

Workers Memorial Day — April 28, 2011

Workers Memorial Day recognizes those workers who have died or sustained work-related injuries or illnesses. In 2008, a total of 5,214 U.S. workers died from occupational injuries (1), and 49,000 deaths annually are attributed to work-related illnesses (2). In 2009, an estimated 3.28 million workers in private industry and 862,900 in state and local government had a nonfatal occupational injury or illness. Of those workers, 1.7 million in private industry and 374,100 in state and local government were transferred, placed on work restrictions, or took time away from work (3). An estimated 2.6 million workers were treated in emergency departments for occupational injuries and illnesses in 2009, and approximately 80,000 were hospitalized (CDC, unpublished data, 2011).

Work-related injuries and deaths are costly. Employers and insurers spent nearly \$79 billion on workers' compensation in 2008 (4). Employers, workers, and society overall paid additional costs, including lost productivity and charges to other insurance systems. Additional information on workplace safety and health is available from CDC at <http://www.cdc.gov/niosh>.

References

1. US Department of Labor, Bureau of Labor Statistics. Census of fatal occupational injuries summary, 2009. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2010. Available at <http://www.bls.gov/news.release/cfoi.nr0.htm>. Accessed April 27, 2011.
2. Steenland K, Burnett C, Lulich N, Ward E, Hurrell J. Dying for work: the magnitude of U.S. mortality from selected causes of death associated with occupation. *Am J Ind Med* 2003;43:461–82.
3. US Department of Labor, Bureau of Labor Statistics. Nonfatal occupational injuries and illnesses requiring days away from work, 2009. Washington, DC: US Department of Labor; 2008. Available at <http://www.bls.gov/news.release/pdf/osh2.pdf>. Accessed April 12, 2011.
4. Sengupta I, Reno V, Burton JF Jr. Workers' compensation: benefits, coverage, and costs, 2008. Washington, DC: National Academy of Social Insurance; 2010. Available at http://www.nasi.org/sites/default/files/research/Workers_Comp_Report_2008.pdf. Accessed April 12, 2011.

Occupational Highway Transportation Deaths — United States, 2003–2008

Highway transportation crashes are the leading cause of fatal injuries in the United States for both workers and the general population (1,2). Prevention of work-related highway transportation deaths, and highway transportation deaths in general, are long-standing public health priorities (1,3). To assess trends and help guide the prevention of occupational highway transportation deaths, CDC analyzed data from the Census of Fatal Occupational Injuries (CFOI) for 2003–2008 (2).

A total of 8,173 workers died from highway transportation incidents during 2003–2008, representing 24% of all fatal occupational injuries for the period. The annual average fatality rate for workers was 0.9 highway transportation deaths per 100,000 workers; that rate decreased an average of 2.8% annually during the period. Workers employed in the trucking industry accounted for the greatest number (2,320) and highest rate of highway transportation deaths (19.6 per 100,000 workers). Public health, highway safety, labor, and state agencies; highway designers; and transportation-related associations need to work together to implement effective interventions to reduce the risk for highway transportation deaths for all workers. Employers should adopt, communicate, and enforce safety policies designed to reduce highway transportation deaths (e.g., requiring the use of safety belts in fleet vehicles, restricting cellular telephone use while driving, and allowing for adequate travel time), and ensure these policies are followed by employees.

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The U. S. Department of Labor Bureau of Labor Statistics (BLS) collects CFOI data on occupational injury deaths from multiple sources, including death certificates, police reports, and workers' compensation reports. To be included in CFOI, the decedent must have been working, working as a volunteer in a similar manner to a paid employee, or present at a site as a job requirement (2). Occupational highway transportation* deaths are defined as those events that involve a motorized or nonmotorized vehicle on a public roadway where the victim was the operator or passenger in the vehicle. Pedestrians struck by vehicles in or on the side of public roadways are excluded. Deaths while traveling between work locations are included; deaths while commuting to and from work is not. To calculate fatality rates, labor force denominator estimates were derived from the Current Population Survey (CPS) for U.S. workers aged ≥ 16 years (4). Workers aged < 16 years, volunteers, and military personnel posted in the United States are included in the fatality counts but excluded from the fatality rate calculations because they are not included in the CPS. Trends and demographic differences were assessed using Poisson regression and significance set at $\alpha = 0.05$.

During 2003–2008, a total of 8,173 occupational highway transportation deaths occurred in the United States (average:

1,362 per year) (Table 1), equating to an annual average fatality rate of 0.9 deaths per 100,000 workers. The fatality rate decreased an estimated 2.8% annually during the period ($p=0.0268$). Highway transportation fatality rates were highest among workers aged ≥ 65 years (2.1 deaths per 100,000 workers), followed by those aged 55–64 years (1.2 deaths per 100,000 workers). The fatality rate for males (1.6 deaths per 100,000 workers [$p<0.0001$]) was significantly greater than for females (0.2 deaths per 100,000 workers). American Indians or Alaska Natives had a highway transportation fatality rate of 1.8 per 100,000 workers. That rate was significantly greater than the rates seen for any other racial or ethnic group, which had rates of ≤ 1.0 ($p<0.0001$ for all comparisons).

The most common type of crash resulting in an occupational highway transportation death was a collision between two or more vehicles (4,009 deaths). Crashes between vehicles moving in opposite directions accounted for 38% (1,532) of these multiple-vehicle crash deaths (Table 1). The most common noncollision highway crashes involved jackknifed or overturned vehicles (1,551 deaths). Victims most often had been in a tractor-trailer (2,761 deaths) or automobile (1,353 deaths) at the time of the crash.

The transportation, warehousing, and utilities industry had the highest number (2,776) and crude rate (7.9 deaths per 100,000 workers) of occupational highway transportation deaths by industry (Table 2). Within that industry, truck transportation (i.e., trucking) accounted for 2,320 highway transportation deaths (average: 386 per year) and had the

*BLS uses the term "highway transportation" to define events involving crashes of motorized and nonmotorized vehicles on a public roadway, regardless of the size or location of the public roadway. "Highway transportation" is interchangeable with the terms "motor vehicle" or "traffic" used by other groups to define these same crash events.

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TABLE 1. Number and rate of occupational highway transportation fatal injuries, by sex, age group, race/ethnicity, type of event, and primary vehicle type — United States, 2003–2008

Characteristic	No. of workers employed (cumulative)*	Highway fatal injuries [†]		Rate ratio	Standard error
		No.	Rate [§]		
Year					
2003	137,736,000	1,353	0.96	1.17	0.04
2004	139,252,000	1,398	0.98	1.20	0.05
2005	141,730,000	1,437	0.99	1.21	0.05
2006	144,427,000	1,356	0.92	1.12	0.04
2007	146,047,000	1,414	0.94	1.15	0.04
2008	145,362,000	1,215	0.82	1.00	—
Sex					
Male	457,071,000	7,402	1.59	8.37	0.31
Female	397,482,000	771	0.19	1.00	—
Age group (yrs)					
<16	—	20	—	—	—
16–24	117,869,000	709	0.56	1.00	—
25–34	185,506,000	1,477	0.77	1.38	0.06
35–44	206,419,000	1,878	0.90	1.61	0.06
45–54	200,734,000	2,007	0.99	1.77	0.07
55–64	112,587,000	1,408	1.23	2.20	0.09
≥65	31,439,000	674	2.11	3.77	0.18
Race/Ethnicity[¶]					
White	597,950,000	6,008	0.98	1.00	—
Black	89,535,000	910	1.01	1.03	0.03
American Indian or Alaska Native	4,040,000	73	1.76	1.80	0.19
Asian	37,670,000	131	0.34	0.35	0.03
Other or multiple races	15,124,000	53	0.34	0.35	0.06
Hispanic	114,275,000	998	0.87	0.89	0.03
Type of event					
Collisions between vehicles	854,554,000	4,009	0.46	—	—
Reentry to roadway	—	52	—	—	—
Moving in same direction	—	932	—	—	—
Moving in opposite direction	—	1,532	—	—	—
Moving in an intersection	—	798	—	—	—
Moving and stationary vehicle-in roadway	—	320	—	—	—
Moving and stationary vehicle-side of roadway	—	141	—	—	—
Other or unspecified collisions between vehicles	—	234	—	—	—
Vehicle striking other objects	854,554,000	2,158	0.25	—	—
Noncollision	854,554,000	1,848	0.21	—	—
Jackknife/Overtake	—	1,551	—	—	—
Ran off roadway	—	120	—	—	—
Other or unspecified	—	152	—	—	—
Other or unspecified	854,554,000	158	0.02	—	—
Primary vehicle involved					
Highway vehicles	854,554,000	7,847	0.90	—	—
Automobile	—	1,353	—	—	—
Bus	—	85	—	—	—
Motorcycle, moped	—	146	—	—	—
Delivery truck	—	294	—	—	—
Dump truck	—	278	—	—	—
Pickup truck	—	1,187	—	—	—
Semitrailer, tractor trailer	—	2,761	—	—	—
Other or unspecified trucks	—	986	—	—	—
Vans	—	599	—	—	—
Other or unspecified highway vehicles	—	158	—	—	—
All other vehicles	854,554,000	326	0.03	—	—
Total	854,554,000	8,173	0.94	—	—

* Employed worker estimates were obtained from the U.S. Department of Labor, Bureau of Labor Statistics Current Population Survey (CPS). Values might not add to the total because of rounding.

[†] Based on data from the Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI), 2010. Includes deaths to workers aged <16 years, volunteer workers, and resident military. Additional information available at <http://www.bls.gov/iif/oshcfoi1.htm>.

[§] The rate represents the number of fatal occupational injuries per 100,000 employed workers and was calculated as follows: $(N/W) \times 100,000$, where N = the number of fatal work injuries, and W = the number of employed workers. Workers aged <16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment figures. The fatalities column represents total published fatalities before the exclusions. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event.

[¶] White, black, American Indian or Alaska Native, Asian, and other or multiple races exclude persons of Hispanic or Latino ethnicity. The CPS sample for American Indians or Alaska Natives is small, and American Indians living on tribal reservations are not included in the survey.

TABLE 2. Number and rate of occupational highway transportation fatal injuries, by industry sector — United States, 2003–2008

Industry sector*	No. of workers in sector (cumulative)†	Highway fatal injuries§	
		No.¶	Rate¶¶
Agriculture, forestry, fishing, hunting	12,817,000	502	3.83
Logging	650,000	76	11.69
Agricultural and forest services	894,000	50	5.59
Mining	3,914,000	221	5.65
Oil, gas extraction	509,000	29	5.70
Support activities for mining	2,044,000	161	7.88
Construction	63,901,000	871	1.36
Manufacturing	97,719,000	380	0.39
Wholesale	26,583,000	488	1.84
Petroleum products	805,000	69	8.57
Farm supplies	346,000	18	5.16
Retail	98,651,000	418	0.42
Transport, warehousing, utilities	35,034,000	2,776	7.91
Truck transportation	11,797,000	2,320	19.62
Taxi and limousine services	1,365,000	93	6.81
Information	20,036,000	176	0.86
Finance, insurance	41,821,000	70	0.17
Real estate	17,955,000	89	0.50
Professional, technical services	51,304,000	116	0.23
Administrative, waste services	34,700,000	470	1.35
Waste management	2,035,000	172	8.45
Education, health services	115,357,000	221	0.19
Leisure, hospitality	70,247,000	150	0.20
Other services	41,582,000	176	0.40
Government	122,929,000	1,029	0.72
Total	854,554,000	8,173	0.94

* Based on the 2002 North American Industry Classification System.

† Employed worker estimates were obtained from the U.S. Department of Labor, Bureau of Labor Statistics Current Population Survey (CPS). Values might not add to the total because of rounding.

§ Based on data from the Bureau of Labor Statistics, Census of Fatal Occupational Injuries (CFOI), 2010. Includes deaths to workers aged <16 years, volunteer workers, and resident military. Additional information available at <http://www.bls.gov/iif/oshcfoi1.htm>.

¶ The rate represents the number of fatal occupational injuries per 100,000 employed workers, calculated as follows: (N/W) x 100,000, where N = the number of fatal work injuries and W = the number of employed workers. Workers aged <16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with CPS employment data. The fatalities column represents total published fatalities before exclusions. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event.

highest fatality rate (19.6 deaths per 100,000 workers) among the industry sectors. Government, which includes local, state, and federal workers, accounted for the second highest number of deaths (1,029), and logging had the second highest fatality rate (11.7 deaths per 100,000 workers). The finance and insurance industry had the lowest rate of occupational highway transportation deaths (<0.2 deaths per 100,000 workers) among the industry sectors.

Occupational highway transportation fatality rates varied geographically during this 6-year period (Figure).† The highest rates (≥1.0 deaths per 100,000 workers) were concentrated

† Fatality rates were calculated as highway transportation deaths occurring within a state, using employment data within the state from CPS for the 6-year period.

What is already known on this topic?

Highway transportation crashes are the leading cause of occupational fatalities in the United States.

What is added by this report?

Occupational highway transportation fatality rates declined 2.8% annually during 2003–2008, and groups at greatest risk for occupational highway transportation deaths (e.g., workers aged ≥55 years and truck occupants) differ from those identified for highway transportation deaths in the general motoring public.

What are the implications for public health practice?

Employers need to know more about the fatality risks to workers from highway transportation crashes, and employer-based strategies (e.g., requiring the use of safety belts in fleet vehicles, restricting cellular telephone use while driving, and allowing for adequate travel time) should be disseminated and implemented more widely.

in the Mountain, North West Central, and South regions of the United States.§ The lowest fatality rates (<1.0) were concentrated in the East North Central, Northeast, and Pacific regions. Wyoming had the highest highway transportation fatality rate (7.0), followed by Montana (3.3). The lowest rates were in Rhode Island and Massachusetts (0.2).

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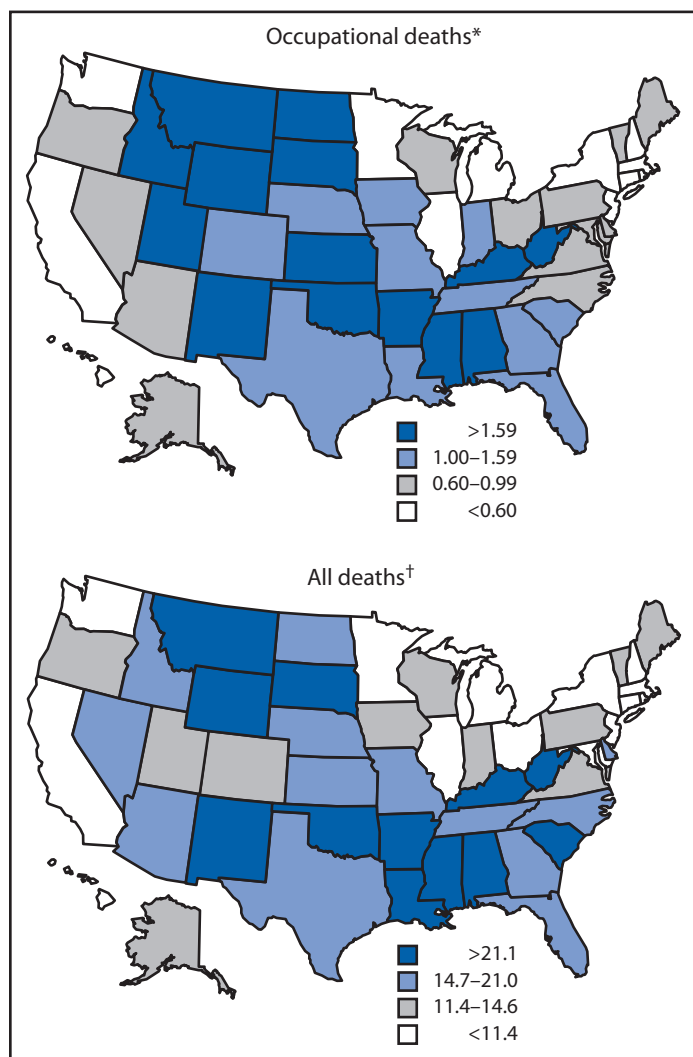
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Editorial Note

Prevention of work-related highway deaths and injuries has long been a priority for CDC's National Institute for Occupational Safety and Health (NIOSH) (1). CDC recently has denoted highway transportation injury and fatality prevention as a public health "winnable battle" (3). In 2008, a

§ Regions classified by the Bureau of the Census. *Northeast:* Connecticut, Maine, Massachusetts, Pennsylvania, New Hampshire, New Jersey, New York, Rhode Island, Vermont; *East North Central:* Illinois, Indiana, Michigan, Wisconsin, Ohio; *West North Central:* Iowa, Kansas, Missouri, Minnesota, Nebraska, North Dakota, South Dakota; *South:* Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Tennessee, Texas, South Carolina, Virginia, West Virginia; *Mountain:* Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming; *Pacific:* Alaska, California, Hawaii, Oregon, Washington.

