher for influenza vaccination and 4.5 percentage points higher for pneumococcal vaccine) (*8*). The NHIS is used to monitor progress toward the national 2000 objective.

To assist local planners in targeting public health programs to reach undervaccinated groups, states can expand the BRFSS survey or use local surveys to capture information on reasons for vaccination and nonvaccination, provider recommendations for vaccination, and accessibility of vaccination services. Because older adults have a high rate of reported routine medical care and because provider recommendation can influence a patient's decision to be vaccinated, strategies to improve vaccination directed at practitioners can have a large impact (*9*). Interventions, such as standing orders for vaccination, using provider and patient recalls and reminders, and feedback on vaccination levels, have been effective in increasing adult vaccination levels (*9*). Guidelines and tools for implementing these interventions are available through Put Prevention Into Practice, a national campaign to improve delivery of clinical preventive services (*10*). In addition, opportunities for vaccination outside of traditional health-care settings should be increased to reach healthy elderly persons who do not routinely access traditional health-care settings.

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National Fire Prevention Week — October 4–10, 1998

October 4–10 is National Fire Prevention Week. This year, the week will commemorate the Great Chicago Fire of 1871, which accounted for 250 deaths and destroyed 17,430 buildings. The aim of National Fire Prevention Week is to increase public awareness of fire safety and the prevention of fire-related injuries, deaths, and property damage by promoting fire prevention strategies. These strategies include 1) promoting safe storage of matches and flammable liquids, 2) teaching children not to play with matches or lighters, 3) discouraging persons from smoking in bed, 4) recommending that persons establish and practice fire escape plans, 5) encouraging the installation of a smoke alarm on each habitable floor of a home and outside each sleeping area, and 6) teaching persons how to extinguish fires.

This year, as part of National Fire Prevention Week, a unified North American fire drill, The Great Escape, will be held on October 7 at 6 p.m. This event is being coordinated by the National Fire Protection Association (NFPA) and participating fire departments, schools, and communities across the United States and Canada. Additional information about preventing residential fires and The Great Escape fire drill is available from NFPA, telephone (617) 984-7285, or from the World-Wide Web site http://www.nfpa.org.

Deaths Resulting from Residential Fires and the Prevalence of Smoke Alarms — United States, 1991–1995

In 1995, residential fires accounted for an estimated 3600 deaths and approximately 18,600 injuries (*1,2*). In addition, property damage and other direct costs have been estimated to exceed more than $4 billion annually (*3*). To determine residential fire-related death rates, CDC analyzed death certificate data from 1991 to 1995 from U.S. vital statistics mortality tapes. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) was used to determine the prevalence of smoke alarms in U.S. households. This report presents the findings of these analyses, which indicate a seasonal variation in fire-related deaths and a high prevalence of smoke alarms in residences in the United States.

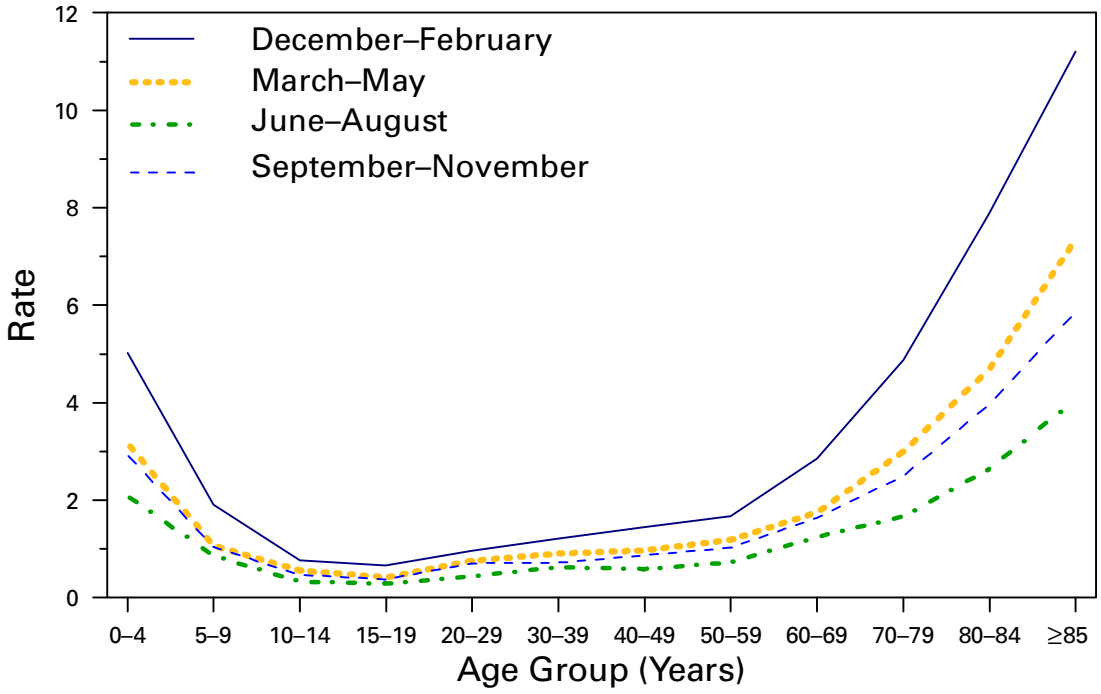
Deaths from residential fires were classified using *International Classification of Diseases, Ninth Revision*, external cause of injury codes E890–E899 and the place of occurrence noted as residence on the death certificate. The 1995 BRFSS survey is the only comprehensive survey from which state-specific prevalence rates for smoke alarms can be generated. The BRFSS is an ongoing, state-based, random-digit–dialed telephone survey of the U.S. population aged ≥18 years. Estimates of the prevalence of smoke alarms were weighted based on the number of telephone numbers per household and the age, sex, and race distribution in each state.

From 1991 to 1995, the U.S. residential fire-related death rate declined from 1.3 per 100,000 population to 1.1. During this time period, residential fire-related death rates were greatest during December–February and lowest during June–August (Figure 1).

The averaged annualized death rates for 1991–1995 showed that children aged <5 years and adults aged ≥65 years had higher rates than those in other age groups

Deaths Resulting from Residential Fires — Continued

FIGURE 1. Annualized rates* of deaths from residential fires,† by season and age group of decedents — United States, 1991–1995



*Per 100,000 population.
† *International Classification of Diseases, Ninth Revision*, codes E890–E990.

(Figure 1). In 1995, 93.6% of households in the United States reported having at least one smoke alarm. The prevalence of smoke alarms ranged from 78.9% in Hawaii (95% confidence interval [CI]=76.7%–81.2%) to 98.7% in Maryland (95% CI=98.3%–99.1%) (Table 1).

Reported by: Div of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC.

Editorial Note: During 1991–1995, deaths from residential fires declined, meeting the national health objective for 2000 of 1.2 per 100,000 persons (objective 9.6) (*4*). The findings in this report suggest that residential fire-related deaths were greatest during December–February, reflecting the seasonal use of heating devices (e.g., portable space heaters and wood-burning stoves). The leading causes of residential fires are due to cooking and heating devices improperly placed and/or left unattended (*5*).

Because 81% of fire-related deaths occur in the home, strategies that emphasize residential fire prevention probably will result in the largest reduction in fire-related deaths. To reduce the risk for death or injury resulting from fires, a smoke alarm should be installed outside each sleeping area and on every habitable level of a home (*6*). Homes with smoke alarms have almost half as many fire-related deaths compared with homes without smoke alarms (*7,8*). Children aged <5 years and adults aged ≥65 years have two to six times higher fire-related death rates compared with the national average for all ages (*2*). Both young children and older adults who may have physical limitations can benefit from the early warnings provided by smoke alarms.

Deaths Resulting from Residential Fires — Continued

TABLE 1. Prevalence of households* with at least one smoke alarm, by state — Behavioral Risk Factor Surveillance System, United States, 1995

State	%	(95% CI†)	State	%	(95% CI)
Alabama	92.6	(91.1%–94.1%)	Montana	90.1	(88.1%–92.1%)
Alaska	96.4	(94.9%–97.8%)	Nebraska	90.9	(89.4%–92.4%)
Arizona	91.5	(89.6%–93.3%)	Nevada	95.0	(93.8%–96.2%)
Arkansas	87.7	(85.9%–89.4%)	New Hampshire	97.7	(96.9%–98.6%)
California	92.7	(90.9%–94.5%)	New Jersey	96.0	(94.7%–97.3%)
Colorado	90.5	(89.0%–92.0%)	New Mexico	87.6	(85.4%–89.8%)
Connecticut	96.8	(95.9%–97.8%)	New York	94.5	(93.5%–95.5%)
Delaware	97.4	(96.5%–98.2%)	North Carolina	93.9	(93.0%–94.9%)
Florida	92.2	(91.1%–93.2%)	North Dakota	94.3	(93.0%–95.6%)
Georgia	92.9	(91.7%–93.5%)	Ohio	96.7	(95.6%–97.8%)
Hawaii	78.9	(76.7%–81.2%)	Oklahoma	93.2	(91.8%–94.5%)
Idaho	92.0	(90.9%–93.2%)	Oregon	97.7	(97.1%–98.2%)
Illinois	97.8	(97.0%–98.6%)	Pennsylvania	95.1	(94.3%–96.0%)
Indiana	95.8	(94.8%–96.7%)	Rhode Isaland	95.6	(94.5%–96.7%)
Iowa	93.7	(92.8%–94.6%)	South Carolina	95.8	(94.6%–97.0%)
Kansas	91.9	(90.5%–93.2%)	South Dakota	88.1	(86.3%–89.8%)
Kentucky	91.9	(90.6%–93.2%)	Tennessee	92.6	(91.4%–93.8%)
Louisiana	84.5	(82.6%–86.5%)	Texas	87.6	(85.7%–89.5%)
Maine	96.4	(95.2%–97.7%)	Utah	91.1	(89.6%–92.6%)
Maryland	98.7	(98.3%–99.1%)	Vermont	95.3	(94.4%–96.3%)
Massachusetts	97.8	(97.0%–98.6%)	Virgina	96.1	(95.0%–97.1%)
Michigan	96.5	(95.6%–97.3%)	Washington	96.6	(95.8%–97.3%)
Minnesota	97.3	(96.6%–97.9%)	West Virginia	91.7	(90.4%–92.9%)
Mississippi	85.3	(83.0%–87.5%)	Wisconsin	96.9	(95.9%–97.9%)
Missouri	94.7	(93.3%–96.2%)	Wyoming	90.5	(89.1%–91.8%)

*Persons aged ≥18 years who reported the presence of at least one smoke alarm.
†Confidence interval.

The findings in this report also indicate that the prevalence of smoke alarms across the United States is high. This is, in part, due to various programs, such as distribution and installation programs, conducted by state and local health departments and fire service personnel and programs that provide smoke alarms to parents of newborns (*9*). However, these data do not necessarily reflect the proportion of homes equipped with functional smoke alarms. The effectiveness of smoke alarms is dependent on appropriately installing and maintaining the device (*1*), and approximately 50% of smoke alarms are no longer functional 12 months after installation. It is necessary to continue with programs to install smoke alarms in homes to achieve 100% coverage and to implement public health programs that focus on their maintenance.

This analysis has at least one important limitation. Low-income households less likely to have telephones are probably less likely to have smoke alarms. Because the BRFSS excludes households without telephones, the prevalence of smoke alarms may be overestimated.

Effective public health strategies to reduce residential fire-related injuries and deaths should include 1) smoke alarm installation, 2) monthly testing of smoke alarms, 3) reduction of residential fire hazards, 4) the design and practice of fire escape plans, 5) fire-safety education, and 6) the implementation of smoke alarm ordinances. The adoption of these strategies should lead to continued declines in residential fire-related deaths.

Deaths Resulting from Residential Fires — Continued

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Outbreak of Cyclosporiasis — Ontario, Canada, May 1998

During May–June 1998, the Ontario Ministry of Health and local health departments in Ontario received reports of clusters of cases of cyclosporiasis associated with events held during May. This report describes the preliminary findings of the investigation of a cluster in Toronto, Ontario, and summarizes the findings from investigations of 12 other clusters. These investigations indicated that fresh raspberries imported from Guatemala were linked to the multicluster outbreak.

Toronto, Ontario

On June 2, Toronto Public Health was notified of a laboratory-confirmed case of cyclosporiasis in a person who attended a dinner at a hotel in Toronto on May 8. Six other persons who attended the dinner were reported to have diarrheal illness. A case of cyclosporiasis was defined as onset of any gastrointestinal (e.g., nausea or vomiting) or constitutional (e.g., fever or fatigue) symptom 1–14 days after the dinner and either 1) laboratory confirmation of *Cyclospora* oocysts in a stool specimen; 2) diarrhea (i.e., three or more loose or watery stools during a 24-hour period); or 3) at least four gastrointestinal symptoms. Of the 174 persons who attended the dinner, 128 (74%) were interviewed. Of these 128 persons, 29 (23%) had illness that met the case definition; three of the 29 persons had laboratory-confirmed cyclosporiasis. The median incubation period was 8 days (range: 1–12 days). All 29 case-patients had diarrhea; the median duration of diarrheal illness was 7 days (range: 1–34 days).

Eating the berry garnish (which included raspberries, blackberries, strawberries, and possibly blueberries) for the dessert was significantly associated with risk for illness. Of the 108 persons who ate or probably ate the berry garnish, 28 (26%) became

Cyclosporiasis — Continued

ill, compared with one (5%) of the 20 persons who did not or probably did not eat the berry garnish (relative risk [RR]=5.2; p=0.04, Fisher's exact test). Among the berries in the garnish, raspberries were the only berries significantly associated with risk for illness. Of the 94 persons who ate or probably ate the raspberries, 27 (29%) became ill, compared with two (6%) of the 32 persons who did not or probably did not eat the raspberries (RR=4.6; 95% confidence interval=1.2–18.3).

Other Investigations

Twelve other clusters of cases of cyclosporiasis in addition to the Toronto cluster described above have been investigated; each of the 13 clusters had two or more cases, at least one of which was laboratory confirmed. Based on preliminary data, the 13 clusters comprise 192 cases; 46 (24%) of the 192 were laboratory confirmed. The dates of the events associated with the clusters ranged from May 2 through May 23, 1998.

Fresh raspberries were the only food in common to all 13 events. Raspberries were included in mixtures of various types of berries at 12 events and were the only type of berry served at one event. The median of the event-specific attack rates for the 13 events, irrespective of exposures, was 89% (range: 23%–100%). The median of the event-specific attack rates for persons who ate or probably ate the food items that included raspberries was 100% (range: 26%–100%); the median attack rate for persons who did not or probably did not eat these food items was 0% (range: 0%–67%). Eating the food items that included raspberries was significantly associated with risk for illness for five events; for the other eight events, eating the raspberry-containing food items could account for 60 (92%) of 65 cases. Traceback investigations to identify the source(s) of the raspberries have been completed for eight events, including the event described above; Guatemala was the only source of the raspberries served at the events. Mesclun lettuce and fresh basil, which were implicated in outbreaks of cyclosporiasis in the United States in 1997 (*1,2*), each were served at two events but were not significantly associated with risk for illness.

Reported by: Toronto Public Health, Toronto; Haliburton-Kawartha-Pine Ridge District Health Unit, Port Hope; Simcoe County District Health Unit, Barrie; York Regional Health Unit, Newmarket; Disease Control Svc, Public Health Br, Ontario Ministry of Health, Toronto; Central Public Health Laboratory, Laboratory Services Br, Ontario Ministry of Health, Toronto. Canadian Food Inspection Agency, Fresh and Processed Plant Products Div, Ottawa, and Food Inspection, Ontario Region, Toronto and Guelph; Bur of Infectious Diseases and Field Epidemiology Training Program, Laboratory Center for Disease Control, and Food Directorate, Health Canada, Ottawa. Parasitic Disease Surveillance Unit, New York City Dept of Health, New York. Div of Parasitic Diseases, National Center for Infectious Diseases; and an EIS Officer, CDC.