FIGURE. Fatality rates for occupational highway transportation deaths and all highway transportation deaths — United States, 2003–2008



* Average annual deaths per 100,000 workers. Fatality rates exclude deaths to workers aged <16 years, volunteers, and resident military personnel. Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries (CFOI), 2010.

† Average annual deaths per 100,000 population. Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) 2003–2008 annual reports. Available at <http://www.nrd.nhtsa.dot.gov/cats/listpublications.aspx?Id=E&ShowBy=DocType>.

total of 32,883 nonpedestrian highway deaths occurred in the United States, equating to a fatality rate of 10.8 deaths per 100,000 U.S. residents (5).[‡] Workers accounted for 1,215 of these highway deaths (Table 1), which made up 23.3% of all occupational deaths in 2008 (2). The rate of all highway transportation deaths declined an estimated 3.2% annually

[‡] Road traffic fatalities for 2008 for the general motoring public are from the National Highway Traffic Safety Administration's Fatality Analysis Reporting System (FARS). The classification of fatalities might vary between CFOI and FARS because of differing inclusion criteria, definitions of public roadways, and vehicle classifications.

($p=0.0008$) during 2003–2008 (5), a rate of decline slightly greater than the 2.8% annual decline for occupational highway transportation deaths reported in this analysis. Reasons for these declines are unclear, but might be related to the improved crashworthiness of vehicles, increases in safety belt use, or reductions in the number of workers driving and work-related miles driven during the recent economic recession.

Occupational highway transportation deaths differ from those among the general motoring public in terms of persons at risk, type of vehicle, and type of crash. Occupational highway transportation deaths pose the greatest risk to workers aged ≥ 55 years and to males (rate ratio: 8.4 compared with female workers) (Table 1). For transportation deaths overall in 2008, persons aged 16–24 years were at greatest risk, and males were at greater risk than females, although the relative difference was smaller (rate ratio: 2.6) (5). Contributing factors for work-related transportation deaths include fatigue and prescription drug use, which might be associated with age; roadway crash deaths overall are known to be associated with alcohol consumption, especially for drivers aged 16–24 years (1,5,6). Alcohol has not been shown to be a major contributor to work-related crashes involving large trucks (7), nor work-related crashes in general (1,6).

The majority of work-related highway transportation fatalities occurred among occupants of trucks (67% of deaths), especially tractor-trailers (34% of deaths), whereas occupants of passenger cars constituted the largest percentage of road traffic fatalities (40% of deaths) in 2008 (5). Occupational highway deaths involved a high number of collisions between two or more vehicles (49% of deaths) and noncollision incidents, especially jackknifed trucks and overturned vehicles (19% of deaths). For all road traffic fatalities during 2008, the most common crash types were collisions between vehicles (37%) and collisions between a vehicle and a fixed object (34%) (5). By state, risk patterns for occupational highway transportation deaths were similar to those for all road traffic fatalities (5) (Figure).

Workplace driving in the United States falls into two distinct categories: large trucks and buses, whose operation is regulated by the U.S. Department of Transportation (DOT),^{**} and lighter-weight fleet or personal vehicles driven for work purposes, whose operation is largely unregulated by the federal government.^{††} A voluntary consensus standard (Safe practices

^{**} Access to the Federal Motor Carrier Safety Regulations and for information about DOT medical programs and commercial driver licensing are available at <http://www.fmcsa.dot.gov>.

^{††} The Occupational Safety and Health Administration (OSHA) has issued regulations covering some aspects of mobile industrial equipment operation in construction and logging that could impact the use of such machinery on public roads, although the use of such equipment on public roadways is limited. In addition, OSHA recently has indicated that, under the general duty clause, it will begin citing employers who require their employees to send text messages while driving on the job. However, OSHA has not issued broad regulations for employers related to the work-related use of motor vehicles on public roadways.

for motor vehicle operations, ANSI Z15.1-2006) (8) outlines a comprehensive, corporate fleet motor-vehicle safety program, but the operation of lighter vehicles (including light trucks) in the workplace is governed primarily by state traffic laws and augmented by individual employer policies.

Modifiable behavioral and environmental risk factors for work-related highway transportation deaths include long hours of work, fatigue, sleepiness, occupational stress, time pressures, distracted driving, nonuse of safety belts, use of prescription and nonprescription medications, road design and maintenance, and motor vehicle safety technology (1,6). Employer commitment to road safety at the highest levels of management and a comprehensive, integrated approach to safety management at all supervisory levels are best-practice recommendations seen as essential ingredients in reducing the risk for work-related crashes (1,8–10).

The findings in this report are subject to at least four limitations. First, the cross-sectional nature of this analysis allows for identification of associations between exposure and incidents, but is only suggestive of risk factors. Second, CPS is a monthly survey of households and might underreport the employment of certain workers, especially those without permanent addresses or telephone access, or those who are undocumented. Underreporting in the workforce results in an overestimation of the occupational fatality rates provided in this report. Third, the fatality rates presented in this report do not account for the amount of time or distance workers spend on public roadways as part of their job duties. Using either as a denominator could provide a different assessment of risk between industries and demographic variables. Such data are not available for all workers in the United States. Finally, CFSI includes cases determined to be in work status but excludes those in commuter status. These determinations are difficult where the work relationship might not be clear, or when the distinction between traveling between job sites and commuting is unclear.

Preventing workplace crashes rests on worker compliance with regulations and traffic laws, supplemented by best-practice safety initiatives by employers (8). Under these recognized practices, employers should prioritize road traffic safety and initiate activities such as implementation and enforcement of policies that require use of safety belts and prohibit unsafe behaviors such as impaired driving and use of cellular phones and other mobile devices that might distract the driver while the vehicle is in motion. Proposed strategies for fatigue management focus on

flexible voluntary programs to supplement regulatory requirements, route and trip planning to reduce stress and fatigue, and in-vehicle monitoring and feedback. Other recommended injury prevention practices include rigorous driver selection and training procedures as part of a comprehensive driver management program, prehire checks of employee driving records and periodic checks thereafter, continuing risk assessment of drivers, selection of fleet vehicles with high levels of occupant protection and advanced safety features, and collection of fleet safety performance indicators (8–10).

References

1. CDC. Work-related roadway crashes, challenges and opportunities for prevention. Cincinnati, OH: US Department of Health and Human Services, CDC, National Institute for Occupational Safety and Health; 2003. Available at <http://www.cdc.gov/niosh/docs/2003-119/pdfs/2003-119.pdf>. Accessed February 23, 2011.
2. US Bureau of Labor Statistics. Census of fatal occupational injuries summary, 2009. Washington, DC: US Department of Labor, US Bureau of Labor Statistics; 2010. Available at <http://www.bls.gov/news.release/foi.nr0.htm>. Accessed February 23, 2011.
3. CDC. CDC's winnable battles. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at <http://www.cdc.gov/about/winnablebattles.htm>. Accessed February 23, 2011.
4. Bureau of Labor Statistics. Current population survey, 1998–2007 (microdata files) and labor force, employment, and unemployment from the current population survey. In: BLS handbook of methods. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2008. Available at <http://www.bls.gov/cps/home.htm>. Accessed February 23, 2011.
5. National Highway Traffic Safety Administration. Traffic safety facts 2008. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2009. DOT-HS-811-170. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811170.pdf>. Accessed February 23, 2011.
6. Robb G, Sultana S, Ameratunga S, Jackson R. A systematic review of epidemiological studies investigating risk factors for work-related road traffic crashes and injuries. *Inj Prev* 2008;14:51–8.
7. Federal Motor Carrier Safety Administration. Report to Congress on the large truck crash causation study. Washington, DC: US Department of Transportation, Federal Motor Carrier Safety Administration; 2006. MC-R/MC-RRA. Available at <http://www.fmcsa.dot.gov/facts-research/research-technology/report/ltccs-2006.htm>. Accessed April 25, 2011.
8. American National Standards Institute, American Society of Safety Engineers. Safe practices for motor vehicle operations. New York, NY: American National Standards Institute; Des Plaines, IL: American Society of Safety Engineers; 2006. ANSI/ASSE Z15.1-2006.
9. Haworth N, Tingvall C, Kowadlo N. Review of best practice road safety initiatives in the corporate and/or business environment. Clayton, Victoria, Australia: Monash University Accident Research Centre; 2000. MUARC report No. 166.
10. Newnam S, Griffin MA, Mason C. Safety in work vehicles: a multilevel study linking safety values and individual predictors to work-related driving crashes. *J Appl Psych* 2008;93:632–44.

Nonfatal Occupational Injuries and Illnesses Among Older Workers — United States, 2009

Older workers (defined as those aged ≥ 55 years) represented 19% of the U.S. workforce in 2009* and are the nation's fastest growing segment of the working population (1). To identify occupational safety issues affecting older workers, an analysis of data from the Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII) was conducted by CDC, BLS, and several state partners. This report summarizes the results of that analysis, which indicated that, based on employer reports, an estimated 210,830 nonfatal occupational injuries and illnesses among older workers in 2009 resulted in lost workdays. Although older workers had similar or lower rates for all injuries and illnesses combined compared with younger workers, the length of absence from work increased steadily with age and was highest for older workers (medians of 11 and 12 days for workers aged 55–64 years and ≥ 65 years, respectively). Older workers had higher rates of falls on the same level, fractures, and hip injuries compared with younger workers and workers of all ages. Public health and research agencies should conduct research to better understand the overall burden of occupational injuries and illnesses on older workers, aging-associated risks, and effective prevention strategies. Employers and others should take steps to address specific risks for older workers such as falls (e.g., by ensuring floor surfaces are clean, dry, well-lit, and free from tripping hazards).

SOII is a collaborative federal/state survey program administered by BLS based on reports from approximately 240,000 employers (220,000 private sector employers and 20,000 state and local government employers)[†] (2). The sampling frame is representative at the national level and at the state level for most states.[§] Employers report injuries and illnesses that meet recordkeeping requirements of the Occupational Safety and

Health Administration (OSHA).[¶] BLS estimates the incidence of work-related injuries and illnesses based on these data. For those injuries and illnesses resulting in lost workdays, employers provide information on worker characteristics, including age and sex, and data about the nature and circumstances of injuries and illnesses, including an “event” variable that describes the manner in which the injury or illness occurred.** Rates of nonfatal occupational injuries and illnesses resulting in at least 1 day away from work were calculated using hours of work data collected in SOII, augmented by data collected in the Current Population Survey (CPS) and the BLS Occupational Employment Statistics program.^{††} Rates were calculated per 10,000 full-time equivalent (FTE) workers (one FTE = 2,000 hours worked per year); 95% confidence intervals also were calculated (2).

In 2009, an estimated 210,830 nonfatal occupational injuries and illnesses among older workers resulted in lost workdays; 17% of the total 1,238,490 for all workers. The majority (94%) of the cases were classified as acute traumatic injuries, with chronic injuries such as back pain and illnesses such as dermatitis comprising the remainder of the cases. (In this report, cases generically are referred to as injuries.) Males, who represented 52% of workers aged ≥ 55 years,^{§§} accounted for 55% of injuries among older workers and had longer absences from work compared with females (medians of 14 and 9 days away from work, respectively).

Workers aged 55–64 years had a rate of nonfatal occupational injuries and illnesses resulting in lost workdays of 116.8 per 10,000 FTE workers, and workers aged ≥ 65 years had a rate of 105.9 per 10,000 FTE workers. The rate for workers of all ages combined was 117.2 per 10,000 FTE workers. No consistent age-related trend in overall rates by age group was observed (Figure). However, age-related trends were observed

* Based on a CDC analysis of 2009 Current Population Survey (CPS) microdata files. CPS is the primary source of U.S. labor force statistics and is based on monthly household surveys by the U.S. Census Bureau. Additional information available at <http://www.census.gov/cps>.

[†] The survey excludes farms with fewer than 11 employees, private household workers, the self-employed, and federal workers. Data for employees covered by specific federal safety and health legislation are provided by the Mine Safety and Health Administration of the U.S. Department of Labor and the Federal Railroad Administration of the U.S. Department of Transportation. Additional information available at <http://www.bls.gov/opub/hom/homch9.htm>.

[§] The base sample for SOII is designed to produce national estimates. However, each year, approximately 40 states participate in a federal/state cooperative program, through which the base sample is augmented to generate state-specific estimates that meet the individual needs of participating states. In 2009, a total of 40 states and the District of Columbia participated in this program.

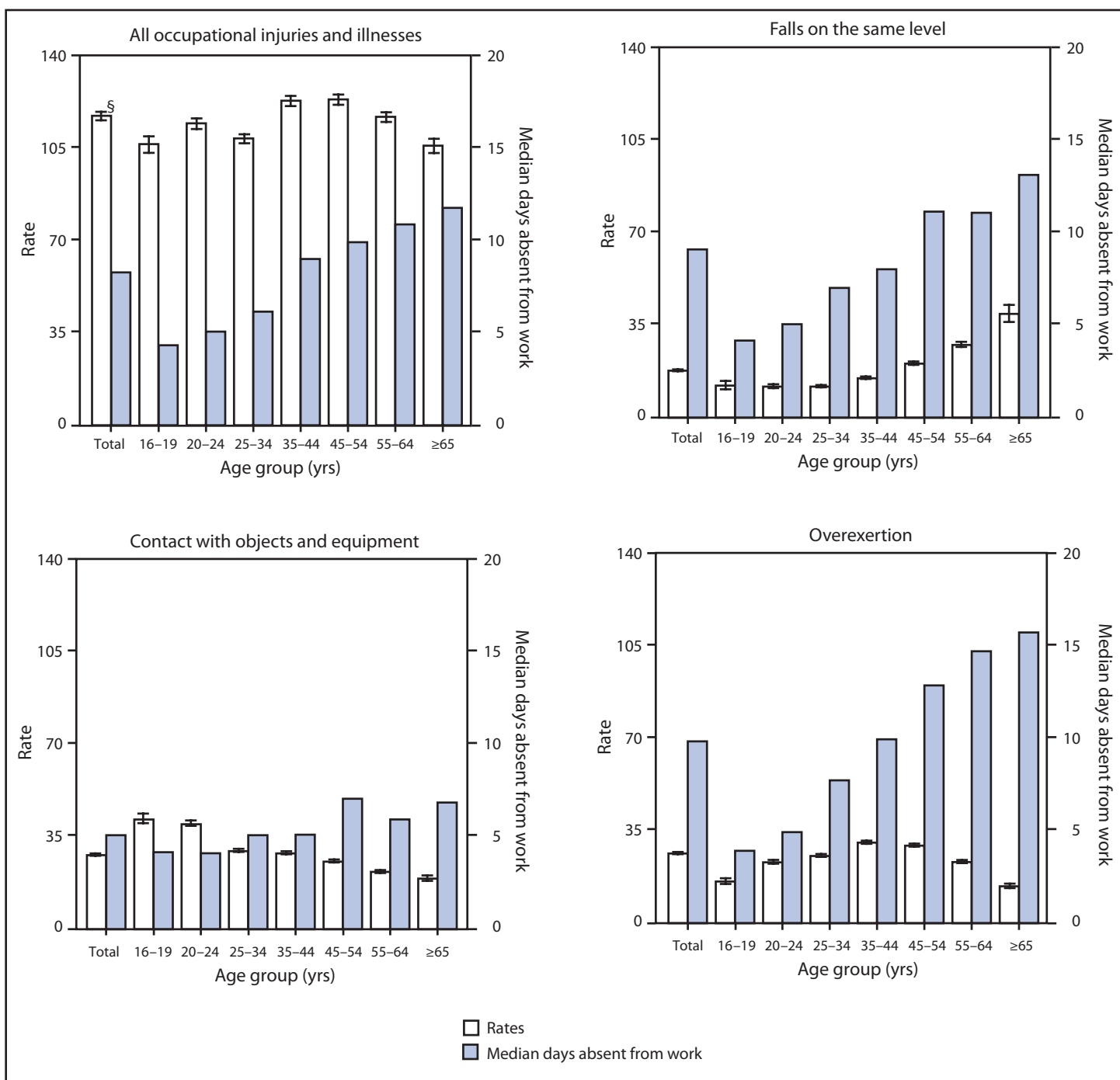
[¶] Occupational injuries and illnesses are recordable if they involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first-aid). Additional information available at http://www.osha.gov/recordkeeping/handbook/index.html#1904.4_4.

** Classified according to the BLS Occupational Injury and Illness Classification System. The BLS variable for “event or exposure” is abbreviated in this report as “event.” Additional information available at <http://www.bls.gov/iif/oshioics.htm>.

^{††} The BLS Occupational Employment Statistics program produces employment and wage estimates for approximately 800 occupations nationally and at the state level. Additional information available at <http://www.bls.gov/oes>.