Editorial Note: The findings in this report indicate that fresh raspberries imported from Guatemala were linked to the outbreak of cyclosporiasis in Ontario in May 1998. Outbreaks of cyclosporiasis in North America in the spring of 1996 and 1997 also were linked to Guatemalan raspberries; the mode of contamination of the raspberries was not identified for any of these outbreaks (*1,3*). No outbreaks were recognized in association with Guatemalan raspberries during Guatemala's fall and winter export seasons in 1996 and 1997.

After the outbreak in 1996, berry growers and exporters in Guatemala, in consultation with the Food and Drug Administration (FDA) and CDC, voluntarily introduced control measures that focused on improving water quality and sanitary conditions on individual farms (*1*). In the spring of 1997, another outbreak of cyclosporiasis

Cyclosporiasis — Continued

occurred despite the implementation of control measures and the restriction (beginning April 22, 1997) that, during that spring, only farms classified by the Guatemalans as low risk could export to North America (*1*). In the spring of 1998, FDA did not allow importation of fresh raspberries from Guatemala into the United States. The Canadian Food Inspection Agency reported that fresh raspberries from farms that the Guatemalans had classified as low risk continued to be imported into Canada until June 9, 1998. The occurrence of outbreaks in 1997 and 1998 despite the implementation of control measures on Guatemalan farms suggests either that the control measures may not have been fully implemented by some farms, were not effective, or were not directed against the true source of contamination of the raspberries (*1*). The Guatemalan Berry Commission and the government of Guatemala are developing a more comprehensive plan for growing and handling raspberries that includes additional control measures and inspection criteria; the plan is being reviewed by U.S. and Canadian officials.

This is at least the third, and possibly the fourth (*4*), consecutive year in which outbreaks of cyclosporiasis linked to consumption of raw produce have occurred in North America. In addition to Guatemalan raspberries, fresh mesclun lettuce and fresh basil that were not from Guatemala have been implicated in outbreaks in the United States (*1,2*). The mode of contamination of the produce was not determined for any of the outbreaks, in part because the methods for detecting *Cyclospora* on produce and in other environmental samples are insensitive for detecting low levels of the parasite. Produce should be washed thoroughly before it is eaten; however, this practice does not eliminate the risk for transmission of *Cyclospora* (*3,5,6*).

Health-care providers should consider the diagnosis of *Cyclospora* infection in persons with prolonged diarrheal illness and specifically request testing of stool specimens for this parasite. The average incubation period for cyclosporiasis is 1 week; in patients who are not treated with trimethoprim-sulfamethoxazole (*7*), illness can be protracted, with remitting and relapsing symptoms.

Cases of *Cyclospora* infection unrelated to travel outside of Canada or the United States may be associated with a new outbreak. Newly identified clusters should be investigated to identify the vehicles of infection and to identify the sources and modes of contamination of the implicated vehicles. Although cyclosporiasis is not a reportable disease in any Canadian province or territory, as of June 1998, five states and one municipality in the United States had mandated reporting. In June 1998, the Council of State and Territorial Epidemiologists passed a resolution recommending that cyclosporiasis be made a nationally notifiable disease in the United States. In jurisdictions where formal reporting mechanisms are not yet established, clinicians and laboratorians who identify cases of cyclosporiasis unrelated to travel outside North America are encouraged to inform the appropriate local, provincial, territorial, or state health departments, which in turn are encouraged to contact, in Canada, the Division of Disease Surveillance, Bureau of Infectious Diseases, Laboratory Center for Disease Control, telephone (613) 941-1288; and, in the United States, CDC's Division of Parasitic Diseases, National Center for Infectious Diseases, telephone (770) 488-7760.

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Cyclosporiasis — Continued

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Local Data for Local Decision Making — Selected Counties, Connecticut, Massachusetts, and New York, 1997

Although the delivery of clinical preventive services to adults, such as adult vaccinations and cancer and cardiovascular screening, reduces premature morbidity and mortality (*1*), such services are underused (*1–3*). Performance monitoring at the population level plays a critical role in supporting efforts to increase the use of clinical preventive services. However, many communities do not have the capacity to measure prevention activities. Without such information, efforts aimed at improving the county-wide or regional use of clinical preventive services must rely on state or national data. To examine the use of seven clinical preventive services among adults at the county level and to demonstrate how a population-based survey can be used to guide local prevention efforts, a community-based coalition (the Sickness Prevention Achieved through Regional Collaboration [SPARC]), in collaboration with state health departments, peer review organizations, and CDC, conducted a survey in the four-county SPARC region. This report summarizes the results of this analysis, which indicate that clinical preventive services in this region were underused despite high levels of access to medical care.

The SPARC initiative, established by the Berkshire Taconic Community Foundation in 1994, represents a collaboration of 75 organizations and businesses with an interest in disease prevention in a four-county region at the junction of Connecticut, Massachusetts, and New York (regional population: 636,000). SPARC's mission is to improve the health of residents by increasing their use of clinical preventive services.

Using methodology from the Behavioral Risk Factor Surveillance System (BRFSS), the SPARC Disease Prevention Survey was designed to establish county-level baseline estimates and identify barriers to increasing the use of preventive health services. The survey provides prevalence estimates for the use of screening measures, such as blood cholesterol level, blood stool test, sigmoidoscopy, Papanicolaou test, mammography, and influenza and pneumococcal vaccinations.

Data are presented for 2241 noninstitutionalized respondents selected by random-digit–dialed telephone survey methods. Only adults aged ≥50 years were selected because many prevention services are not recommended until age 50 years (e.g., blood stool test and sigmoidoscopy) or age 65 years (e.g., influenza and pneumococcal vaccination). The overall response rate for the survey was 63%. Data were weighted to

Local Data for Local Decision Making — Continued

correct for disproportionate probabilities of selection and to post-stratify the data to census estimates of the population age and sex distributions for the four counties. SUDAAN was used to produce confidence intervals and to account for the complex survey design. Results are not stratified by race/ethnicity because the population was predominately white (95%) and non-Hispanic (98%).

Prevalence of health-care coverage was high among this age group, with approximately 42% of respondents on Medicare (Table 1). Most respondents had had a routine checkup during the preceding 2 years (Table 2). The prevalence of specific clinical preventive services varied by county. The least used services were blood stool test in Litchfield County, Connecticut (32.2%), sigmoidoscopy in Columbia County, New York (26.0%), and pneumococcal vaccination in Dutchess County, New York (36.9%). Physician recommendation for preventive services was strongly associated with the patient receiving the services. For example, the prevalence of persons who received a preventive service after a physician recommendation was higher than that of persons who received the service without a recommendation (e.g., blood stool test [57.0% versus 15.3%], pneumococcal vaccination [92.0% versus 13.6%], and influenza vaccination [80.4% versus 43.1%]). The prevalence of clinical preventive services use in surveyed counties was similar to the prevalences for Connecticut, Massachusetts, and New York collected through state BRFSS surveys.

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Editorial Note: The findings in this report indicate that despite high levels of health-care coverage and access to physicians, adult clinical preventive services in the region are not fully used. These findings are consistent with studies in other populations that indicate patients are often not aware of the need for these services and that clinicians frequently do not recommend preventive services to their patients (*4–6*). As a result of the survey findings, SPARC plans to broaden its partnerships with medical specialists and generalists to improve the use of preventive services.

Acquiring information at the local level helps local institutions, organizations, and persons recognize the existence and magnitude of a public health challenge and creates new opportunities for community-wide interventions that can increase the use of preventive services. Performance monitoring is an important tool for establishing shared responsibility among community-level health-care providers (*7*). A major reason preventive services are not fully used in the United States may be that no defined public or private organization takes responsibility for assuring that all residents in a community are presented with an informed choice and reasonable access to these services.

SPARC is an example of a public/private partnership that fosters community-based activism for clinical preventive services. Although SPARC does not deliver these services, it has developed a local infrastructure that can use data from the survey as a basis for action. For example, SPARC has been working since 1995 to increase the use

TABLE 1. Number and percentage of persons aged ≥50 years reporting selected demographic and health-care factors, by county — Sickness Prevention Achieved through Regional Collaboration survey, 1997

	Berkshire County, Mass.		Columbia County, N.Y.		Dutchess County, N.Y.		Litchfield County, Conn.	
Characteristic	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Sex								
Women	278	(57.4)	315	(54.7)	392	(54.3)	328	(54.4)
Men	210	(42.6)	199	(45.3)	263	(45.7)	256	(45.6)
Age group (yrs)								
50–64	231	(44.9)	285	(48.7)	364	(54.2)	317	(49.6)
≥65	257	(55.1)	229	(51.3)	291	(45.8)	267	(50.4)
Education level								
Less than high school	74	(15.2)	72	(15.6)	79	(11.4)	78	(14.0)
Some college	184	(38.3)	209	(41.9)	232	(35.8)	214	(37.6)
College graduate	228	(46.5)	230	(42.5)	341	(52.8)	288	(48.4)
Employment status								
Employed	173	(33.0)	215	(36.9)	274	(42.0)	269	(41.5)
Unemployed	15	(2.9)	10	(1.4)	20	(2.8)	13	(2.2)
Homemaker/Student	12	(2.8)	24	(4.4)	27	(4.1)	25	(4.1)
Retired	287	(61.4)	264	(57.3)	333	(51.1)	274	(52.2)
Health-care coverage*								
Yes	461	(95.2)	485	(95.1)	623	(95.4)	554	(96.2)
No	26	(4.8)	29	(4.9)	32	(4.6)	25	(3.8)
Type of coverage								
Employer	185	(38.8)	214	(40.0)	313	(51.1)	246	(42.9)
Private pay	32	(7.3)	46	(9.2)	28	(4.3)	39	(6.5)
Medicare	205	(47.5)	184	(43.6)	224	(36.6)	226	(44.0)
Medicaid	21	(3.6)	17	(3.2)	19	(2.5)	8	(2.0)
Other	15	(2.8)	21	(4.1)	36	(5.5)	30	(4.6)
Health status†								
Excellent/Very good/Good	403	(83.0)	412	(79.3)	531	(81.9)	488	(83.9)
Fair/Poor	84	(17.0)	102	(20.7)	120	(18.1)	92	(16.1)

* Respondents were asked, "Do you have any kind of health care coverage, including prepaid plans such as HMOs or government plans such as Medicare?"
† Respondents who reported excellent, very good, or good health are compared with those reporting fair or poor health.

TABLE 2. Prevalence of factors related to access to health care and prevalence of clinical preventive health behaviors among adults aged ≥50 years, by county — Sickness Prevention Achieved through Regional Collaboration survey, 1997

	Berkshire Co., Mass.			Columbia Co., N.Y.			Dutchess Co., N.Y.			Litchfield Co., Conn.			BRFSS
Factor	**No.**	**%**	**(95% CI*)**	**No.**	**%**	**(95% CI*)**	**No.**	**%**	**(95% CI)**	**No.**	**%**	**(95% CI)**	**median† (%)**
Last routine checkup <2 years ago	439	91.3	(88.6–93.9)	466	93.3	(91.0–95.6)	582	90.6	(88.1–93.1)	529	91.7	(89.3–94.1)	89.9
Regular care source	442	91.0	(88.3–93.7)	471	91.9	(89.4–94.5)	584	88.7	(85.8–91.5)	523	89.9	(87.3–92.6)	NA§
Cost is barrier¶	27	5.5	(3.3– 7.7)	25	4.7	(2.8– 6.7)	32	3.9	(2.5– 5.3)	31	5.4	(3.4– 7.3)	6.6
Ever had cholesterol check	436	90.6	(87.9–93.3)	472	94.1	(92.0–96.3)	605	93.0	(90.8–95.1)	508	89.5	(86.9–92.1)	89.2
Blood stool test <1 year ago	190	40.3	(35.6–45.0)	163	35.8	(31.1–40.5)	211	33.5	(29.5–37.5)	186	32.2	(28.1–36.3)	NA
Sigmoidoscopy examination <5 years ago	134	27.9	(23.6–32.2)	127	26.0	(21.7–30.2)	206	33.8	(29.8–37.9)	163	29.2	(25.2–33.3)	30.5
Last Papanicolaou smear** <2 years ago	135	76.4	(69.6–83.3)	164	72.3	(65.7–78.9)	211	73.9	(68.3–79.6)	161	72.0	(65.7–78.3)	74.4
Last mammogram <2 years ago	220	80.0	(74.9–85.1)	232	72.8	(67.1–78.5)	278	71.6	(66.7–76.5)	249	78.3	(73.6–83.0)	73.4
Last influenza shot†† <1 year ago	183	73.7	(68.0–79.5)	147	65.6	(58.9–72.2)	178	62.0	(55.9–68.1)	177	67.1	(61.1–73.1)	65.5
Pneumococcal shot ever††	123	50.6	(44.0–57.2)	89	39.8	(32.8–46.8)	100	36.9	(30.8–43.0)	112	43.4	(36.9–49.9)	45.4

*Confidence interval.
†From the 1997 U.S. Behavioral Risk Factor Surveillance System (BRFSS) survey.
§Not available.
¶Respondents were asked, "Was there a time in the last 12 months when you needed to see a doctor but could not because of the cost?"
**Percentage of female respondents, without hysterectomy, who report that they had had a Papanicolaou smear within the preceding 2 years.
††Only reported for persons aged ≥65 years.

Local Data for Local Decision Making — Continued

of influenza vaccination among persons aged ≥65 years in each of the four counties through outreach and marketing campaigns. To promote pneumococcal vaccination, in 1997, SPARC's collaborators in two counties offered pneumococcal vaccination along with influenza vaccination, which more than doubled the prevalence of pneumococcal vaccination with only a modest increase in resources. From 1996 to 1997, the annual prevalence of pneumococcal vaccinations reimbursed by Medicare increased from 5.9% to 12.1% in Litchfield County and from 6.7% to 13.4% in Dutchess County (Health Care Financing Administration, unpublished data, 1998).

Based on these survey data, SPARC and its collaborators (i.e., preventive service providers, community associations, businesses, and county and municipal health departments) are designing and implementing additional ways of increasing the use of preventive services. Outreach strategies include community mailings, establishment of new sites for prevention activities, improved access to information hotlines, and radio and local cable television announcements.

The findings in this report are subject to at least three limitations. First, the survey excluded households without telephones; however, telephone coverage in all three states is very high (93%–96%) (*8*). Second, self-reported data are subject to recall bias, potentially resulting in overestimates or underestimates of use. Finally, the survey excludes nursing home residents who comprise approximately 5% of the population aged ≥65 years in these four counties.

A second SPARC survey is planned for 2001 to measure anticipated progress in the county and regional delivery of clinical preventive services. Enlisting the support of health-care providers, community associations, and patients in increasing the use of clinical preventive services for adults can reduce health-care costs and morbidity and mortality and enhance the quality of life in the aging U.S. population.