^{§§} Based on CDC analysis of 2009 CPS microdata files. Additional information available at <http://www.census.gov/cps>.

FIGURE. Rate* and median days absent from work for employer-reported nonfatal occupational injuries and illnesses resulting in lost workdays, by age group and event† — United States, 2009



* Per 10,000 full-time equivalent (FTE) workers; one FTE = 2,000 hours worked per year. Data are from the U.S. Department of Labor's Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). Data represent nonfatal occupational injuries and illnesses resulting in lost workdays reported by employers to the BLS SOII. Farms with fewer than 11 employees, private household workers, the self-employed, and federal employees are excluded. Additional information available at <http://www.bls.gov/opub/hom/homch9.htm>.

† Classified according to the BLS Occupational Injury and Illness Classification System. Additional information available at <http://www.bls.gov/iif/oshioic.htm>.

^s 95% confidence interval.

for the most frequent events. Rates for falls on the same level (e.g. falling to a floor, a walkway, or the ground or onto/against objects such as a desk, wall, or door) increased steadily with age, rates for contact with objects and equipment (e.g., being struck by or against, or caught in or crushed by various tools, equipment, machinery, parts, or materials) decreased with age, and rates for overexertion were lowest for younger worker (16–19 years and 20–24 years) and older worker (55–64 years and ≥65 years) age groups. Conversely, median number of days absent from work increased steadily with age and was highest among older worker age groups for all injuries and the most frequent events (Figure).

Older worker age groups had lower injury rates than workers of all ages combined for several types of injuries, including

sprains, strains, and tears for workers aged ≥65 years, and cuts, lacerations, and punctures for both older worker age groups (Table). In contrast, rates for fractures and multiple injuries were high for both older worker age groups compared with rates for all workers. Fractures accounted for 11% of all injuries among workers aged ≥55 years and were associated with high median numbers of days absent from work (32 days for workers aged 55–64 years and 42 days for workers aged ≥65 years). The most frequently fractured body parts among workers aged ≥55 years were ankles (13% of fractures), wrists (13%), arms (11%), feet (11%), legs (11%), fingers (7%), and hips (7%).

Older worker groups had lower injury rates compared with workers of all ages combined for several parts of the body, including the back and upper extremities (Table). Although

TABLE. Number,* rate,[†] and median days absent from work for employer-reported nonfatal occupational injuries and illnesses resulting in lost workdays, by age group and selected characteristics — United States, 2009

Characteristic	Persons aged 55–64 yrs					Persons aged ≥65 yrs					Total (all ages)				
	No.	Rate	(95% CI) [§]	(% [¶])	Median days absent	No.	Rate	(95% CI)	(%)	Median days absent	No.	Rate	(95% CI)	(%)	Median days absent
Total**	176,280	116.8	(±1.8)	(100.0)	11	34,540	105.9	(±2.7)	(100.0)	12	1,238,490	117.2	(±1.6)	(100.0)	8
Sex															
Male	96,900	— ^{††}	—	(55.0)	14	19,280	—	—	(55.8)	13	754,910	129.3	(±1.8)	(61.0)	9
Female	78,640	—	—	(44.6)	8	15,230	—	—	(44.1)	11	477,620	102.2	(±1.6)	(38.6)	7
Nature of injury^{§§}															
Sprains, strains, tears	66,590	44.1	(±1.0)	(37.8)	14	10,190	31.3	(±1.3)	(29.5)	13	493,170	46.7	(±0.6)	(39.8)	10
Soreness, pain	19,370	12.8	(±0.4)	(11.0)	8	4,050	12.4	(±0.8)	(11.7)	10	137,660	13.0	(±0.2)	(11.1)	8
Fractures	18,810	12.5	(±0.4)	(10.7)	32	5,270	16.2	(±0.9)	(15.3)	42	90,160	8.5	(±0.2)	(7.3)	30
Bruises, contusions	17,700	11.7	(±0.4)	(10.0)	5	3,860	11.8	(±0.8)	(11.2)	5	113,280	10.7	(±0.2)	(9.1)	4
Cuts, lacerations, punctures	9,720	6.4	(±0.3)	(5.5)	5	2,370	7.3	(±0.6)	(6.9)	4	97,460	9.2	(±0.2)	(7.9)	4
Multiple injuries	9,680	6.4	(±0.3)	(5.5)	10	2,690	8.2	(±0.6)	(7.8)	13	52,550	5.0	(±0.1)	(4.2)	8
Part of body affected^{§§}															
Trunk (total)	55,390	36.7	(±0.8)	(31.4)	17	11,310	34.7	(±1.4)	(32.7)	18	406,370	38.5	(±0.6)	(32.8)	10
Back	27,160	18.0	(±0.5)	(15.4)	11	4,860	14.9	(±0.9)	(14.1)	7	242,380	22.9	(±0.4)	(19.6)	7
Pelvic region	3,900	2.6	(±0.2)	(2.2)	20	1,460	4.5	(±0.5)	(4.2)	59	19,550	1.9	(±0.1)	(1.6)	10
Hip(s)	2,390	1.6	(±0.1)	(1.4)	35	1,090	3.3	(±0.4)	(3.2)	67	9,780	0.9	(±0.0)	(0.8)	15
Lower extremities	43,300	28.7	(±0.7)	(24.6)	13	7,910	24.3	(±1.1)	(22.9)	15	281,820	26.7	(±0.4)	(22.8)	10
Upper extremities	33,470	22.2	(±0.6)	(19.0)	10	5,900	18.1	(±1.0)	(17.1)	10	265,980	25.2	(±0.4)	(21.5)	7
Multiple parts	28,040	18.6	(±0.5)	(15.9)	8	6,070	18.6	(±1.0)	(17.6)	8	153,890	14.6	(±0.3)	(12.4)	9
Head	10,240	6.8	(±0.3)	(5.8)	3	2,190	6.7	(±0.6)	(6.3)	4	81,000	7.7	(±0.2)	(6.5)	3
Event^{§§}															
Fall on same level	41,470	27.5	(±0.6)	(23.5)	11	12,780	39.2	(±1.5)	(37.0)	13	186,630	17.7	(±0.3)	(15.1)	9
Overexertion	34,840	23.1	(±0.6)	(19.8)	15	4,550	13.9	(±0.8)	(13.2)	16	277,560	26.3	(±0.4)	(22.4)	10
Contact with objects equipment	33,140	21.9	(±0.6)	(18.8)	6	6,320	19.4	(±1.0)	(18.3)	7	299,030	28.3	(±0.4)	(24.1)	5
Fall to lower level	15,700	10.4	(±0.4)	(8.9)	16	2,490	7.6	(±0.6)	(7.2)	16	79,050	7.5	(±0.1)	(6.4)	13

* The number of nonfatal occupational injuries and illnesses resulting in lost workdays reported by employers to the U.S. Department of Labor, Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). Farms with fewer than 11 employees, private household workers, the self-employed, and federal employees are excluded. Additional information available at <http://www.bls.gov/opub/hom/homch9.htm>.

[†] Per 10,000 full-time equivalent (FTE) workers; one FTE = 2,000 hours worked per year. FTE are derived from employment data collected in the SOII augmented by data collected in the Current Population Survey and the BLS Occupational Employment Statistics Program. Additional information is available at <http://www.bls.gov/opub/hom/homch9.htm>.

[§] Confidence interval for rate.

[¶] Percentages might not add to 100 because of rounding or because of reporting on only selected values based on highest frequency (i.e., nature of injury or illness, part of body affected, and event or exposure).

** The sum of the number of injuries for persons aged 55–64 years and ≥65 years (210,820) does not equal the total of 210,830 that is reported in the report because of rounding of the sample-based estimates.

^{††} Data do not meet BLS standards for publication.

^{§§} Classified according to the BLS Occupational Injury and Illness Classification System. Additional information available at <http://www.bls.gov/iif/oshoinc.htm>.

What is already known on this topic?

Older workers (defined as those aged ≥ 55 years) are the nation's fastest growing segment of the working population. These workers have the highest rates of all age groups for fatal occupational injuries and require more time than younger workers to recover from nonfatal occupational injuries.

What is added by this report?

In 2009, 17% of employer-reported nonfatal occupational injuries and illnesses were among workers aged ≥ 55 years, and median number of days absent from work exceeded those for younger age groups. Older workers have unique patterns of injury compared with other age groups, including lower rates for some types of injuries and illnesses (e.g., such as contact with objects and equipment) and increased rates for others (e.g., falls on the same level, fractures, and hip injuries).

What are the implications for public health practice?

As the workforce ages, additional research and interventions by public health agencies are needed to protect worker health. Steps to improve older worker safety and health are expected to affect the larger workforce because many efforts, such as implementing fall-prevention strategies, would be beneficial for workers of all ages.

hip injuries accounted for only 2% of older worker injuries, the rates were high for both older worker age groups compared with workers of all ages, and median numbers of days absent from work were high (35 days for workers aged 55–64 years and 67 days for workers aged ≥ 65 years). Forty-nine percent of the hip injuries among workers aged ≥ 55 years were fractures. Fifty-four percent of the hip injuries among workers aged ≥ 55 years were the result of falls on the same level; another 16% were from falls to a lower level. Females accounted for 52% of the hip injuries among workers aged ≥ 55 years. Females with hip injuries were absent from work for a median of 44 days, compared with 59 days for males with hip injuries.

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Editorial Note

The population of older workers that forgo retirement because of various factors (e.g., better health, changes in social or retirement policy, lack of younger replacement workers, economic need, or desire to change careers) is growing (3,4). In 2009, U.S. workers aged ≥ 55 years accounted for 17% of injuries resulting in lost workdays reported in SOII overall and among private sector employers. A 2003 analysis of SOII data that was limited to private sector employment indicated that 12% of injuries were among older workers (3), suggesting that the proportion of older worker injuries has increased during the past 6 years. Researchers and practitioners suggest that accommodating older workers positively impacts the entire workforce (4,5). For example, employer efforts to reduce fall risks for older workers, such as ensuring walkways are well-lit, removing slipping and tripping hazards, and use of more slip-resistant floors, will improve the safety of all workers.

The findings described in this report are consistent with previous studies, which indicate that when older workers are injured, recovery times are longer compared with younger workers, and falls and fractures are common (3,4,6). These findings also suggest substantive impacts on older workers' quality of life and health-care costs. The analysis did not include fatal injuries; previous analyses have found that older workers have the highest fatal injury rates (3,4), and preliminary data for 2009 suggest that workers aged ≥ 55 years accounted for 31% of all occupational injury deaths that year.[¶] The findings in this report show that although older workers have higher rates for some types of injuries (e.g., falls on the same level), for other types of injuries (e.g., contact with objects and equipment), they have lower rates compared with other age groups. Additional research is needed to elucidate why older workers have increased rates for some types of injury and not others, and most importantly, to identify the most effective strategies for ensuring the health and well-being of older workers. Increased attention should be paid to the complex safety issues of this growing worker population, which is projected to comprise nearly one quarter of the U.S. workforce by 2018 (1).

[¶] Based on preliminary data from the BLS Census of Fatal Occupational Injuries. Additional information available at http://www.bls.gov/iif/oshwc/foi/foi_rates_2009hb.pdf.

Although SOII provides some representative data for occupational injuries and is a good source for addressing injury severity, it is limited to those injuries reported by employers that result in at least 1 day away from work, and it does not include data on long-term disability or costs associated with nonfatal occupational injuries. In an analysis of 2004 nationally representative hospital emergency department data (6), researchers estimated that approximately twice as many older worker injuries had occurred as were estimated by SOII that same year, and the analysis suggested injury rates declined with increasing age.^{***} The differences in findings from these two data sources might reflect differences in worker populations and the types of injuries captured by each system. Analyzing other sources of occupational injury and illness data, such as data from hospitals and workers' compensation systems, will provide a more accurate and complete picture of older worker injuries and illnesses. Additionally, these data might include estimates of costs that provide another measure of public health burden. In an analysis of carpal tunnel syndrome in Washington based on workers' compensation data, associated costs were greater for older workers compared with younger workers (7).

The findings in this report are subject to at least four limitations. First, SOII data exclude farms with fewer than 11 employees, private household workers, the self-employed, and federal workers (2). The distribution of older workers in these groups is not known, although an analysis of CPS data suggested that 22% of workers aged ≥ 55 years were self-employed or federal workers in 2009, much higher than the 12% of workers aged < 55 years who were self-employed or federal workers in 2009.^{†††} Second, some injuries and illnesses might not be reported because of employer and employee disincentives for reporting injuries and illnesses or misinterpretation of recordkeeping requirements (8); whether injuries among older

workers are more likely to be underreported than those among other age groups is unknown. Third, information on age is available in SOII only for injuries and illnesses that result in lost workdays; 70% of injuries and illnesses reported by employers in 2009 did not result in lost workdays.^{§§§} Finally, SOII undercounts the number of work-related illnesses because of difficulty in attributing many occupational illnesses specifically to work exposures (2) (e.g., arthritis, respiratory illnesses, and cancers), and this might be a larger problem for older workers who have a lifetime of work and environmental exposures.

Worker safety is a shared responsibility of employers and employer groups, workers and their organizations and medical providers, and government agencies. Although focusing on the health and well-being of all workers throughout their working lifetime is imperative, an urgent need exists to understand and address the needs of older workers as the nation's workforce ages (4). Additional research is needed to guide prevention activities, with specific attention to preventing falls (given the large percentage of fall-related injuries among older workers and the high rates and severity of associated injuries). More research is needed to build the evidence base for preventing older worker injuries and illnesses; however, the increases in the numbers of older workers and associated injuries dictate that interim guidance be developed using available data and research (4).

Examples of such guidance are available from CDC and state public health agencies (5,9,10) and include recommendations for age-awareness training for supervisors and workers, medical assessments of underlying medical conditions and characteristics of the aging process that might increase risk and susceptibility to injury (e.g., loss of visual acuity, hearing loss, and osteoporosis), and reasonable accommodations for older workers. For example, the New Jersey Department of Health and Senior Services has recommended that older workers discuss with their personal physician their ability to work and precautionary measures to address medical or underlying conditions that might increase risk and susceptibility to injury (10). Government agencies, research organizations, and labor and trade organizations should develop, implement, and evaluate additional guidance and programs, including guidance specific to reducing falls among older workers, the various types of work done by older workers, and the diverse industries in which they work.

^{§§§} SOII reported 4,140,700 total recordable cases in 2009. Of these, 1,238,490 (30%) involved days away from work (lost workdays). Additional information available at <http://data.bls.gov/cgi-bin/dsrv?ii>.

^{***} The emergency department analysis identified 303,000 injuries, compared with 152,760 reported by SOII for private industry workers in 2004. Data from the 2004 SOII are available at <http://www.bls.gov/iif/oshcdnew2004.htm#04m>. The emergency department data indicated that the highest injury and illness rates were for workers aged 18–19 years, with steady declines for older age groups. These data are available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5616a3.htm>.

^{†††} A CDC analysis of 2009 CPS microdata files provided estimates of 4,984,091 self-employed and 867,989 federal workers aged ≥ 55 years (22% of the 27,132,249 workers aged ≥ 55 years) based on primary job. Similar analyses showed that only 12% of workers aged < 55 years worked in these employment categories. Data on private household workers and employees on farms with fewer than 11 employees are not available in CPS. Additional information on CPS and microdata files is available at <http://www.census.gov/cps>.

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References

1. Toossi M. Employment outlook: 2008-18: labor force projections to 2018: older workers staying more active. *Mon Labor Rev* 2009;132:30–51.
2. US Department of Labor, Bureau of Labor Statistics. Occupational safety and health statistics [Chapter 9]. In: *BLS handbook of methods*. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2009. Available at <http://www.bls.gov/opub/hom>. Accessed January 25, 2011.
3. Rogers E, Wiatrowski WJ. Injuries, illnesses, and fatalities among older workers. *Mon Labor Rev* 2005;128:24–30.
4. Society for Occupational and Environmental Health, Association of Occupational and Environmental Clinics. Healthy aging for a sustainable workforce: a conference report, November 2009. Available at http://www.soeh.org/pdf/agingworkersworkshopreport_11%2009_final.pdf. Accessed January 25, 2011.
5. CDC. A story of impact: an age-related training tool developed by NIOSH researchers raises awareness about workplace accommodations. Cincinnati, OH: US Department of Health and Human Services, CDC; 2010. Available at <http://www.cdc.gov/niosh/docs/2010-165>. Accessed January 29, 2011.
6. CDC. Nonfatal occupational injuries and illnesses—United States, 2004. *MMWR* 2007;56:393–7.
7. Foley M, Silverstein B, Polissar N. The economic burden of carpal tunnel syndrome: long-term earnings of CTS claimants in Washington State. *Am J Ind Med* 2007;50:155–72.
8. US Government Accounting Office. Workplace safety and health: Enhancing OSHA's records audit process could improve the accuracy of worker injury and illness data. Washington, DC: US Government Accounting Office; 2009. Available at <http://www.gao.gov/products/GAO-10-10>. Accessed January 28, 2011.
9. CDC. Fact sheet: older drivers in the workplace: crash prevention for employers and workers. Cincinnati, OH: US Department of Health and Human Services, CDC; 2005. Available at <http://www.cdc.gov/niosh/docs/2005-159>. Accessed January 29, 2011.
10. New Jersey Department of Health and Human Services. Occupational safety and health issues for the older worker. Trenton, NJ: New Jersey Department of Health and Human Services; 2003. Available at <http://www.state.nj.us/health/surv/documents/olderwkinfo.pdf>. Accessed January 29, 2011.

Prevalence of Obesity Among Adults with Arthritis — United States, 2003–2009

Obesity and arthritis are critical public health problems with high prevalences and medical costs. In the United States, an estimated 72.5 million adults aged ≥ 20 years are obese, and 50 million adults have arthritis. Medical costs are estimated at \$147 billion for obesity and \$128 billion for arthritis each year (1–3). Obesity is common among persons with arthritis (2) and is a modifiable risk factor associated with progression of arthritis, activity limitation, disability, reduced quality-of-life, total joint replacement, and poor clinical outcomes after joint replacement (4,5). To assess obesity prevalence among adults with doctor-diagnosed arthritis, CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS) for the period 2003–2009. This report summarizes the results of that analysis, which determined that, among adults with arthritis, 1) obesity prevalence, on average, was 54% higher, compared with adults without arthritis, 2) obesity prevalence varied widely by state (2009 range: 26.9% in Colorado to 43.5% in Louisiana), 3) obesity prevalence increased significantly from 2003 to 2009 in 14 states and Puerto Rico and decreased in the District of Columbia (DC), and 4) the number of U.S. states with age-adjusted obesity prevalence $\geq 30.0\%$ increased from 38 (including DC) in 2003 to 48 in 2009. Through efforts to prevent, screen, and treat obesity in adults, clinicians and public health practitioners can collaborate to reduce the impact of obesity on U.S. adults with arthritis.

BRFSS* is an annual, random-digit-dialed telephone survey of adults aged ≥ 18 years conducted in all 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands.* Arthritis and obesity prevalence data are collected in odd numbered years. For this analysis, the total survey participants were as follows: 264,864 in 2003; 356,112 in 2005; 430,912 in 2007; and 432,607 in 2009. Data from those 4 years for the 50 states and DC were used to assess median obesity prevalence among adults with and without arthritis and to produce obesity prevalence maps. Data from 2003 and 2009 were used to assess changes in obesity prevalence among adults with arthritis by state/area. For 2003, 2005, 2007, and 2009 respectively, median Council of American Survey and Research Organizations (CASRO) response rates were 53.2%, 51.1%, 50.6%, and 52.5%; median CASRO cooperation rates were 74.8%, 75.1%, 72.1%, and 75.0%, respectively.†

*Additional information available at http://www.cdc.gov/brfss/technical_info-data/surveydata.htm.

†Response rates are defined as the percentage of completed interviews among all eligible persons. Cooperation rates are defined as the percentage of completed interviews among all eligible persons who actually were contacted.

Respondents were defined as having arthritis if they responded “yes” to the question “Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?” Body mass index (weight [kg] / height [m²]) was calculated from self-reported weight and height. Obesity was defined as a body mass index ≥ 30.0 . Respondents reporting body weight ≥ 500 pounds or height ≥ 7 feet or < 3 feet were excluded (1). Unadjusted, weighted obesity prevalence and 95% confidence intervals for each state/area were calculated using sampling weights, which take into account the complex sample design, nonresponse, and noncoverage, by state/area; unadjusted estimates were calculated to enable states to use these data in program planning and awareness efforts. Statistical significance of percentage changes in unadjusted obesity prevalence by state/area was determined by t-test ($p < 0.05$). In addition, state-specific obesity prevalence estimates among adults with arthritis were age-adjusted to the 2000 U.S. standard population.§

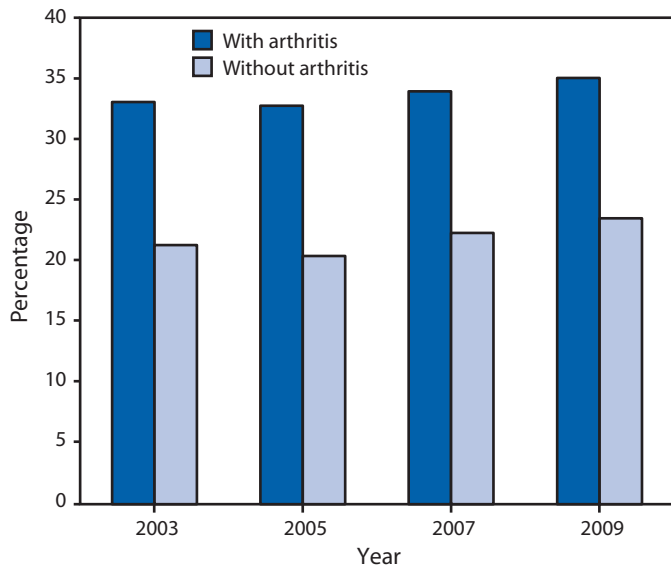
For each of the 4 years analyzed, unadjusted median obesity prevalence for the 50 states and DC was significantly higher among adults with arthritis than adults without arthritis. On average for the 4 years, unadjusted state median obesity prevalence among adults with arthritis was 54% higher (range: 49.2%–60.5%) than among adults without arthritis (Figure 1).

In 2003, unadjusted median state (including DC) obesity prevalence among adults with arthritis was 33.2%; prevalence ranged from 25.1% in Colorado to 40.1% in Ohio (Table). In 2009, unadjusted median state obesity prevalence among adults with arthritis was 35.2%; prevalence ranged from 26.9% in Colorado to 43.5% in Louisiana. From 2003 to 2009, the percentage change in prevalence ranged from -19.2% in DC to 26.2% in Wisconsin. From 2003 to 2009, unadjusted obesity prevalence among adults with arthritis increased significantly in 14 states and Puerto Rico and decreased significantly in DC (Table).

In 2003, a total of 37 states and DC had an age-adjusted obesity prevalence among adults with arthritis $\geq 30.0\%$ (including two states with prevalence $\geq 40.0\%$) (Figure 2). From 2003 to 2009, the number of states with obesity prevalence $\geq 30.0\%$ increased each survey year: 42 states in 2005 (zero states $\geq 40.0\%$), 45 states and DC in 2007 (seven states $> 40.0\%$), and 48 states in 2009 (12 states $\geq 40.0\%$) (Figure 2).

§Additional information available at <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>.

FIGURE 1. Median unadjusted, weighted prevalence of obesity* among adults with and without arthritis — Behavioral Risk Factor Surveillance System, 50 states and District of Columbia, 2003, 2005, 2007, and 2009



* Body mass index (weight [kg] / height [m²]) \geq 30.0.

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Editorial Note

The findings in this report indicate that, among adults with arthritis in the United States, obesity prevalence was higher than among adults without arthritis and increased significantly in 15 states/areas from 2003 to 2009. In 2009, age-adjusted obesity prevalence among adults with arthritis was \geq 30% in 48 states; obesity prevalence among adults without arthritis was \geq 30% in only two states (CDC, unpublished data, 2011).

Because of the complex relationships between obesity, joint pain, function, and physical activity, adults with arthritis have difficulty maintaining and losing weight (4). Obesity is an independent risk factor for severe pain, reduced physical function, and disability among adults with arthritis, which might be related to both the increased mechanical stress caused by extra weight on the joints as well as inflammatory effects of elevated cytokines and adipokines that affect cartilage degradation (4). Obesity also can impair the ability to be physically active, a key self-management and weight loss and maintenance strategy that not only can improve pain and function among adults

What is already known on this topic?

Among the 50 million U.S. adults with arthritis, obesity is associated with progression of arthritis, activity limitation, disability, reduced quality-of-life and poor clinical outcomes.

What is added by this report?

During 2003–2009, obesity prevalence among U.S. adults with arthritis was 54% higher than among adults without arthritis. From 2003 to 2009, obesity prevalence among adults with arthritis increased significantly in 14 states and Puerto Rico.

What are the implications for public health practice?

Health-care professionals should screen, counsel, and, when necessary, refer adults with arthritis and obesity to appropriate and effective clinical and community-based weight-management programs.

with arthritis, but also contribute to the energy expenditure needed to lose or maintain weight (4).

Even small amounts of weight loss (e.g., 10–12 pounds) can have important benefits for persons with arthritis (4). Randomized controlled interventions of diet, exercise, and diet plus exercise among overweight and obese adults with osteoarthritis have reduced body weight by approximately 5%, improving symptoms and functioning, and preventing short-term disability (4). Intentional weight loss among obese adults with osteoarthritis might reduce the risk for early mortality by nearly 50% (6). Reducing obesity prevalence to approximately that observed in 2000 in this population might prevent 111,206 total knee replacements and increase life expectancy by an estimated 7.8 million quality-adjusted years (7).

For health-care providers, counseling patients with arthritis to lose weight and be more physically active has been shown to correlate strongly with healthy behaviors such as attempts to lose weight (8). However, provider counseling for weight loss and physical activity for adults with arthritis is below the *Healthy People 2010* target (9) and represents an effective but underused opportunity to improve the health of adults with arthritis. Community-based efforts to reduce or maintain weight recommended for adults by the *Guide to Community Preventive Services* include technology-supported coaching or counseling interventions as well as worksite strategies (e.g., policies to improve access to healthy foods and opportunities to be physically active).[¶] U.S. Preventive Services Task Force clinical recommendations include screening and intensive counseling (one or more sessions per month for at least 3 months), plus behavioral interventions for all obese adults.^{**} Creating linkages between the health-care system and community-based

[¶] Additional information available at <http://www.thecommunityguide.org/obesity/communitysettings.html>.

^{**} Additional information available at <http://www.uspreventiveservicestaskforce.org/3rduspstf/obesity/obeserr.pdf>.

TABLE. Unadjusted, weighted prevalence of obesity* among adults with arthritis — Behavioral Risk Factor Surveillance System, United States, 2003 and 2009

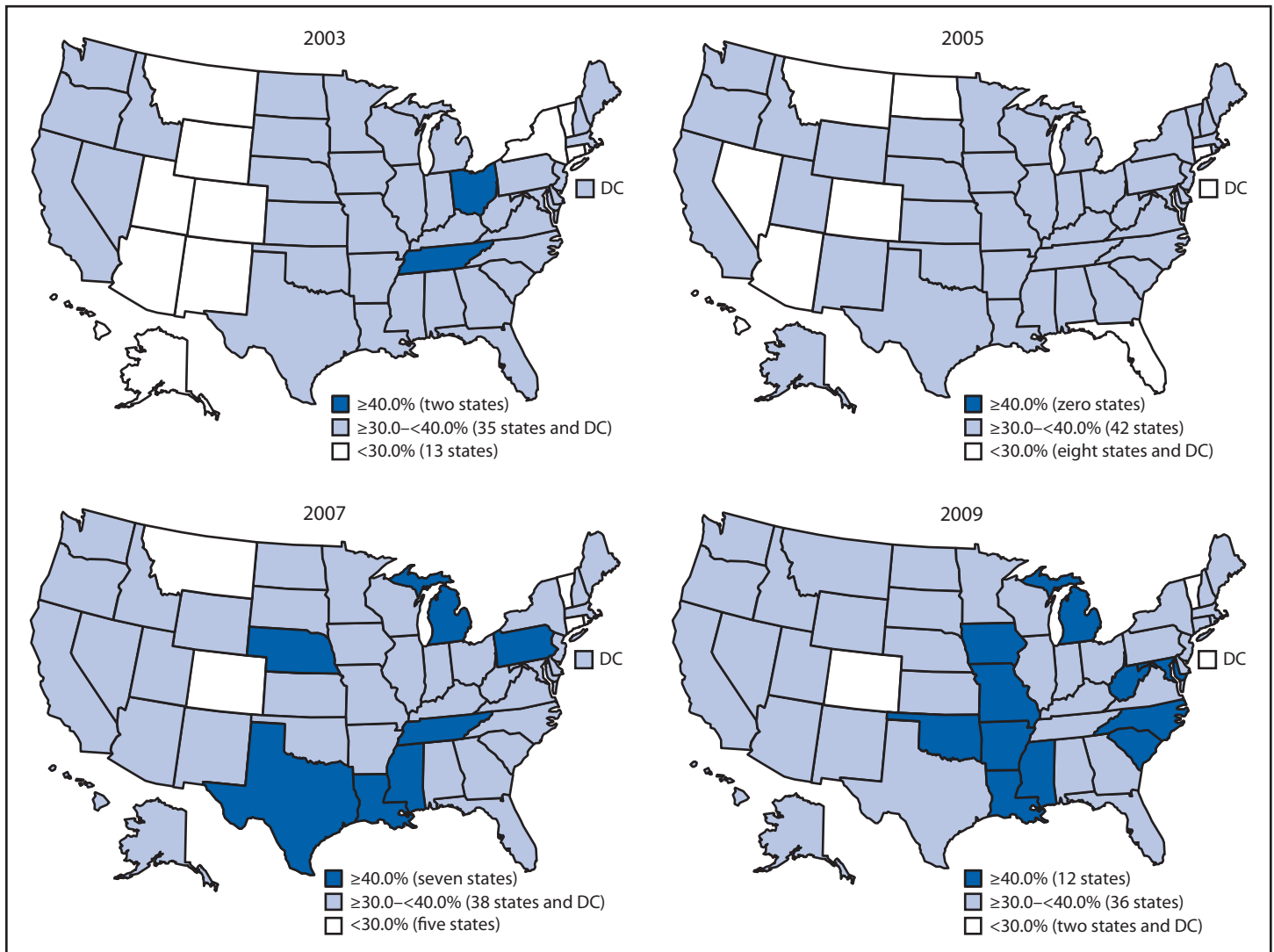
State/Area	2003			2009			% difference
	Weighted no. (1,000s)	%	(95% CI)	Weighted no. (1,000s)	%	(95% CI)	
Alabama	408	36.1	(33.2–39.1)	424	37.6	(35.0–40.4)	4.2
Alaska	35	31.6	(27.0–36.6)	43	39.0	(33.4–44.9)	23.3
Arizona	287	27.1	(23.4–31.3)	339	30.7	(27.1–34.5)	13.1
Arkansas	225	35.4	(32.7–38.1)	241	38.9	(35.5–42.3)	10.0
California	1,682	30.7	(27.5–34.1)	1,643	33.3	(31.5–35.3)	8.7
Colorado	210	25.1	(22.4–28.1)	212	26.9	(25.0–29.0)	7.2
Connecticut	194	29.1	(26.6–31.8)	191	30.9	(28.1–33.8)	6.1
Delaware	61	37.3	(33.9–40.8)	60	36.8	(33.5–40.4)	-1.2
District of Columbia	38	36.7	(31.5–42.3)	27	29.7 [†]	(26.6–33.0)	-19.2
Florida	1,080	30.4	(27.1–33.8)	1,140	31.5	(29.2–33.8)	3.7
Georgia	570	34.1	(31.6–36.6)	584	37.7	(34.7–40.7)	10.5
Hawaii	44	26.1	(22.5–30.0)	57	27.8	(25.0–30.8)	6.6
Idaho	85	34.2	(31.4–37.2)	88	35.1	(32.1–38.2)	2.5
Illinois	836	36.7	(32.8–40.8)	863	35.1	(32.4–37.8)	-4.5
Indiana	495	35.8	(33.5–38.3)	497	38.1	(35.9–40.4)	6.4
Iowa	193	33.2	(30.5–35.9)	194	36.1	(33.5–38.7)	8.8
Kansas	164	33.5	(30.6–36.4)	182	37.9 [†]	(36.4–39.5)	13.4
Kentucky	359	34.5	(32.1–37.0)	423	38.9 [†]	(36.1–41.6)	12.7
Louisiana	320	36.2	(33.5–39.0)	360	43.5 [†]	(41.1–46.0)	20.2
Maine	85	29.4	(26.0–33.0)	96	31.7	(29.7–33.7)	7.8
Maryland	377	35.7	(32.5–39.1)	369	36.0	(33.6–38.5)	0.8
Massachusetts	365	29.6	(27.2–32.1)	341	30.8	(28.9–32.8)	4.1
Michigan	835	34.7	(31.8–37.7)	864	39.3 [†]	(37.3–41.3)	13.2
Minnesota	320	33.6	(30.4–36.9)	270	33.3	(30.4–36.4)	-0.8
Mississippi	247	38.0	(35.3–40.8)	265	42.4 [†]	(40.4–44.5)	11.5
Missouri	416	32.6	(29.4–35.9)	509	39.7 [†]	(36.5–42.9)	21.8
Montana	47	26.0	(22.8–29.4)	63	32.4 [†]	(30.0–34.9)	24.9
Nebraska	118	34.3	(31.8–36.9)	117	35.8	(33.5–38.2)	4.4
Nevada	136	30.8	(26.4–35.6)	149	33.6	(29.0–38.4)	9.0
New Hampshire	84	33.2	(30.5–36.0)	83	31.8	(29.0–34.7)	-4.2
New Jersey	509	31.9	(30.0–33.7)	456	33.6	(31.5–35.7)	5.4
New Mexico	90	26.5	(23.9–29.1)	116	32.3 [†]	(30.1–34.7)	22.1
New York	1,246	31.9	(29.4–34.6)	1,235	35.1	(32.7–37.6)	9.9
North Carolina	627	35.1	(32.7–37.7)	672	37.4	(35.2–39.8)	6.6
North Dakota	44	34.1	(30.9–37.4)	44	35.2	(32.3–38.1)	3.3
Ohio	1,009	40.1	(36.7–43.5)	936	37.1	(35.0–39.1)	-7.5
Oklahoma	254	34.8	(32.7–37.0)	303	37.8	(35.6–39.9)	8.5
Oregon	227	31.7	(28.8–34.7)	227	31.0	(28.0–34.2)	-2.1
Pennsylvania	1,021	34.5	(31.6–37.5)	1,037	36.6	(34.3–38.9)	6.1
Rhode Island	66	28.7	(25.9–31.7)	70	30.7	(28.4–33.0)	6.7
South Carolina	307	33.1	(30.7–35.5)	379	38.7 [†]	(36.0–41.4)	17.0
South Dakota	51	31.5	(29.1–34.0)	53	36.6 [†]	(33.8–39.4)	16.2
Tennessee	536	39.0	(35.3–42.8)	417	36.2	(32.8–39.8)	-7.1
Texas	1,368	36.5	(33.9–39.3)	1,340	36.2	(33.6–38.9)	-0.9
Utah	105	29.9	(26.4–33.7)	133	34.8 [†]	(32.5–37.1)	16.3
Vermont	38	29.2	(26.6–32.0)	39	29.5	(27.3–31.7)	0.8
Virginia	479	32.2	(29.4–35.2)	485	33.9	(30.9–37.1)	5.3
Washington	378	31.2	(29.8–32.7)	425	33.9 [†]	(32.5–35.4)	8.7
West Virginia	180	34.5	(31.8–37.4)	185	40.2 [†]	(37.6–42.8)	16.3
Wisconsin	360	32.9	(29.8–36.1)	411	41.5 [†]	(37.8–45.3)	26.2
Wyoming	30	27.8	(25.1–30.6)	31	30.6	(28.2–33.2)	10.4
Median		33.2	(31.7–34.3)		35.2	(33.6–36.6)	7.2
Range		25.1–40.1			26.9–43.5		
Guam	5	30.7	(22.8–39.9)	3	31.0	(23.2–39.0)	1.0
Puerto Rico	193	30.1	(26.8–33.6)	172	35.7 [†]	(32.3–39.2)	18.6
U.S. Virgin Islands	4	34.9	(29.1–41.1)	4	39.9	(34.5–45.6)	14.3