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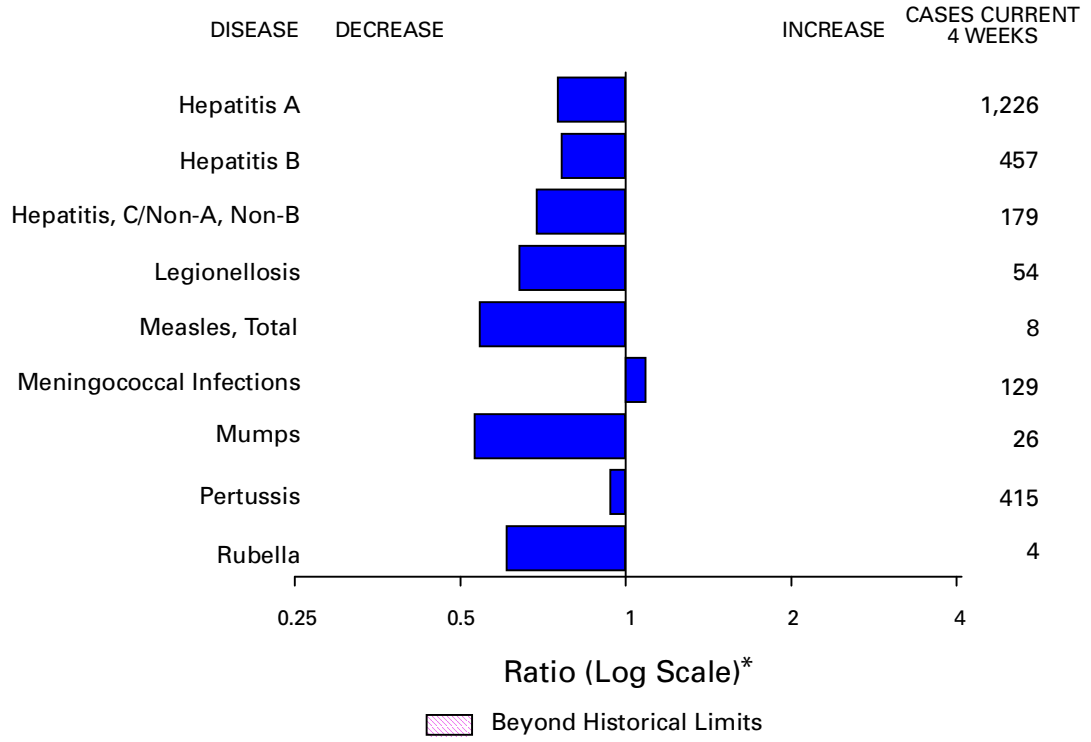
Notice to Readers

National Infection Control Week — October 18–24, 1998

National Infection Control Week is October 18–24. This week emphasizes the importance of protecting patients and health-care workers from infections acquired in health-care settings. Each year, approximately 2 million patients develop a hospital-associated infection, and an estimated 88,000 patients die as a direct or indirect result of such infections. In addition, the 6 million health-care workers in the United States are at risk for acquiring serious and potentially deadly infections (e.g., hepatitis B and C and human immunodeficiency virus infection).

During National Infection Control Week, health-care facilities around the country will sponsor activities designed to heighten public awareness of, and professional commitment to, the importance of preventing infections in health-care settings. Health-care workers, patients, and visitors can contribute to preventing the spread of infection by using infection-control measures such as handwashing. Additional information about infection control is available from CDC's Hospital Infections Program, National Center for Infectious Diseases, World-Wide Web site http://www.cdc.gov/ncidod/ hip/hip.htm. A free copy of the 1998 Infection Control Resource Kit is available from the Association for Professionals in Infection Control and Epidemiology (APIC), telephone (202) 789-1890, or the World-Wide Web site http://www.apic.org.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending September 26, 1998, with historical data — United States



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

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending September 26, 1998 (38th Week)

	Cum. 1998		Cum. 1998
Anthrax	-	Plague	6
Brucellosis	42	Poliomyelitis, paralytic	1
Cholera	7	Psittacosis	30
Congenital rubella syndrome	3	Rabies, human	-
Cryptosporidiosis*	2,459	Rocky Mountain spotted fever (RMSF)	237
Diphtheria	1	Streptococcal disease, invasive Group A	1,655
Encephalitis: California*	56	Streptococcal toxic-shock syndrome*	40
eastern equine*	4	Syphilis, congenital¶	286
St. Louis*	3	Tetanus	31
western equine*	-	Toxic-shock syndrome	96
Hansen Disease	86	Trichinosis	9
Hantavirus pulmonary syndrome*†	15	Typhoid fever	250
Hemolytic uremic syndrome, post-diarrheal*	52	Yellow fever	-
HIV infection, pediatric*§	164		

-:no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update August 30, 1998.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 26, 1998, and September 20, 1997 (38th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1998*	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1998	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997
UNITED STATES	31,523	41,875	386,438	328,102	2,151	1,270	234,119	208,047	2,822	2,591
NEW ENGLAND	1,194	1,777	14,022	12,730	267	206	4,045	4,285	42	46
Maine	22	42	734	701	31	-	52	41	-	-
N.H.	28	29	673	569	37	36	71	72	-	-
Vt.	17	31	298	294	14	7	26	40	-	2
Mass.	604	640	6,109	5,193	128	126	1,589	1,543	39	37
R.I.	88	113	1,668	1,468	11	1	273	339	3	7
Conn.	435	922	4,540	4,505	46	36	2,034	2,250	-	-
MID. ATLANTIC	8,893	12,617	45,931	41,857	225	61	26,379	27,342	286	238
Upstate N.Y.	1,014	1,931	N	N	167	-	4,155	4,586	222	175
N.Y. City	5,005	6,451	24,987	19,722	6	10	11,028	9,983	-	-
N.J.	1,655	2,630	7,858	7,197	52	41	4,952	5,603	-	-
Pa.	1,219	1,605	13,086	14,938	N	10	6,244	7,170	64	63
E.N. CENTRAL	2,276	3,142	64,554	43,495	326	243	45,116	28,498	390	443
Ohio	485	676	18,412	15,855	91	48	11,635	10,427	7	14
Ind.	379	444	4,656	6,532	73	38	2,974	4,356	4	12
Ill.	888	1,178	18,464	U	82	39	15,269	U	25	73
Mich.	390	648	15,736	13,150	80	49	12,115	10,293	354	319
Wis.	134	196	7,286	7,958	N	69	3,123	3,422	-	25
W.N. CENTRAL	599	796	22,116	23,382	364	233	11,233	10,167	228	48
Minn.	119	137	4,439	4,772	179	98	1,675	1,672	9	3
Iowa	51	78	2,063	3,232	78	46	660	845	7	23
Mo.	282	380	8,688	8,675	30	47	6,455	5,264	206	9
N. Dak.	4	10	616	611	10	13	51	43	-	2
S. Dak.	13	7	1,128	936	22	21	178	98	-	-
Nebr.	56	71	1,437	1,813	26	-	507	726	2	2
Kans.	74	113	3,745	3,343	19	8	1,707	1,519	4	9
S. ATLANTIC	7,960	10,261	79,518	68,031	180	114	66,313	66,883	141	173
Del.	104	174	1,799	-	-	2	1,002	876	-	-
Md.	914	1,382	5,479	5,227	27	12	6,392	8,376	8	4
D.C.	635	751	N	N	1	-	2,660	3,187	-	-
Va.	650	782	9,837	8,625	N	38	6,701	6,030	11	22
W. Va.	60	80	1,843	2,125	8	5	549	690	6	15
N.C.	536	597	16,034	12,504	43	36	13,983	12,330	18	40
S.C.	507	575	13,146	9,153	9	5	8,442	8,468	3	32
Ga.	846	1,162	17,101	11,689	60	-	15,191	13,787	9	-
Fla.	3,708	4,758	14,279	18,708	32	16	11,393	13,139	86	60
E.S. CENTRAL	1,273	1,480	28,115	25,075	89	33	27,690	25,136	162	267
Ky.	195	238	4,477	4,680	22	-	2,561	2,974	18	11
Tenn.	434	612	9,735	9,236	43	29	8,551	7,914	137	179
Ala.	372	384	7,179	6,111	21	2	9,314	8,603	5	7
Miss.	272	246	6,724	5,048	3	2	7,264	5,645	2	70
W.S. CENTRAL	3,799	4,632	58,858	42,225	102	12	34,130	28,489	498	345
Ark.	136	180	2,599	2,187	8	6	1,247	3,582	9	10
La.	654	762	10,851	6,833	5	2	9,311	6,506	33	156
Okla.	224	240	7,330	5,496	12	4	3,991	3,622	12	7
Tex.	2,785	3,450	38,078	27,709	77	-	19,581	14,779	444	172
MOUNTAIN	1,052	1,228	15,105	21,257	272	178	5,794	5,658	277	227
Mont.	20	34	962	745	14	-	31	34	7	19
Idaho	19	41	1,291	1,110	30	7	121	92	87	44
Wyo.	1	13	399	427	51	53	18	42	48	56
Colo.	209	313	10	5,036	60	45	1,684	1,412	22	24
N. Mex.	166	141	2,453	2,750	17	13	623	640	75	44
Ariz.	385	269	7,537	7,815	21	25	2,724	2,606	3	24
Utah	91	98	1,527	1,220	69	21	163	191	21	3
Nev.	161	319	926	2,154	10	14	430	641	14	13
PACIFIC	4,477	5,942	58,219	50,050	326	190	13,419	11,589	798	804
Wash.	303	455	7,982	6,526	65	56	1,378	1,397	15	22
Oreg.	128	222	4,236	3,526	88	86	611	539	5	3
Calif.	3,919	5,172	42,931	37,604	169	35	10,850	8,990	723	653
Alaska	17	42	1,375	1,104	4	-	236	291	1	-
Hawaii	110	51	1,695	1,290	N	13	344	372	54	126
Guam	-	2	201	193	N	-	24	27	-	-
P.R.	1,246	1,381	U	U	6	U	263	438	-	-
V.I.	19	74	N	N	N	U	U	U	U	U
Amer. Samoa	-	-	U	U	N	U	U	U	U	U
C.N.M.I.	-	1	N	N	N	U	28	17	-	2