Abbreviation: CI = confidence interval.

* Body mass index (weight [kg] / height [m²]) ≥30.0.

† Increase from 2003 to 2009 was statistically significant by t-test.

FIGURE 2. Age-adjusted, weighted percentage of adults with arthritis who were categorized as obese* — Behavioral Risk Factor Surveillance System, 50 states and District of Columbia, 2003, 2005, 2007, and 2009



* Body mass index (weight [kg] / height [m²]) ≥30.0.

obesity prevention and treatment programs is a potential strategy to address obesity among adults with arthritis.

The findings in this report are subject to at least four limitations. First, all BRFSS information is self-reported and subject to recall bias. In a study of 2001–2006 data, weight was found to be underestimated, especially by women, and height was found to be overestimated by both men and women (10), and these tendencies might affect BRFSS results. Second, single-year estimates of obesity prevalence among adults with arthritis for individual states might be imprecise because of small sample sizes that result from year-to-year differences in survey execution, budgetary constraints, and natural disasters. All estimates in this report meet minimum reliability standards

(relative standard errors <30.0%); however, some estimates with wide confidence intervals are less precise. Third, BRFSS does not include persons residing in institutions and, during 2003–2009, did not include households without a landline telephone. Finally, the case-finding question in this analysis covers a range of conditions (i.e., some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia), which might have different relationships to obesity. Because of the survey design, separate analyses by condition type could not be performed.

Approximately 22% of U.S. adults have arthritis (2), and a disproportionate number of those persons are categorized as obese. Efforts are needed to increase access to and availability of

effective services and programs to manage both chronic conditions. A broad approach to reducing obesity, as outlined in the *Surgeon General's Vision for a Healthy and Fit Nation 2010*,^{††} includes addressing both diet and physical activity, leveraging multiple sectors (e.g., health care, communities, and work sites), and utilizing various strategies (e.g., individual behavior, environment, and policy changes). Such an approach might help adults with both conditions increase healthy behaviors that can lessen the impact of obesity and arthritis and improve their overall quality of life.

^{††} Available at <http://www.surgeongeneral.gov/library/obesityvision/obesityvision2010.pdf>.

References

1. CDC. Vital Signs: State-specific obesity prevalence among adults—United States, 2009. *MMWR* 2009;59:951–5.
2. CDC. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2007–2009. *MMWR* 2010;59:1261–5.
3. Finkelstein EA, Trogden JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. *Health Aff (Millwood)* 2009;28:w822–31.
4. Messier SP. Diet and exercise for obese adults with knee osteoarthritis. *Clin Geriatr Med* 2010;26:461–77.
5. Anandacoomarasamy A, Caterson I, Sambrook P, Fransen M, March L. The impact of obesity on the musculoskeletal system. *Int J Obes (Lond)* 2008;32:211–22.
6. Shea MK, Houston DK, Nicklas BJ, et al. The effect of randomization to weight loss on total mortality in older overweight and obese adults: the ADAPT Study. *J Gerontol A Biol Sci Med Sci* 2010;65:519–25.
7. Losina E, Walensky RP, Reichmann WM, et al. Impact of obesity and knee osteoarthritis on morbidity and mortality in older Americans. *Ann Intern Med* 2011;154:217–26.
8. Mehrotra C, Naimi TS, Serdula M, Bolen J, Pearson K. Arthritis, body mass index, and professional advice to lose weight: implications for clinical medicine and public health. *Am J Prev Med* 2004;27:16–21.
9. Do BT, Hootman JM, Helmick CG, Brady TJ. Monitoring Healthy People 2010 arthritis objectives: education and clinician counseling for weight loss and exercise. *Ann Fam Med* 2011;9:136–41.
10. Merrill RM, Richardson JS. Validity of self-reported height, weight, and body mass index: findings from the National Health and Nutrition Examination Survey 2001–2006. *Prev Chronic Dis* 2009;6:A121.

Rotavirus Surveillance — Worldwide, 2009

Rotavirus is the leading cause of severe diarrhea worldwide among children aged <5 years (1). An estimated 527,000 children in this age group died from rotavirus in 2004, and approximately 85% of those deaths occurred in South Asia and sub-Saharan Africa (2). In 2009, the World Health Organization (WHO) recommended inclusion of rotavirus vaccination in all national immunization programs (3). Disease burden data generated from surveillance are important for making decisions regarding whether to introduce rotavirus vaccine into a country, and establishing surveillance platforms is essential to enable monitoring of vaccine impact. WHO coordinates a global surveillance network for rotavirus that uses standardized case definitions and laboratory methods at sentinel hospitals to identify cases of rotavirus in children with diarrhea. This report summarizes an assessment of data from the global surveillance network for 2009, which found that, among 43 participating countries that tested ≥ 100 stool specimens and reported results for all 12 months in 2009, a median of 36% of enrolled and tested children aged <5 years hospitalized with diarrhea (range: 25%–47% among the six WHO regions) tested positive for rotavirus. These data illustrate the important etiologic role of rotavirus in hospitalizations for diarrhea in children worldwide, which can be prevented by rotavirus vaccination.

Rotavirus surveillance was conducted using standardized case definitions and a common data reporting format (4). Any child aged <5 years who was hospitalized for treatment of acute gastroenteritis or diarrhea at a sentinel hospital conducting surveillance was eligible for enrollment. An enrolled child was

defined as one for whom a case report form was completed and a stool specimen was collected, although not necessarily tested. Stool specimens were tested for rotavirus antigen using enzyme immunoassays, generally at the sentinel hospital laboratory or national laboratory. A child whose stool specimen tested positive for rotavirus antigen was defined as having a confirmed case of rotavirus diarrhea.

This report presents data collected through the global surveillance network for rotavirus in 2009. The number of enrolled children and the number of enrolled children with stool specimens tested were stratified by WHO region. The percentage of positive rotavirus results was calculated for all countries, and the median was calculated for all countries and for each WHO region. Countries were included if ≥ 100 stool specimens were tested in 2009 and the number of tested stool specimens was reported for all 12 months of 2009. A total of 55 countries from the six WHO regions participated in the global network; 43 of these countries met the inclusion criteria.

Among the 43 countries, an average of three (range: 1–13) sentinel hospitals per country conducted surveillance. A total of 45,932 children aged <5 years were enrolled (range: 153–6,227 among countries), and stool specimens from 38,580 children (84%) were tested for rotavirus (range: 111–3,442 among countries) (Table). The median percentage of positive rotavirus results among enrolled children with stool specimens tested in the 43 countries was 36% (range: 12%–68% among countries). By WHO region, the median percentage of positive rotavirus results ranged from 25% in the Region of the Americas to 47% in the Western Pacific Region (Table).

TABLE. Number of children aged <5 years enrolled in the global surveillance network for rotavirus, number of enrolled children with stool specimens tested for rotavirus, and median detection rates of rotavirus for all countries, by World Health Organization (WHO) region — worldwide, 2009

WHO region*	No. of countries	No. of enrolled children [†]		No. of enrolled children with stool specimens tested for rotavirus		Median percentage of test results positive for rotavirus	
		No.	(Range among countries)	No.	(Range among countries)	%	(Range among countries)
African	9	4,377	(153–1,128)	4,191	(151–1,036)	41	(16–57)
Americas	12	16,242	(210–3,698)	13,139	(111–2,327)	25	(19–42)
Eastern Mediterranean	10	14,004	(205–6,227)	10,475	(205–3,442)	38	(14–54)
European	4	4,409	(737–1,485)	4,409	(737–1,485)	36	(12–52)
South-East Asia	2	1,389	(514–875)	1,389	(514–875)	37	(32–42)
Western Pacific	6	5,511	(276–2,026)	4,977	(275–1,874)	47	(24–68)
Total	43	45,932	(153–6,227)	38,580	(111–3,442)	36	(12–68)

* Of 55 countries participating in the global surveillance network for rotavirus, the following 43 countries met the inclusion criteria for analysis (i.e., tested ≥ 100 stool specimens for rotavirus and reported on the number of stool specimens tested for all 12 months in 2009): (*African Region*) Cameroon, Ethiopia, Ghana, Kenya, Tanzania, Togo, Uganda, Zambia, and Zimbabwe; (*Region of the Americas*) Bolivia, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Suriname, and Venezuela; (*Eastern Mediterranean Region*) Afghanistan, Egypt, Iraq, Libya, Morocco, Pakistan, Sudan, Syria, Tunisia, and Yemen; (*European Region*) Azerbaijan, Georgia, Moldova, and Ukraine; (*South-East Asia Region*) Myanmar and Nepal; (*Western Pacific Region*) China, Fiji, Laos, Mongolia, Papua New Guinea, and Vietnam.

[†] No data available regarding the number of enrolled children in Suriname.

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Editorial Note

Among 43 countries participating in the global surveillance network for rotavirus in 2009 that met the inclusion criteria, a median of 36% of diarrhea hospitalizations among children aged <5 years for whom stool specimens were tested were attributable to rotavirus. This detection rate is comparable to the median rotavirus detection rate of 40% among 35 countries with similar regional and global distribution in a report from the rotavirus surveillance networks for 2001–2008 (5). Furthermore, a review of studies examining the period 2000–2004 estimated that 39% of children aged <5 years who were hospitalized with diarrhea had rotavirus infection (1). The high detection rates highlight the etiologic role of rotavirus in severe diarrhea among children worldwide and underscore the need for effective immunization programs to control this disease, as part of a comprehensive approach to prevention and control of diarrhea.

Beginning in 2006, countries worldwide began implementing rotavirus vaccination in their national childhood immunization programs. Countries in the Region of the Americas were among the earliest vaccine adopters. In 2009, the Americas reported the lowest rotavirus detection rate of all regions (25%); eight of the 12 countries in the Americas in this analysis introduced rotavirus vaccine into national immunization programs during 2006–2009, and vaccination coverage levels of >80% among age-eligible children have been achieved in several of these countries. In an earlier report, among 10 countries in the Americas during 2006–2007, a median of 32% of children aged <5 years who were hospitalized with diarrhea tested positive for rotavirus, at a time when eight countries were not using rotavirus vaccine, and after two had introduced rotavirus vaccine in 2006 (6).

Although firm conclusions cannot be drawn from these trend data alone, the decline in rotavirus detection in the Americas following use of rotavirus vaccine might be attributable to vaccination. Indeed, evaluations in some individual countries in

What is already known on this topic?

Rotavirus is the leading cause of severe diarrhea among children aged <5 years worldwide.

What is added by this report?

Among 43 countries participating in the global surveillance network for rotavirus in 2009, a median of 36% of children aged <5 years hospitalized for diarrhea and tested for rotavirus had rotavirus detected in a stool specimen.

What are the implications for public health practice?

The global disease burden of rotavirus diarrhea remains high, but experience to date indicates that it can be lowered through expansion of rotavirus vaccination.

the Americas have shown marked declines in rotavirus-specific and diarrhea-related hospitalizations after vaccine introduction (7,8). For example, in El Salvador, which introduced vaccination in 2006, among children aged <5 years, rotavirus-specific hospitalizations declined 69%–81%, and all-cause diarrhea health-care visits during rotavirus season decreased 35%–48% during 2008–2009, compared with prevaccine years (7). Focused analyses of WHO surveillance data from individual countries, with consideration for the year of vaccine introduction, vaccine coverage achieved, age range under surveillance, secular trends in rotavirus diarrhea, and changes in surveillance systems should assist in assessing the impact of rotavirus vaccination on childhood diarrhea hospitalizations.

The findings in this report are subject to at least two limitations. First, sentinel hospitals associated with the global surveillance network for rotavirus are typically health facilities that treat large numbers of children with acute diarrhea, and patients at these sites might not be representative of the total population of children in the country. Second, the variation in rotavirus detection rates among WHO regions might reflect actual differences but might also reflect, in part, differences in ascertainment of rotavirus diarrhea (e.g., enrollment of patients with varying severity of diarrhea and variability in quantity or timing of collection of stool specimens) among countries participating in the network. In 2008, regional surveillance networks for rotavirus were brought under the full coordination of WHO, and efforts are under way to further standardize surveillance procedures, implement performance monitoring indicators, and evaluate laboratory performance in rotavirus antigen detection.

To date, only 27 of 193 WHO member states have introduced rotavirus vaccine into their national immunization programs. Based on data from pivotal trials conducted in the Americas and Europe, WHO recommended routine use of rotavirus vaccines in those regions in 2007 (9). In 2009,

WHO expanded the recommendation to include all countries worldwide, after data showing vaccine efficacy in less developed countries in Africa and Asia became available (3). To help overcome financial barriers to wider adoption of rotavirus vaccines, efforts are ongoing to further mobilize resources to fund purchase of rotavirus vaccines for low-income countries. In addition, several emerging-market manufacturers are pursuing development of rotavirus vaccines, which might lead to the availability of additional vaccines at a lower price.

As more countries consider whether to introduce rotavirus vaccine into national immunization programs, documenting the etiologic role of rotavirus in childhood diarrhea hospitalizations through surveillance efforts such as those described in this report will provide important evidence for decision-making. Analysis of surveillance data for trends in the number of rotavirus cases before and after rotavirus vaccine implementation will assist in evaluating vaccination impact, as illustrated by the evidence from early-introducing countries in the Americas (7,8,10).

References

1. Parashar UD, Gibson CJ, Bresee JS, Glass RI. Rotavirus and severe childhood diarrhea. *Emerg Infect Dis* 2006;12:304–6.
2. Parashar UD, Burton A, Lanata C, et al. Global mortality associated with rotavirus disease among children in 2004. *J Infect Dis* 2009;200 Suppl 1:S9–15.
3. World Health Organization. Rotavirus vaccines: an update. *Wkly Epidemiol Rec* 2009;84:533–40.
4. World Health Organization. Generic protocol for (i) hospital-based surveillance to estimate the burden of rotavirus gastroenteritis among children and (ii) a community-based survey on utilization of health care services for gastroenteritis in children. Geneva, Switzerland: World Health Organization; 2002. Available at <http://www.who.int/vaccines-documents/DocsPDF02/www698.pdf>. Accessed April 25, 2011.
5. CDC. Rotavirus surveillance—worldwide, 2001–2008. *MMWR* 2008; 57:1255–7.
6. de Oliveira LH, Danovaro-Holliday MC, Andrus JK, et al. Sentinel hospital surveillance for rotavirus in Latin American and Caribbean countries. *J Infect Dis* 2009;200 Suppl 1:S131–9.
7. Yen C, Armero Guardado JA, Alberto P, et al. Decline in rotavirus hospitalizations and health care visits for childhood diarrhea following rotavirus vaccination in El Salvador. *Pediatr Infect Dis J* 2011;30 (1 Suppl):S6–10.
8. Quintanar-Solares M, Yen C, Richardson V, Esparza-Aguilar M, Parashar UD, Patel MM. Impact of rotavirus vaccination on diarrhea-related hospitalizations among children <5 years of age in Mexico. *Pediatr Infect Dis J* 2011;30(1 Suppl):S11–5.
9. World Health Organization. Rotavirus vaccines. *Wkly Epidemiol Rec* 2007;82:285–95.
10. Patel MM, Steele D, Gentsch JR, Wecker J, Glass RI, Parashar UD. Real-world impact of rotavirus vaccination. *Pediatr Infect Dis J* 2011; 30(1 Suppl):S1–5.

Announcements

Drinking Water Week 2011

The United States has one of the safest public drinking water supplies in the world (1). Tap water not only provides water for daily activities such as drinking, bathing, and cooking, it also benefits the entire community by providing water to serve businesses, schools, and hospitals, and to promote overall health (2). May 1–7, 2011, is Drinking Water Week, an annual observance whose theme “Water: Celebrate the Essential” underscores the many services provided by public drinking water systems in the United States (3).

Disinfection and treatment practices, as well as the environmental regulation of water pollutants, have substantially improved domestic water quality during the past century and have led to a dramatic decrease in the incidence of waterborne diseases such as cholera and typhoid fever (4,5). Despite these improvements, sources of drinking water still can become contaminated and lead to adverse health effects (6).

New challenges to the U.S. water supply include aging drinking water infrastructure, the impact of climate change on water availability and quality, chemical contamination of water sources, emerging pathogens, and the development of new ways to obtain and use water. Drinking Water Week is a time to highlight the importance of safe drinking water and recognize that protecting and reinvesting in water infrastructure is crucial to the health of persons living in the United States.

References

1. US Environmental Protection Agency. Drinking water and health: what you need to know. Washington, DC: US Environmental Protection Agency; 2009. Available at http://water.epa.gov/drink/guide/upload/book_waterontap_full.pdf. Accessed March 25, 2011.
2. CDC. Achievements in public health, 1900–1999: changes in the public health system. *MMWR* 1999;48:1141–7.
3. American Water Works Association. Drinking Water Week 2011. Denver, CO: American Water Works Association; 2011. Available at <http://www.awwa.org/government/content.cfm?itemnumber=44766&navitemnumber=3863>. Accessed March 25, 2011.
4. CDC. Achievements in public health, 1900–1999: safer and healthier foods. *MMWR* 1999;48:905–13.
5. CDC. Summary of notifiable diseases—United States, 2006. *MMWR* 2008;55:17.
6. US Environmental Protection Agency. Drinking water contaminants. Washington, DC: US Environmental Protection Agency; 2011. Available at <http://www.epa.gov/safewater/contaminants/index.html>. Accessed March 25, 2011.

National Arthritis Awareness Month — May 2011

May is National Arthritis Awareness Month. Arthritis affects 50 million U.S. adults (most of whom are aged <65 years) (1), costs \$128 billion per year (2), and continues to be the most common cause of disability in the United States (3). By 2030, an estimated 67 million adults (one in four) are expected to be affected by arthritis (4).

This year’s theme, “Take Action,” is aimed at raising public awareness of underused self-management interventions that can improve arthritis symptoms and quality of life. Physical activity (e.g., walking, biking, or swimming) for 30 minutes a day, 5 days a week, reduces joint pain and stiffness in 4–6 weeks and can be done in increments of as little as 10 minutes at a time (5). Self-management education helps persons gain control of arthritis by learning techniques to reduce pain and activity limitations. Persons who are overweight or obese can reduce symptoms and slow arthritis progression by losing weight. For those with other chronic diseases who also have arthritis (e.g., half of adults with diabetes or heart disease have arthritis), these arthritis interventions might help in managing those other chronic diseases (6,7).

Information about these interventions is available at <http://www.cdc.gov/arthritis>. Additional information is available from the Arthritis Foundation (<http://www.arthritis.org>) and the National Institute of Arthritis and Musculoskeletal and Skin Diseases (<http://www.nih.gov/niams>).

References

1. CDC. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2007–2009. *MMWR* 2010;59:1261–5.
2. CDC. National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions—United States, 2003. *MMWR* 2007;56:4–7.
3. CDC. Prevalence and most common causes of disability among adults, United States, 2005. *MMWR* 2009;58:421–6.
4. Hootman JM, Helmick CG. Projections of US prevalence of arthritis and associated activity limitations. *Arth Rheum* 2006;54:226–9.
5. US Department of Health and Human Services. Physical Activity Guidelines Advisory Committee report, 2008. Washington, DC: US Department of Health and Human Services; 2008. Available at <http://www.health.gov/paguidelines/committeereport.aspx>. Accessed April 21, 2011.
6. CDC. Arthritis as a potential barrier to physical activity among adults with diabetes—United States, 2005 and 2007. *MMWR* 2008;57:486–9.
7. CDC. Arthritis as a potential barrier to physical activity among adults with heart disease—United States, 2005–2007. *MMWR* 2009;58:165–9.

Errata

Vol. 59, No. 38

In the report, “Current Depression Among Adults—United States, 2006 and 2008,” because of statistical programming difficulties, multiple small errors in estimates occurred. The correct estimates are now available at <http://www.cdc.gov/features/dsdepression>.

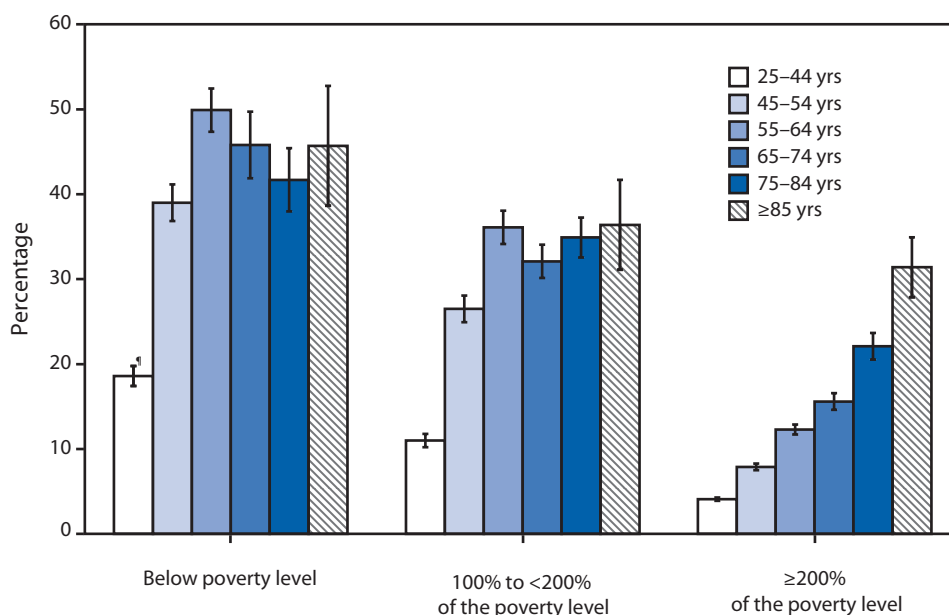
Vol. 60, No. 14

On page 462, in Table IV, errors occurred in the title and labels. The title should have read “Provisional cases of selected notifiable diseases,* United States, first quarter ending April 2, 2011 (13th week).” The fifth column heading should have read “Cum 2011,” and the sixth column heading should have read “Cum 2010.”

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Adults Aged ≥ 25 Years Reporting Fair or Poor Health,* by Age Group and Income[§] — National Health Interview Survey, United States, 2007–2009[†]



* Respondents were asked to assess their own health and that of family members living in the same household as excellent, very good, good, fair, or poor. Data are presented only for respondents aged ≥ 25 years.

[§] Family income is expressed as a percentage of the federal poverty level and grouped into three categories. Family income was imputed when information was missing by using multiple imputation methodology.

[†] Estimates are based on household interviews of a sample of the noninstitutionalized U.S. civilian population. Denominators for each category exclude persons for whom data were missing.

[¶] 95% confidence interval.

During 2007–2009, the percentage of adults who reported their health as fair or poor increased with age group among those in families with incomes $\geq 200\%$ of the poverty level, from 4.1% among persons aged 25–44 years to 31.4% among persons aged ≥ 85 years. However, among those in families with lower incomes, the percentage reporting fair or poor health increased with age only until age 55–64 years, with those aged ≥ 65 years no more likely to report fair or poor health than those aged 55–64 years. For each age group, persons in families whose income was below poverty level were most likely to report fair or poor health.

Sources: National Health Interview Survey, 2007–2009 data. Available at <http://www.cdc.gov/nchs/nhis.htm>.

CDC. Health Data Interactive. Available at <http://www.cdc.gov/nchs/hdi.htm>.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 23, 2011 (16th week)*

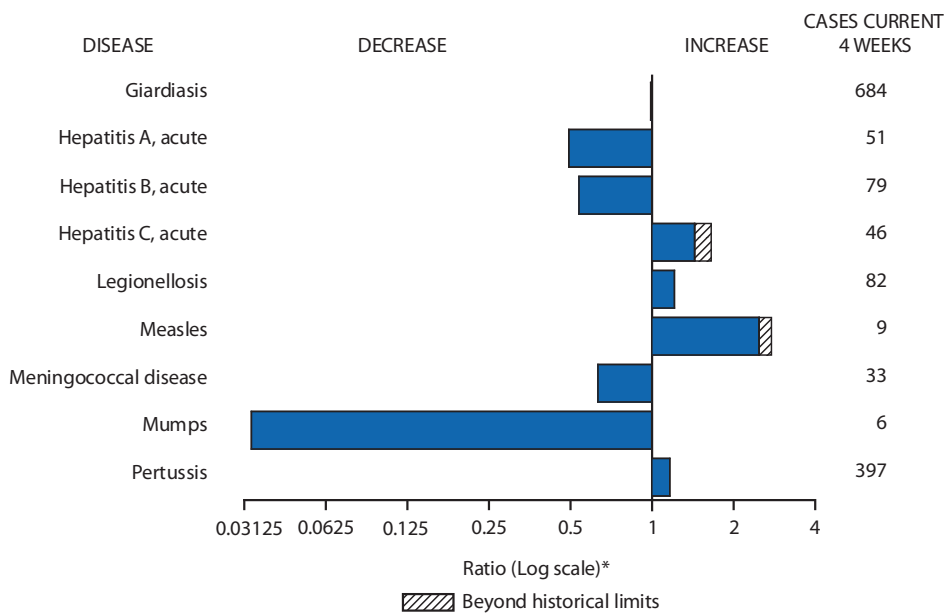
Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	—	0	74	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	—	10	4	4	4	8	
Powassan virus disease	—	—	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	—	9	1	NN	NN	NN	NN	NN	
Botulism, total	1	20	2	112	118	145	144	165	
foodborne	—	2	0	7	10	17	32	20	
infant	—	14	2	80	83	109	85	97	
other (wound and unspecified)	1	4	1	25	25	19	27	48	CA (1)
Brucellosis	3	14	2	117	115	80	131	121	PA (1), FL (2)
Chancroid	—	6	1	30	28	25	23	33	
Cholera	—	16	0	12	10	5	7	9	
Cyclosporiasis [§]	1	28	1	173	141	139	93	137	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	1	0	23	35	30	22	29	
nonsensory type b	—	34	5	183	236	244	199	175	
unknown serotype	3	84	4	232	178	163	180	179	MO (1), FL (1), OK (1)
Hansen disease [§]	—	15	2	69	103	80	101	66	
Hantavirus pulmonary syndrome [§]	—	5	0	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	—	17	3	249	242	330	292	288	
Influenza-associated pediatric mortality ^{§, ††}	2	93	2	61	358	90	77	43	MN (1), OK (1)
Listeriosis	3	115	12	774	851	759	808	884	OK (1), WA (1), CA (1)
Measles ^{§§}	—	50	3	61	71	140	43	55	
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	3	56	7	263	301	330	325	318	VT (1), OK (1), WA (1)
serogroup B	—	39	3	123	174	188	167	193	
other serogroup	—	3	1	10	23	38	35	32	
unknown serogroup	5	156	12	403	482	616	550	651	MA (1), MO (1), FL (1), CA (2)
Novel influenza A virus infections ^{***}	—	1	0	4	43,774	2	4	NN	
Plague	—	—	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	1	0	4	9	8	12	21	
Q fever, total [§]	—	14	2	120	113	120	171	169	
acute	—	6	1	97	93	106	—	—	
chronic	—	8	0	23	20	14	—	—	
Rabies, human	—	—	—	2	4	2	1	3	
Rubella ^{†††}	—	1	0	6	3	16	12	11	
Rubella, congenital syndrome	—	—	0	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	—	43	4	160	161	157	132	125	
Syphilis, congenital (age <1 yr) ^{§§§}	—	40	7	308	423	431	430	349	
Tetanus	—	1	0	11	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	1	28	1	77	74	71	92	101	WV (1)
Trichinellosis	—	4	0	6	13	39	5	15	
Tularemia	1	5	1	114	93	123	137	95	ID (1)
Typhoid fever	2	91	7	437	397	449	434	353	CA (2)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	1	19	1	105	78	63	37	6	NY (1)
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	2	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	8	63	5	806	789	588	549	NN	FL (7), CA (1)
Viral hemorrhagic fever ^{¶¶¶}	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 23, 2011 (16th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
 * Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 97 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.
 ‡‡ No measles cases were reported for the current week.
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.
 *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010 and the one case reported in 2011 were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
 ††† No rubella cases were reported for the current week.
 §§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
 ¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 23, 2011, with historical data



* 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.