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

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update August 30, 1998.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending September 26, 1998, and September 20, 1997 (38th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998*	Cum. 1997	Cum. 1998
UNITED STATES	871	684	8,983	8,773	963	1,352	5,273	6,164	10,412	12,936	5,179
NEW ENGLAND	56	58	2,209	2,360	46	70	56	112	335	320	1,085
Maine	1	2	6	8	4	1	1	-	5	17	171
N.H.	3	6	34	22	5	8	1	-	9	10	47
Vt.	5	10	8	6	-	2	4	-	2	4	50
Mass.	25	21	611	265	15	25	35	56	190	175	384
R.I.	13	5	385	314	4	5	1	2	40	29	71
Conn.	9	14	1,165	1,745	18	29	14	54	89	85	362
MID. ATLANTIC	210	140	5,715	5,017	245	396	199	301	2,103	2,275	1,177
Upstate N.Y.	71	41	3,178	1,995	71	54	28	29	265	309	829
N.Y. City	25	15	19	142	109	247	46	66	1,093	1,146	U
N.J.	11	19	1,139	1,526	41	73	67	123	451	466	148
Pa.	103	65	1,379	1,354	24	22	58	83	294	354	200
E.N. CENTRAL	265	225	84	441	93	126	715	471	853	1,296	110
Ohio	100	82	61	34	11	16	98	158	75	219	50
Ind.	47	38	17	25	10	13	150	124	78	102	9
Ill.	25	20	5	12	27	52	279	U	452	667	12
Mich.	63	52	1	23	38	33	141	102	245	218	30
Wis.	30	33	U	347	7	12	47	87	3	90	9
W.N. CENTRAL	59	38	159	82	70	45	96	135	274	405	547
Minn.	5	1	131	56	39	19	7	15	106	107	97
Iowa	8	9	19	5	8	8	-	6	28	46	122
Mo.	20	7	1	15	12	9	73	86	88	163	19
N. Dak.	-	2	-	-	2	3	-	-	7	9	108
S. Dak.	3	2	-	1	-	1	1	-	16	9	121
Nebr.	16	13	3	2	1	1	4	3	11	15	6
Kans.	7	4	5	3	8	4	11	25	18	56	74
S. ATLANTIC	106	89	600	605	219	247	2,179	2,536	1,451	2,445	1,518
Del.	11	9	12	105	3	5	17	17	U	25	17
Md.	22	14	439	393	63	73	493	706	215	232	356
D.C.	6	4	4	7	14	14	54	82	80	75	-
Va.	16	20	50	45	41	59	116	176	187	220	439
W. Va.	N	N	9	5	2	-	2	3	30	45	62
N.C.	8	11	42	25	18	14	571	643	298	317	136
S.C.	8	5	4	2	5	15	232	280	197	244	111
Ga.	8	-	5	1	30	28	533	402	374	452	240
Fla.	25	26	35	22	43	39	161	227	70	835	157
E.S. CENTRAL	52	42	68	71	24	31	887	1,335	816	956	219
Ky.	23	8	13	12	4	11	79	104	127	126	28
Tenn.	17	25	40	34	13	7	414	568	243	345	116
Ala.	5	2	14	6	5	10	213	342	287	309	73
Miss.	7	7	1	19	2	3	181	321	159	176	2
W.S. CENTRAL	20	12	22	61	24	18	762	891	1,517	1,862	125
Ark.	-	1	6	17	1	4	80	120	90	140	29
La.	2	2	3	2	11	9	302	266	106	161	-
Okla.	8	1	2	12	4	5	77	89	134	152	96
Tex.	10	8	11	30	8	-	303	416	1,187	1,409	-
MOUNTAIN	50	44	12	9	45	59	158	129	290	417	172
Mont.	2	1	-	-	1	2	-	-	16	6	46
Idaho	2	2	3	3	7	-	1	1	8	7	-
Wyo.	1	1	-	1	-	2	1	-	4	2	53
Colo.	14	16	3	-	16	26	9	11	U	66	29
N. Mex.	2	2	4	1	12	8	22	5	44	45	5
Ariz.	10	9	-	1	8	9	119	98	138	186	12
Utah	18	8	-	1	1	3	3	5	46	26	25
Nev.	1	5	2	2	-	9	3	9	34	79	2
PACIFIC	53	36	114	127	197	360	221	254	2,773	2,960	226
Wash.	9	6	6	7	17	18	24	8	156	230	-
Oreg.	-	-	15	17	14	19	5	6	100	117	4
Calif.	42	29	92	103	161	314	190	238	2,359	2,414	199
Alaska	1	-	1	-	2	3	1	1	35	60	23
Hawaii	1	1	-	-	3	6	1	1	123	139	-
Guam	2	-	-	-	1	-	1	3	36	13	-
P.R.	-	-	-	-	-	5	148	178	68	164	39
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	-	164	9	77	2	-

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

*Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, *MMWR* Vol. 47, No. 2, p. 39.