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	<i>Chlamydia trachomatis</i> infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	11,427	24,758	28,656	375,123	385,100	145	0	506	3,959	NN	29	119	355	1,094	1,640
New England	479	805	2,046	12,454	11,407	—	0	1	1	NN	1	6	19	64	166
Connecticut	—	171	1,558	1,780	2,509	N	0	0	N	NN	—	0	13	13	77
Maine†	—	56	100	903	751	N	0	0	N	NN	—	0	7	1	13
Massachusetts	415	405	871	7,053	6,163	N	0	0	N	NN	1	3	9	32	34
New Hampshire	38	55	113	922	572	—	0	1	1	NN	—	1	3	9	19
Rhode Island†	—	70	154	1,318	1,045	—	0	0	—	NN	—	0	2	1	7
Vermont†	26	25	84	478	367	N	0	0	N	NN	—	1	5	8	16
Mid. Atlantic	1,613	3,345	5,178	48,329	51,345	—	0	0	—	NN	6	15	38	168	168
New Jersey	285	508	697	6,814	7,899	N	0	0	N	NN	—	0	4	8	5
New York (Upstate)	710	706	2,028	10,752	9,565	N	0	0	N	NN	—	4	13	36	32
New York City	—	1,171	2,773	15,199	19,445	N	0	0	N	NN	—	2	6	16	18
Pennsylvania	618	956	1,180	15,564	14,436	N	0	0	N	NN	6	8	26	108	113
E.N. Central	737	3,770	6,395	54,195	60,028	1	0	3	14	NN	5	29	130	230	430
Illinois	14	964	1,093	11,236	16,772	N	0	0	N	NN	—	3	21	3	64
Indiana	—	428	2,965	8,332	4,154	N	0	0	N	NN	—	3	10	24	68
Michigan	461	936	1,389	14,638	16,334	1	0	3	7	NN	1	5	18	54	90
Ohio	149	992	1,134	13,839	15,907	—	0	3	7	NN	4	7	24	92	101
Wisconsin	113	427	518	6,150	6,861	N	0	0	N	NN	—	9	65	57	107
W.N. Central	498	1,400	1,602	20,623	22,619	—	0	0	—	NN	3	14	83	81	188
Iowa	7	200	237	3,057	3,414	N	0	0	N	NN	—	4	24	11	61
Kansas	1	188	287	2,739	3,066	N	0	0	N	NN	—	2	9	14	28
Minnesota	—	291	354	3,554	4,843	—	0	0	—	NN	—	0	0	—	—
Missouri	458	512	769	8,407	8,043	—	0	0	—	NN	1	3	30	28	43
Nebraska†	32	97	218	1,769	1,622	N	0	0	N	NN	2	3	26	25	28
North Dakota	—	42	91	332	654	N	0	0	N	NN	—	0	9	—	2
South Dakota	—	62	91	765	977	N	0	0	N	NN	—	1	6	3	26
S. Atlantic	2,200	4,826	6,181	76,200	77,113	—	0	0	—	NN	6	19	39	230	267
Delaware	63	84	220	1,421	1,349	—	0	0	—	NN	—	0	1	2	1
District of Columbia	94	99	158	1,526	1,565	—	0	0	—	NN	—	0	1	3	2
Florida	624	1,462	1,706	22,092	22,653	N	0	0	N	NN	4	7	19	67	105
Georgia	—	687	2,201	11,181	12,307	N	0	0	N	NN	—	5	11	72	87
Maryland†	316	502	1,106	6,367	6,742	—	0	0	—	NN	—	1	3	13	9
North Carolina	—	734	1,436	12,342	14,091	N	0	0	N	NN	—	0	12	23	26
South Carolina†	392	536	847	8,408	8,078	N	0	0	N	NN	—	2	8	29	12
Virginia†	646	662	970	11,491	9,210	N	0	0	N	NN	2	2	9	15	20
West Virginia	65	76	124	1,372	1,118	N	0	0	N	NN	—	0	5	6	5
E.S. Central	1,304	1,767	2,649	26,637	25,291	—	0	0	—	NN	—	4	19	37	62
Alabama†	—	542	1,464	7,384	7,065	N	0	0	N	NN	—	2	13	7	22
Kentucky	559	266	541	4,235	4,651	N	0	0	N	NN	—	1	6	13	22
Mississippi	592	387	780	6,356	5,628	N	0	0	N	NN	—	0	2	6	4
Tennessee†	153	583	797	8,662	7,947	N	0	0	N	NN	—	1	5	11	14
W.S. Central	1,325	3,195	4,623	50,842	53,865	—	0	1	1	NN	—	8	31	42	82
Arkansas†	368	303	440	5,052	4,673	N	0	0	N	NN	—	0	3	5	12
Louisiana	729	396	790	6,628	7,873	N	0	1	1	NN	—	0	6	5	12
Oklahoma	228	245	1,372	3,649	3,902	N	0	0	N	NN	—	1	8	—	9
Texas†	—	2,340	3,110	35,513	37,417	N	0	0	N	NN	—	4	24	32	49
Mountain	1,158	1,531	2,220	21,936	25,527	85	0	423	2,879	NN	2	10	30	111	142
Arizona	88	498	657	2,980	8,169	83	0	418	2,829	NN	1	1	3	8	10
Colorado	711	337	876	8,124	6,099	N	0	0	N	NN	1	2	6	30	35
Idaho†	—	70	199	1,007	1,126	N	0	0	N	NN	—	2	7	21	25
Montana†	41	63	83	991	944	N	0	0	N	NN	—	1	4	11	16
Nevada†	144	194	380	3,308	3,048	2	0	4	27	NN	—	0	7	2	5
New Mexico†	130	196	1,253	3,062	3,431	—	0	4	17	NN	—	2	12	25	27
Utah	37	129	175	1,966	2,104	—	0	2	3	NN	—	1	5	9	17
Wyoming†	7	39	90	498	606	—	0	2	3	NN	—	0	2	5	7
Pacific	2,113	3,780	5,445	63,907	57,905	59	0	104	1,064	NN	6	12	29	131	135
Alaska	—	118	156	1,685	1,884	N	0	0	N	NN	—	0	3	4	2
California	1,645	2,842	4,717	46,763	43,580	59	0	104	1,064	NN	6	7	18	73	79
Hawaii	—	106	158	1,240	1,856	N	0	0	N	NN	—	0	0	—	1
Oregon	195	218	496	4,126	3,957	N	0	0	N	NN	—	4	13	52	36
Washington	273	424	891	10,093	6,628	N	0	0	N	NN	—	1	7	2	17
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	NN	N	0	0	N	NN
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	9	44	189	59	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	22	104	251	1,731	1,927	N	0	0	N	NN	N	0	0	N	NN
U.S. Virgin Islands	—	12	29	—	136	—	0	0	—	NN	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Dengue Virus Infection									
	Dengue Fever [†]					Dengue Hemorrhagic Fever [§]				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max			
United States	—	6	52	18	83	—	0	2	—	1
New England	—	0	3	—	3	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine [¶]	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island [¶]	—	0	1	—	—	—	0	0	—	—
Vermont [¶]	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	—	2	25	7	34	—	0	1	—	1
New Jersey	—	0	5	—	3	—	0	0	—	—
New York (Upstate)	—	0	5	—	5	—	0	1	—	—
New York City	—	1	17	—	20	—	0	1	—	1
Pennsylvania	—	0	3	7	6	—	0	0	—	—
E.N. Central	—	1	7	2	12	—	0	1	—	—
Illinois	—	0	3	—	4	—	0	0	—	—
Indiana	—	0	2	1	2	—	0	0	—	—
Michigan	—	0	2	—	1	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	1	—	—	0	1	—	—
W.N. Central	—	0	6	—	6	—	0	1	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	2	—	5	—	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska [¶]	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	2	19	5	18	—	0	1	—	—
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	2	14	5	15	—	0	1	—	—
Georgia	—	0	2	—	1	—	0	0	—	—
Maryland [¶]	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	—	—	—	0	0	—	—
South Carolina [¶]	—	0	3	—	—	—	0	0	—	—
Virginia [¶]	—	0	3	—	2	—	0	0	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	0	2	—	—	—	0	0	—	—
Alabama [¶]	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee [¶]	—	0	1	—	—	—	0	0	—	—
W.S. Central	—	0	1	—	—	—	0	1	—	—
Arkansas [¶]	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	1	—	—	—	0	0	—	—
Texas [¶]	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	2	—	2	—	0	0	—	—
Arizona	—	0	2	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho [¶]	—	0	1	—	—	—	0	0	—	—
Montana [¶]	—	0	1	—	—	—	0	0	—	—
Nevada [¶]	—	0	1	—	1	—	0	0	—	—
New Mexico [¶]	—	0	0	—	1	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—
Wyoming [¶]	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	4	8	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	1	4	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	3	3	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	104	550	191	1,632	—	2	20	1	45
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

[§] DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

[¶] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	—	8	79	19	56	—	13	59	9	35	—	1	13	4	5
New England	—	0	2	—	1	—	1	7	1	8	—	0	1	—	—
Connecticut	—	0	0	—	—	—	0	6	—	—	—	0	0	—	—
Maine [§]	—	0	1	—	1	—	0	2	1	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	2	—	2	—	0	1	—	—
Rhode Island [§]	—	0	1	—	—	—	0	6	—	3	—	0	0	—	—
Vermont [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	0	10	1	8	—	4	15	3	2	—	0	1	1	1
New Jersey	—	0	0	—	—	—	0	0	—	1	—	0	0	—	—
New York (Upstate)	—	0	10	—	4	—	4	15	3	1	—	0	1	1	1
New York City	—	0	3	1	3	—	0	2	—	—	—	0	0	—	—
Pennsylvania	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	0	4	2	6	—	4	41	—	20	—	1	7	2	3
Illinois	—	0	2	1	2	—	0	2	—	—	—	0	2	1	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	1	3
Michigan	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Ohio	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	1	—	4	—	4	41	—	20	—	0	4	—	—
W.N. Central	—	1	13	2	2	—	0	3	—	—	—	0	11	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	11	—	—
Missouri	—	1	13	2	2	—	0	3	—	—	—	0	3	—	—
Nebraska [§]	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	3	18	13	34	—	1	7	4	5	—	0	1	—	—
Delaware	—	0	3	1	3	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	2	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	4	1	3	—	0	1	—	—	—	0	1	—	—
Maryland [§]	—	0	3	2	4	—	0	2	—	3	—	0	1	—	—
North Carolina	—	1	13	5	23	—	0	4	4	2	—	0	0	—	—
South Carolina [§]	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Virginia [§]	—	1	8	2	—	—	0	2	—	—	—	0	1	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	0	11	1	2	—	0	2	1	—	—	0	1	—	1
Alabama [§]	—	0	3	—	1	—	0	2	1	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee [§]	—	0	7	1	1	—	0	2	—	—	—	0	1	—	1
W.S. Central	—	0	66	—	2	—	0	7	—	—	—	0	1	—	—
Arkansas [§]	—	0	5	—	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	61	—	—	—	0	5	—	—	—	0	0	—	—
Texas [§]	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

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† Cumulative total *E. ewingii* cases reported for year 2010 = 11, and 1 case report for 2011.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	130	320	501	3,732	5,007	2,406	5,797	6,568	82,577	87,034	27	58	127	952	1,044
New England	5	25	54	275	360	37	102	206	1,431	1,432	—	3	9	53	49
Connecticut	—	3	12	—	1	—	38	169	499	623	—	0	6	—	—
Maine [§]	3	3	11	32	56	—	2	7	46	70	—	0	2	7	1
Massachusetts	1	14	25	176	190	35	51	81	735	597	—	2	6	37	35
New Hampshire	—	2	10	19	46	2	3	7	35	44	—	0	1	4	6
Rhode Island [§]	—	1	7	7	19	—	6	15	108	88	—	0	2	3	6
Vermont [§]	1	3	10	41	48	—	0	17	8	10	—	0	3	2	1
Mid. Atlantic	11	61	106	741	874	305	717	1,165	10,345	10,102	5	11	26	185	221
New Jersey	—	3	18	33	119	47	117	173	1,741	1,642	—	2	5	32	33
New York (Upstate)	6	23	58	270	297	125	110	260	1,646	1,487	4	3	15	46	57
New York City	—	17	33	229	238	—	234	535	3,200	3,624	—	2	5	36	45
Pennsylvania	5	15	27	209	220	133	264	366	3,758	3,349	1	4	11	71	86
E.N. Central	21	51	91	583	912	212	1,038	1,981	14,306	15,699	1	10	20	161	178
Illinois	—	10	32	90	220	2	252	328	2,811	3,913	—	3	9	41	48
Indiana	—	5	11	55	113	—	113	1,000	2,272	1,201	—	1	7	19	34
Michigan	4	11	25	127	200	134	249	488	3,728	4,327	—	1	3	24	13
Ohio	16	17	29	233	247	47	317	383	4,245	4,920	1	2	6	55	39
Wisconsin	1	8	34	78	132	29	94	156	1,250	1,338	—	1	5	22	44
W.N. Central	5	23	44	272	344	121	288	365	4,145	4,311	3	2	6	32	41
Iowa	2	5	11	64	77	2	35	57	554	528	—	0	0	—	1
Kansas	—	3	10	38	64	1	40	62	490	595	—	0	2	2	7
Minnesota	—	0	0	—	—	—	37	62	442	693	—	0	0	—	—
Missouri	2	8	26	103	99	112	143	181	2,151	1,997	1	1	4	17	25
Nebraska [§]	1	4	9	55	67	6	23	49	357	339	2	0	3	12	3
North Dakota	—	0	5	—	6	—	3	11	32	55	—	0	2	1	5
South Dakota	—	1	5	12	31	—	9	20	119	104	—	0	0	—	—
S. Atlantic	26	72	121	781	1,034	557	1,377	1,808	19,945	22,289	12	14	26	245	257
Delaware	—	0	5	7	9	16	18	48	302	307	—	0	1	1	3
District of Columbia	—	0	5	7	13	45	34	66	560	600	—	0	1	—	—
Florida	23	39	75	355	520	181	377	486	5,517	6,016	12	4	9	96	71
Georgia	—	13	45	251	222	—	229	668	3,271	3,834	—	3	7	46	60
Maryland [§]	—	4	11	60	100	88	134	243	1,685	1,889	—	1	5	20	18
North Carolina	N	0	0	N	N	—	248	596	4,221	4,486	—	2	9	24	36
South Carolina [§]	—	3	9	28	35	108	155	261	2,383	2,394	—	1	5	23	33
Virginia [§]	2	8	32	61	123	104	124	223	1,727	2,605	—	2	7	35	30
West Virginia	1	0	8	12	12	15	14	26	279	158	—	0	9	—	6
E.S. Central	2	4	11	39	90	264	483	696	6,940	6,781	1	3	10	58	62
Alabama [§]	2	4	11	37	49	—	161	379	2,164	2,056	—	1	4	20	7
Kentucky	N	0	0	N	N	120	71	160	1,108	1,199	—	1	4	12	12
Mississippi	N	0	0	N	N	115	111	216	1,618	1,566	—	0	2	4	6
Tennessee [§]	—	0	3	2	41	29	144	194	2,050	1,960	1	1	4	22	37
W.S. Central	3	6	14	49	105	457	866	1,624	12,970	14,321	2	3	26	52	53
Arkansas [§]	3	2	7	27	29	105	95	138	1,511	1,353	—	0	3	12	9
Louisiana	—	3	8	22	45	287	104	469	1,810	2,118	—	0	4	20	12
Oklahoma	—	0	5	—	31	65	80	332	1,072	1,145	2	1	19	19	28
Texas [§]	N	0	0	N	N	—	600	866	8,577	9,705	—	0	4	1	4
Mountain	24	31	57	312	506	94	185	230	2,478	2,837	1	5	12	104	133
Arizona	4	3	8	36	46	13	57	83	531	981	—	2	6	47	54
Colorado	16	12	27	138	209	41	50	93	725	816	1	1	5	21	29
Idaho [§]	2	4	9	40	70	—	2	14	42	34	—	0	2	4	7
Montana [§]	—	1	6	10	41	—	1	5	23	41	—	0	1	2	1
Nevada [§]	1	2	11	26	16	35	34	103	661	548	—	0	2	8	5
New Mexico [§]	1	2	6	17	22	4	27	100	421	312	—	1	4	16	17
Utah	—	5	13	34	83	1	5	15	61	94	—	0	3	6	15
Wyoming [§]	—	0	5	11	19	—	1	4	14	11	—	0	1	—	5
Pacific	33	52	132	680	782	359	642	809	10,017	9,262	2	3	20	62	50
Alaska	—	2	6	15	31	—	22	36	283	454	—	0	2	8	10
California	26	32	57	462	487	297	521	684	7,895	7,485	—	0	16	9	—
Hawaii	1	1	4	6	20	—	13	26	169	213	—	0	2	9	10
Oregon	3	8	20	117	159	13	20	36	362	333	2	1	6	35	27
Washington	3	8	71	80	85	49	61	115	1,308	777	—	0	2	1	3
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	1	—	0	5	6	4	—	0	0	—	—
Puerto Rico	—	0	8	8	21	2	6	14	114	76	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	3	7	—	26	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