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 26, 1998, and September 20, 1997 (38th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1998*	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	1998	Cum. 1998	1998	Cum. 1998	Cum. 1998	Cum. 1997
UNITED STATES	788	821	15,856	20,502	5,931	6,900	6	37	-	20	57	116
NEW ENGLAND	53	47	197	494	132	129	-	1	-	2	3	19
Maine	2	5	16	47	2	6	-	-	-	-	-	1
N.H.	7	6	8	22	14	10	-	-	-	-	-	1
Vt.	5	3	14	10	4	7	-	-	-	1	1	-
Mass.	33	29	73	202	35	54	-	1	-	1	2	16
R.I.	5	2	14	111	59	12	-	-	-	-	-	-
Conn.	1	2	72	102	18	40	-	-	-	-	-	1
MID. ATLANTIC	116	125	1,063	1,564	823	1,005	-	8	-	5	13	23
Upstate N.Y.	46	40	265	250	220	216	-	1	-	1	2	5
N.Y. City	26	32	248	697	204	360	-	-	-	-	-	7
N.J.	39	37	255	225	161	189	-	7	-	1	8	3
Pa.	5	16	295	392	238	240	U	-	U	3	3	8
E.N. CENTRAL	132	135	2,414	2,118	630	1,088	-	11	-	3	14	10
Ohio	43	74	247	244	57	60	-	-	-	1	1	-
Ind.	35	13	118	222	74	77	U	2	U	1	3	-
Ill.	45	33	419	564	126	206	-	-	-	-	-	7
Mich.	5	15	1,494	936	347	322	-	9	-	1	10	2
Wis.	4	-	136	152	26	423	-	-	-	-	-	1
W.N. CENTRAL	74	39	1,055	1,613	297	350	-	-	-	-	-	17
Minn.	58	27	95	133	34	27	-	-	-	-	-	8
Iowa	2	5	376	337	50	28	-	-	-	-	-	-
Mo.	8	4	449	826	177	254	-	-	-	-	-	1
N. Dak.	-	-	3	10	4	5	-	-	-	-	-	-
S. Dak.	-	2	21	18	2	1	-	-	-	-	-	8
Nebr.	-	1	29	75	9	12	U	-	U	-	-	-
Kans.	6	-	82	214	21	23	U	-	U	-	-	-
S. ATLANTIC	161	126	1,404	1,254	860	897	-	3	-	5	8	11
Del.	-	-	3	23	1	5	-	-	-	1	1	-
Md.	43	46	238	146	118	126	-	-	-	1	1	2
D.C.	-	-	45	17	10	25	-	-	-	-	-	1
Va.	15	12	163	167	79	91	-	-	-	2	2	1
W. Va.	4	3	4	10	5	14	-	-	-	-	-	-
N.C.	23	19	90	150	169	180	-	-	-	-	-	2
S.C.	3	4	29	83	29	81	-	-	-	-	-	1
Ga.	35	24	433	274	129	104	-	1	-	1	2	1
Fla.	38	18	399	384	320	271	-	2	-	-	2	3
E.S. CENTRAL	42	41	295	470	291	518	-	-	-	2	2	1
Ky.	7	6	18	61	32	29	-	-	-	-	-	-
Tenn.	23	24	178	290	205	333	-	-	-	1	1	-
Ala.	10	9	56	67	53	55	-	-	-	1	1	1
Miss.	2	2	43	52	1	101	-	-	-	-	-	-
W.S. CENTRAL	45	38	3,135	4,216	1,015	936	-	1	-	-	1	7
Ark.	-	2	77	179	69	63	U	-	U	-	-	-
La.	22	10	64	164	75	111	U	1	U	-	1	-
Okla.	21	24	440	1,158	70	38	-	-	-	-	-	-
Tex.	2	2	2,554	2,715	801	724	-	-	-	-	-	7
MOUNTAIN	76	70	2,275	3,211	609	651	-	-	-	-	-	8
Mont.	-	-	79	58	5	7	-	-	-	-	-	-
Idaho	-	1	206	105	27	28	-	-	-	-	-	-
Wyo.	1	3	32	26	4	22	U	-	U	-	-	-
Colo.	17	13	235	314	86	117	-	-	-	-	-	-
N. Mex.	6	7	109	264	258	193	-	-	-	-	-	-
Ariz.	41	28	1,371	1,640	138	149	U	-	U	-	-	5
Utah	4	3	157	469	57	73	-	-	-	-	-	1
Nev.	7	15	86	335	34	62	-	-	-	-	-	2
PACIFIC	89	200	4,018	5,562	1,274	1,326	6	13	-	3	16	20
Wash.	7	4	775	423	77	57	-	-	-	1	1	2
Oreg.	34	29	279	274	81	83	-	-	-	-	-	-
Calif.	40	156	2,913	4,722	1,101	1,167	-	5	-	2	7	14
Alaska	1	4	16	25	9	11	6	8	-	-	8	-
Hawaii	7	7	35	118	6	8	-	-	-	-	-	4
Guam	-	-	-	-	2	3	U	-	U	-	-	-
P.R.	2	-	49	225	319	563	U	-	U	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	6	3	1	53	34	U	-	U	-	-	1

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

*Of 186 cases among children aged <5 years, serotype was reported for 103 and of those, 39 were type b.

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

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 26, 1998, and September 20, 1997 (38th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997
UNITED STATES	2,005	2,480	5	357	454	144	3,954	3,934	-	320	140
NEW ENGLAND	76	156	-	4	8	23	660	703	-	39	1
Maine	5	17	-	-	-	-	5	9	-	-	-
N.H.	4	12	-	-	-	7	70	89	-	-	-
Vt.	1	4	-	-	-	-	65	192	-	-	-
Mass.	38	76	-	2	2	14	477	382	-	9	1
R.I.	3	15	-	-	5	2	9	12	-	1	-
Conn.	25	32	-	2	1	-	34	19	-	29	-
MID. ATLANTIC	181	259	-	19	48	13	416	306	-	130	31
Upstate N.Y.	46	70	-	4	10	13	223	121	-	111	4
N.Y. City	20	44	-	4	3	-	23	59	-	14	27
N.J.	49	50	-	2	7	-	5	12	-	4	-
Pa.	66	95	U	9	28	U	165	114	U	1	-
E.N. CENTRAL	302	369	-	59	53	9	399	406	-	-	6
Ohio	113	133	-	23	19	-	191	109	-	-	-
Ind.	51	42	U	5	7	U	83	39	U	-	-
Ill.	77	110	-	10	8	8	57	58	-	-	2
Mich.	35	52	-	21	16	1	51	47	-	-	-
Wis.	26	32	-	-	3	-	17	153	-	-	4
W.N. CENTRAL	166	177	-	25	14	18	321	305	-	27	-
Minn.	29	29	-	12	5	16	200	196	-	-	-
Iowa	30	39	-	9	7	2	57	26	-	-	-
Mo.	59	76	-	3	-	-	22	55	-	2	-
N. Dak.	5	2	-	1	-	-	2	1	-	-	-
S. Dak.	7	5	-	-	-	-	8	4	-	-	-
Nebr.	9	8	U	-	1	U	10	5	U	-	-
Kans.	27	18	U	-	1	U	22	18	U	25	-
S. ATLANTIC	345	421	2	43	56	18	243	352	-	15	63
Del.	2	5	-	-	-	-	3	1	-	-	-
Md.	24	40	-	-	1	7	46	102	-	1	-
D.C.	1	8	-	-	-	-	1	3	-	-	1
Va.	28	42	-	6	10	-	19	42	-	-	1
W. Va.	12	14	-	-	-	-	1	6	-	-	-
N.C.	47	78	-	10	9	5	81	99	-	11	53
S.C.	49	43	-	6	10	2	24	22	-	-	6
Ga.	76	83	-	1	8	3	21	11	-	-	-
Fla.	106	108	2	20	18	1	47	66	-	3	2
E.S. CENTRAL	181	185	-	13	24	-	83	110	-	2	1
Ky.	22	38	-	-	3	-	25	47	-	-	-
Tenn.	58	62	-	1	4	-	31	32	-	1	-
Ala.	77	62	-	7	7	-	24	21	-	1	1
Miss.	24	23	-	5	10	-	3	10	-	-	-
W.S. CENTRAL	254	235	-	52	63	12	266	189	-	88	4
Ark.	26	28	U	7	1	U	53	21	U	-	-
La.	52	47	U	9	12	U	5	17	U	1	-
Okla.	33	31	-	-	-	-	19	28	-	-	-
Tex.	143	129	-	36	50	12	189	123	-	87	4
MOUNTAIN	111	144	-	31	51	45	753	892	-	5	7
Mont.	4	7	-	-	-	2	9	15	-	-	-
Idaho	9	8	-	4	2	1	226	482	-	-	2
Wyo.	5	2	U	1	1	U	8	7	U	-	-
Colo.	22	37	-	7	3	-	149	252	-	-	-
N. Mex.	20	24	N	N	N	2	80	77	-	1	-
Ariz.	35	39	U	5	31	U	142	31	U	1	5
Utah	11	12	-	5	7	40	110	14	-	2	-
Nev.	5	15	-	9	7	-	29	14	-	1	-
PACIFIC	389	534	3	111	137	6	813	671	-	14	27
Wash.	53	67	-	7	14	2	238	273	-	9	5
Oreg.	65	100	N	N	N	2	70	34	-	-	-
Calif.	264	358	3	83	97	2	485	331	-	3	14
Alaska	3	2	-	2	6	-	14	16	-	-	-
Hawaii	4	7	-	19	20	-	6	17	-	2	8
Guam	1	1	U	2	1	U	-	-	U	-	-
P.R.	6	8	U	1	7	U	3	-	U	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	2	4	U	1	-	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending September 26, 1998 (38th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	539	389	86	42	10	12	47
Boston, Mass.	139	90	28	10	2	9	18
Bridgeport, Conn.	26	18	3	3	1	1	1
Cambridge, Mass.	20	16	1	2	-	1	1
Fall River, Mass.	30	22	4	4	-	-	2
Hartford, Conn.	36	26	7	2	1	-	-
Lowell, Mass.	19	12	5	2	-	-	2
Lynn, Mass.	20	17	2	-	1	-	2
New Bedford, Mass.	25	19	5	1	-	-	-
New Haven, Conn.	31	21	7	1	2	-	4
Providence, R.I.	53	42	7	3	1	-	1
Somerville, Mass.	3	2	1	-	-	-	1
Springfield, Mass.	38	27	6	4	1	-	4
Waterbury, Conn.	35	30	2	2	-	1	3
Worcester, Mass.	64	47	8	8	1	-	8
MID. ATLANTIC	2,135	1,475	388	170	39	49	111
Albany, N.Y.	39	24	11	2	-	2	3
Allentown, Pa.	17	14	2	1	-	-	-
Buffalo, N.Y.	85	61	4	1	4	1	6
Camden, N.J.	33	22	5	4	2	-	3
Elizabeth, N.J.	15	8	4	2	-	1	-
Erie, Pa.	29	25	2	1	1	-	-
Jersey City, N.J.	51	28	16	6	-	1	-
New York City, N.Y.	1,085	727	223	92	17	26	42
Newark, N.J.	51	29	12	5	3	2	4
Paterson, N.J.	23	14	2	4	2	1	-
Philadelphia, Pa.	299	189	65	33	5	7	23
Pittsburgh, Pa.§	47	40	4	1	1	1	3
Reading, Pa.	16	15	-	1	-	-	4
Rochester, N.Y.	138	113	17	5	-	3	7
Schenectady, N.Y.	25	19	5	-	1	-	3
Scranton, Pa.	27	21	3	3	-	-	1
Syracuse, N.Y.	108	86	9	7	3	3	10
Trenton, N.J.	24	20	2	1	-	1	-
Utica, N.Y.	23	20	2	1	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,156	1,369	465	166	80	68	120
Akron, Ohio	59	37	13	5	1	3	-
Canton, Ohio	42	33	7	2	-	-	6
Chicago, Ill.	442	246	96	49	19	24	28
Cincinnati, Ohio	97	63	24	5	3	2	14
Cleveland, Ohio	133	78	39	9	4	3	1
Columbus, Ohio	206	138	45	10	8	5	14
Dayton, Ohio	132	93	25	10	2	2	7
Detroit, Mich.	205	114	58	15	11	7	8
Evansville, Ind.	51	33	11	3	3	1	1
Fort Wayne, Ind.	63	42	12	4	3	2	3
Gary, Ind.	11	5	3	1	2	-	-
Grand Rapids, Mich.	63	47	11	3	1	1	1
Indianapolis, Ind.	223	153	33	18	11	8	10
Lansing, Mich.	33	26	4	1	2	-	2
Milwaukee, Wis.	125	83	31	6	2	3	8
Peoria, Ill.	38	23	10	4	-	1	1
Rockford, Ill.	51	31	10	4	4	2	4
South Bend, Ind.	57	38	9	9	1	-	7
Toledo, Ohio	79	58	12	5	1	3	4
Youngstown, Ohio	46	28	12	3	2	1	1
W.N. CENTRAL	853	606	145	48	36	15	37
Des Moines, Iowa	106	79	16	8	1	2	8
Duluth, Minn.	35	28	6	1	-	-	-
Kansas City, Kans.	24	15	6	3	-	-	1
Kansas City, Mo.	83	56	13	6	3	2	2
Lincoln, Nebr.	33	24	9	-	-	-	4
Minneapolis, Minn.	186	135	30	9	6	6	15
Omaha, Nebr.	91	64	21	2	4	-	4
St. Louis, Mo.	122	77	19	14	11	1	1
St. Paul, Minn.	99	77	11	2	8	1	1
Wichita, Kans.	74	51	14	3	3	3	1
S. ATLANTIC	1,129	725	245	96	26	36	57
Atlanta, Ga.	150	88	39	15	6	2	1
Baltimore, Md.	186	114	41	23	4	4	14
Charlotte, N.C.	90	57	18	7	1	7	5
Jacksonville, Fla.	116	81	18	10	1	6	4
Miami, Fla.	91	55	23	7	2	4	-
Norfolk, Va.	55	36	9	4	1	5	5
Richmond, Va.	65	42	15	4	2	2	4
Savannah, Ga.	52	32	14	4	2	-	3
St. Petersburg, Fla.	80	56	13	7	1	3	9
Tampa, Fla.	159	109	33	11	3	3	9
Washington, D.C.	69	47	15	4	3	-	3
Wilmington, Del.	16	8	7	-	-	-	-
E.S. CENTRAL	819	537	185	63	11	23	51
Birmingham, Ala.	175	128	34	5	2	6	16
Chattanooga, Tenn.	74	52	17	3	1	1	4
Knoxville, Tenn.	81	53	18	7	1	2	6
Lexington, Ky.	73	43	21	6	-	3	6
Memphis, Tenn.	137	79	38	15	2	3	5
Mobile, Ala.	112	78	19	12	2	1	-
Montgomery, Ala.	43	34	8	1	-	-	7
Nashville, Tenn.	124	70	30	14	3	7	7
W.S. CENTRAL	1,476	910	350	120	58	38	87
Austin, Tex.	72	33	22	12	3	2	3
Baton Rouge, La.	45	33	9	3	-	-	3
Corpus Christi, Tex.	49	33	9	3	3	1	-
Dallas, Tex.	203	117	50	22	6	8	8
El Paso, Tex.	109	72	21	7	7	2	3
Ft. Worth, Tex.	149	97	29	11	7	5	11
Houston, Tex.	400	230	100	39	21	10	26
Little Rock, Ark.	61	45	11	1	2	2	3
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	204	133	50	13	3	5	16
Shreveport, La.	82	54	20	3	4	1	6
Tulsa, Okla.	102	63	29	6	2	2	8
MOUNTAIN	960	636	194	82	24	24	57
Albuquerque, N.M.	134	90	24	13	5	2	3
Boise, Idaho	27	18	8	-	1	-	3
Colo. Springs, Colo.	57	37	12	7	-	1	1
Denver, Colo.	110	81	17	7	-	5	8
Las Vegas, Nev.	167	108	45	10	3	1	8
Ogden, Utah	21	15	4	-	-	2	-
Phoenix, Ariz.	178	95	43	25	7	8	11
Pueblo, Colo.	17	12	4	1	-	-	-
Salt Lake City, Utah	97	69	15	9	3	1	7
Tucson, Ariz.	152	111	22	10	5	4	16
PACIFIC	1,744	1,243	321	109	43	28	134
Berkeley, Calif.	10	7	-	3	-	-	-
Fresno, Calif.	122	81	30	7	2	2	6
Glendale, Calif.	38	30	8	-	-	-	3
Honolulu, Hawaii	75	59	8	2	1	5	7
Long Beach, Calif.	54	46	3	2	1	2	13
Los Angeles, Calif.	467	339	82	28	11	7	18
Pasadena, Calif.	13	9	3	-	1	-	-
Portland, Oreg.	128	94	26	4	3	1	11
Sacramento, Calif.	141	105	20	11	4	1	19
San Diego, Calif.	161	96	38	18	6	3	23
San Francisco, Calif.	110	76	19	8	4	3	11
San Jose, Calif.	152	107	30	8	6	1	4
Santa Cruz, Calif.	18	12	6	-	-	-	3
Seattle, Wash.	119	74	27	11	4	3	4
Spokane, Wash.	53	39	9	5	-	-	5
Tacoma, Wash.	83	69	12	2	-	-	7
TOTAL	11,811¶	7,890	2,379	896	327	293	701

U: Unavailable -: no reported cases

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

†Pneumonia and influenza.

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

¶Total includes unknown ages.

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