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† Data for H. influenzae (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A				B				C						
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	11	28	66	321	470	12	60	156	639	956	9	16	35	245	235
New England	—	1	6	12	32	—	0	4	13	25	—	0	4	7	21
Connecticut	—	0	4	5	—	—	0	2	2	6	—	0	4	3	11
Maine†	—	0	1	1	2	—	0	1	2	8	—	0	2	2	—
Massachusetts	—	0	5	3	25	—	0	3	8	5	—	0	1	1	10
New Hampshire	—	0	1	—	—	—	0	1	1	5	N	0	0	N	N
Rhode Island†	—	0	1	1	5	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	1	2	—	—	0	1	—	1	—	0	1	1	—
Mid. Atlantic	1	3	10	46	63	—	5	10	69	90	2	1	5	20	26
New Jersey	—	0	1	2	8	—	1	5	11	25	—	0	2	—	6
New York (Upstate)	—	1	4	12	16	—	1	8	13	11	—	1	4	12	12
New York City	—	1	7	17	23	—	1	4	20	31	—	0	1	—	—
Pennsylvania	1	1	3	15	16	—	2	5	25	23	2	0	3	8	8
E.N. Central	2	4	9	54	77	—	9	23	89	173	1	2	6	54	23
Illinois	—	1	3	8	17	—	2	7	18	33	—	0	1	1	—
Indiana	—	0	3	7	8	—	1	6	8	26	—	1	4	20	8
Michigan	1	1	5	20	22	—	2	5	31	43	1	1	5	31	10
Ohio	1	1	5	18	10	—	1	16	24	35	—	0	1	2	3
Wisconsin	—	0	1	1	20	—	1	5	8	36	—	0	2	—	2
W.N. Central	1	1	23	14	19	—	2	16	37	42	—	0	6	2	5
Iowa	—	0	3	1	4	—	0	1	4	8	—	0	0	—	—
Kansas	—	0	2	2	7	—	0	1	3	2	—	0	1	—	—
Minnesota	—	0	22	2	1	—	0	15	1	2	—	0	6	—	3
Missouri	1	0	2	4	5	—	1	3	23	22	—	0	2	—	2
Nebraska†	—	0	4	3	2	—	0	3	5	8	—	0	1	2	—
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	—	—	0	0	—	—
S. Atlantic	1	5	14	64	102	8	17	33	190	256	2	4	8	52	56
Delaware	—	0	1	1	4	—	0	2	—	12	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	1	—	2	—	0	0	—	2
Florida	1	2	7	25	35	2	5	11	65	85	1	1	5	16	14
Georgia	—	1	4	17	8	—	2	8	29	56	—	0	3	7	5
Maryland†	—	0	3	9	7	3	1	4	17	25	1	1	3	10	9
North Carolina	—	0	4	3	19	2	2	16	45	23	—	1	4	15	16
South Carolina†	—	0	1	2	16	—	1	4	10	13	—	0	1	—	—
Virginia†	—	1	6	7	11	1	2	7	24	21	—	0	2	4	4
West Virginia	—	0	5	—	1	—	0	18	—	19	—	0	5	—	6
E.S. Central	—	0	6	7	15	1	8	14	120	94	—	3	8	44	40
Alabama†	—	0	2	—	4	1	1	4	29	22	—	0	1	3	1
Kentucky	—	0	6	2	7	—	3	8	37	30	—	2	6	22	31
Mississippi	—	0	1	2	1	—	0	3	7	7	U	0	0	U	U
Tennessee†	—	0	2	3	3	—	3	8	47	35	—	1	5	19	8
W.S. Central	—	2	15	20	41	1	9	61	65	137	2	2	12	27	19
Arkansas†	—	0	1	—	—	—	1	4	10	14	—	0	0	—	—
Louisiana	—	0	2	1	3	—	1	4	13	20	—	0	2	4	2
Oklahoma	—	0	4	1	—	1	2	14	15	18	2	1	11	15	7
Texas†	—	2	11	18	38	—	5	43	27	85	—	0	3	8	10
Mountain	—	2	8	20	51	1	2	7	22	45	—	1	4	14	22
Arizona	—	0	4	5	23	—	0	2	5	13	U	0	0	U	U
Colorado	—	0	2	6	12	—	0	5	1	10	—	0	3	1	6
Idaho†	—	0	2	3	2	—	0	1	2	3	—	0	2	6	5
Montana†	—	0	1	2	3	—	0	0	—	—	—	0	1	1	—
Nevada†	—	0	2	1	6	1	1	3	12	11	—	0	2	4	1
New Mexico†	—	0	1	2	2	—	0	1	1	2	—	0	1	2	7
Utah	—	0	2	—	3	—	0	1	1	6	—	0	2	—	3
Wyoming†	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Pacific	6	5	16	84	70	1	4	23	34	94	2	1	8	25	23
Alaska	—	0	1	1	—	—	0	1	2	1	U	0	0	U	U
California	5	4	16	72	54	1	3	18	14	67	1	0	4	12	9
Hawaii	—	0	1	2	4	—	0	1	2	2	U	0	0	U	U
Oregon	—	0	1	2	8	—	1	3	10	15	—	0	3	7	8
Washington	1	0	2	7	4	—	1	5	6	9	1	0	5	6	6
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	7	—	1	8	28	16	—	0	7	10	12
Puerto Rico	—	0	2	2	4	—	0	2	1	8	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	19	58	122	491	633	48	411	1,676	1,849	4,372	5	27	101	259	342
New England	1	4	16	25	27	2	116	504	224	1,451	—	1	11	13	20
Connecticut	—	0	6	—	—	—	41	213	—	606	—	0	11	—	—
Maine†	—	0	3	3	—	2	11	62	50	74	—	0	1	1	—
Massachusetts	1	2	10	17	20	—	38	223	94	475	—	1	4	9	17
New Hampshire	—	0	5	2	1	—	19	69	57	255	—	0	2	1	1
Rhode Island†	—	0	4	1	5	—	1	40	4	17	—	0	4	—	1
Vermont†	—	0	2	2	1	—	4	28	19	24	—	0	1	2	1
Mid. Atlantic	3	13	48	112	138	23	180	737	1,086	1,980	—	7	18	62	85
New Jersey	—	0	11	1	21	—	41	220	208	608	—	0	1	—	—
New York (Upstate)	2	5	19	51	36	12	36	159	183	270	—	1	6	10	20
New York City	—	2	17	22	32	—	1	10	2	46	—	4	14	41	48
Pennsylvania	1	6	19	38	49	11	92	386	693	1,056	—	1	3	11	17
E.N. Central	5	11	44	93	154	—	25	330	34	200	2	3	9	30	36
Illinois	—	2	15	10	19	—	1	18	4	10	—	1	6	8	18
Indiana	1	1	6	10	31	—	0	7	1	13	—	0	2	2	4
Michigan	—	3	20	20	23	—	1	14	4	2	1	0	4	6	4
Ohio	4	4	15	53	52	—	0	9	5	5	1	1	5	13	9
Wisconsin	—	0	5	—	29	—	21	302	20	170	—	0	2	1	1
W.N. Central	—	2	9	9	22	1	1	11	3	5	—	1	45	2	19
Iowa	—	0	2	1	2	—	0	10	1	2	—	0	2	—	5
Kansas	—	0	2	1	2	—	0	1	1	2	—	0	2	1	3
Minnesota	—	0	8	—	6	—	0	0	—	—	—	0	45	—	3
Missouri	—	1	4	6	6	—	0	1	—	—	—	0	3	—	3
Nebraska†	—	0	2	—	2	1	0	2	1	1	—	0	1	1	5
North Dakota	—	0	1	—	2	—	0	5	—	—	—	0	1	—	—
South Dakota	—	0	2	1	2	—	0	1	—	—	—	0	2	—	—
S. Atlantic	6	10	27	87	113	19	58	179	443	655	2	7	44	82	111
Delaware	1	0	3	2	3	2	10	33	114	168	—	0	1	—	1
District of Columbia	—	0	4	—	1	1	0	4	4	4	—	0	2	3	5
Florida	3	3	9	44	47	3	1	8	21	16	1	2	7	26	36
Georgia	—	1	4	3	15	—	0	2	1	2	—	1	7	12	16
Maryland†	1	2	6	14	25	4	21	106	168	298	1	1	24	16	17
North Carolina	—	1	7	10	8	—	0	9	10	42	—	0	13	8	20
South Carolina†	—	0	2	3	2	—	0	3	1	13	—	0	1	—	1
Virginia†	1	1	9	11	10	9	18	82	124	102	—	1	5	17	15
West Virginia	—	0	3	—	2	—	0	29	—	10	—	0	1	—	—
E.S. Central	—	2	10	19	24	—	0	4	6	10	—	0	3	5	5
Alabama†	—	0	2	4	3	—	0	2	3	—	—	0	1	1	1
Kentucky	—	0	4	5	8	—	0	1	—	1	—	0	1	2	2
Mississippi	—	0	3	2	2	—	0	0	—	—	—	0	2	1	—
Tennessee†	—	1	6	8	11	—	0	4	3	9	—	0	2	1	2
W.S. Central	1	3	11	19	23	—	2	29	6	20	—	1	18	12	20
Arkansas†	—	0	2	—	1	—	0	0	—	—	—	0	1	—	1
Louisiana	—	0	3	6	1	—	0	1	—	—	—	0	1	—	1
Oklahoma	—	0	3	1	—	—	0	0	—	—	—	0	1	2	2
Texas†	1	2	11	12	21	—	2	29	6	20	—	1	17	10	16
Mountain	2	3	10	24	47	—	0	3	2	3	1	1	4	13	17
Arizona	—	1	7	8	12	—	0	1	1	—	—	0	3	4	6
Colorado	—	0	2	2	11	—	0	1	—	—	1	0	3	4	6
Idaho†	—	0	1	1	—	—	0	2	—	1	—	0	1	—	—
Montana†	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Nevada†	2	0	2	6	10	—	0	1	—	—	—	0	2	3	2
New Mexico†	—	0	2	2	2	—	0	2	1	1	—	0	1	2	—
Utah	—	0	2	4	9	—	0	1	—	1	—	0	0	—	3
Wyoming†	—	0	2	1	2	—	0	0	—	—	—	0	0	—	—
Pacific	1	5	15	103	85	3	3	11	45	48	—	4	10	40	29
Alaska	—	0	2	—	—	—	0	1	—	1	—	0	2	2	1
California	1	4	14	92	76	2	2	8	30	28	—	2	9	30	21
Hawaii	—	0	1	1	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	3	2	2	1	0	3	15	19	—	0	3	3	2
Washington	—	0	5	8	7	—	0	3	—	—	—	0	5	5	5
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	0	1	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	8	14	39	254	295	2	13	220	95	1,142	111	544	2,195	3,824	3,696
New England	2	0	3	14	4	—	0	2	1	15	—	10	24	105	80
Connecticut	—	0	1	1	—	—	0	1	—	10	—	1	8	—	11
Maine [§]	—	0	1	3	—	—	0	1	—	1	—	1	8	41	5
Massachusetts	1	0	2	9	2	—	0	2	1	4	—	5	13	48	55
New Hampshire	—	0	0	—	—	—	0	1	—	—	—	0	3	12	3
Rhode Island [§]	—	0	1	—	—	—	0	0	—	—	—	0	7	3	3
Vermont [§]	1	0	1	1	2	—	0	0	—	—	—	0	4	1	3
Mid. Atlantic	—	1	5	26	28	—	4	209	10	1,011	12	38	122	388	192
New Jersey	—	0	1	—	9	—	1	11	5	244	—	2	9	11	36
New York (Upstate)	—	0	4	7	4	—	0	11	1	599	7	12	85	131	64
New York City	—	0	3	11	7	—	0	201	4	156	—	0	12	7	3
Pennsylvania	—	0	2	8	8	—	0	16	—	12	5	20	70	239	89
E.N. Central	—	2	6	32	55	1	1	7	21	32	21	114	194	968	913
Illinois	—	0	3	10	8	—	1	2	10	6	—	22	52	147	137
Indiana	—	0	2	4	14	—	0	1	—	2	—	12	26	68	115
Michigan	—	0	4	3	6	—	0	1	3	11	10	31	57	327	246
Ohio	—	1	2	11	12	1	0	5	8	5	10	34	80	323	316
Wisconsin	—	0	2	4	15	—	0	2	—	8	1	12	24	103	99
W.N. Central	1	1	5	18	16	—	0	14	12	27	1	36	416	213	274
Iowa	—	0	1	4	5	—	0	7	1	6	—	11	34	46	79
Kansas	—	0	2	1	1	—	0	1	3	1	—	2	9	23	42
Minnesota	—	0	0	—	—	—	0	4	—	3	—	0	408	—	—
Missouri	1	0	4	8	8	—	0	3	6	5	1	7	44	98	117
Nebraska [§]	—	0	2	3	2	—	0	10	1	12	—	4	13	31	21
North Dakota	—	0	1	1	—	—	0	1	1	—	—	0	30	13	—
South Dakota	—	0	1	1	—	—	0	1	—	—	—	0	2	2	15
S. Atlantic	1	2	6	42	61	—	0	4	4	26	5	38	103	409	400
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	4	6	—
District of Columbia	—	0	0	—	—	—	0	0	—	2	—	0	2	1	2
Florida	1	1	3	16	30	—	0	2	2	5	2	6	28	93	57
Georgia	—	0	2	2	4	—	0	2	1	—	—	5	13	61	59
Maryland [§]	—	0	1	3	2	—	0	1	—	6	1	2	6	30	44
North Carolina	—	0	3	8	8	—	0	2	—	3	2	3	35	86	127
South Carolina [§]	—	0	1	4	5	—	0	1	—	3	—	6	25	43	66
Virginia [§]	—	0	2	8	11	—	0	2	1	5	—	7	39	89	38
West Virginia	—	0	1	—	1	—	0	0	—	2	—	0	41	—	7
E.S. Central	—	1	3	11	14	—	0	2	3	3	1	13	35	115	256
Alabama [§]	—	0	1	6	3	—	0	2	1	1	—	4	8	33	65
Kentucky	—	0	2	—	6	—	0	1	—	—	—	4	16	39	97
Mississippi	—	0	1	2	2	—	0	1	2	—	—	1	8	5	19
Tennessee [§]	—	0	2	3	3	—	0	1	—	2	1	3	11	38	75
W.S. Central	1	1	12	24	37	—	2	15	36	19	9	53	283	270	878
Arkansas [§]	—	0	1	6	4	—	0	1	—	1	1	2	17	16	47
Louisiana	—	0	1	5	9	—	0	2	—	2	—	1	3	4	11
Oklahoma	1	0	2	4	12	—	0	1	1	—	—	1	92	17	3
Texas [§]	—	1	10	9	12	—	2	14	35	16	8	45	177	233	817
Mountain	—	1	6	22	21	—	0	4	1	4	18	41	99	656	328
Arizona	—	0	2	8	6	—	0	1	—	1	—	12	29	229	130
Colorado	—	0	4	1	5	—	0	1	—	3	17	12	63	253	37
Idaho [§]	—	0	1	3	2	—	0	1	—	—	—	3	15	30	44
Montana [§]	—	0	2	2	1	—	0	0	—	—	—	2	16	46	5
Nevada [§]	—	0	1	2	4	—	0	1	—	—	—	0	7	8	1
New Mexico [§]	—	0	1	1	2	—	0	2	1	—	1	2	11	40	31
Utah	—	0	1	5	1	—	0	1	—	—	—	6	16	48	79
Wyoming [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	2	1
Pacific	3	3	15	65	59	1	0	18	7	5	44	150	1,101	700	375
Alaska	—	0	1	—	—	—	0	1	1	1	—	0	6	14	7
California	2	2	10	44	44	1	0	18	1	—	37	130	959	522	235
Hawaii	—	0	1	2	1	—	0	1	2	1	—	1	6	9	17
Oregon	—	1	3	14	10	—	0	1	3	1	1	5	12	62	79
Washington	1	0	4	5	4	—	0	2	—	2	6	10	132	93	37
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	14	7	—	0	14	31	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Rabies, animal				Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]					
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	24	54	148	475	961	309	942	1,780	7,067	9,027	43	92	243	792	793
New England	2	4	18	26	68	7	33	110	374	874	1	2	13	21	87
Connecticut	—	2	11	—	26	—	0	88	88	490	—	0	9	9	60
Maine [§]	2	1	3	12	19	3	3	8	36	21	—	0	3	1	1
Massachusetts	—	0	0	—	—	3	22	52	204	274	1	1	9	5	16
New Hampshire	—	0	6	4	4	—	3	12	24	43	—	0	2	6	9
Rhode Island [§]	—	0	4	2	3	—	2	18	10	34	—	0	1	—	—
Vermont [§]	—	1	3	8	16	1	1	5	12	12	—	0	2	—	1
Mid. Atlantic	7	17	33	72	320	36	95	218	737	1,060	4	9	32	86	86
New Jersey	—	0	0	—	—	—	14	57	58	190	—	1	9	11	21
New York (Upstate)	7	8	19	72	132	23	26	63	210	221	4	4	12	31	24
New York City	—	0	4	—	88	—	23	56	186	271	—	1	7	12	10
Pennsylvania	—	6	17	—	100	13	30	81	283	378	—	3	13	32	31
E.N. Central	1	2	27	13	14	30	91	253	751	1,107	—	13	44	97	156
Illinois	—	1	11	4	6	—	35	124	225	369	—	2	9	9	26
Indiana	—	0	0	—	—	—	13	62	58	138	—	2	10	17	14
Michigan	1	1	5	5	5	8	15	49	140	198	—	3	11	24	51
Ohio	—	0	12	4	3	22	24	47	248	279	—	2	11	29	22
Wisconsin	—	0	0	—	—	—	10	48	80	123	—	3	17	18	43
W.N. Central	1	3	36	20	63	20	39	97	390	390	1	11	32	72	71
Iowa	—	0	3	—	4	—	10	34	96	72	—	2	16	18	20
Kansas	—	1	4	10	22	—	7	18	61	81	—	1	5	14	9
Minnesota	—	0	34	—	11	—	0	0	—	—	—	0	0	—	—
Missouri	—	0	6	—	8	18	14	44	178	147	—	4	27	26	25
Nebraska [§]	1	1	4	6	15	2	4	13	37	45	1	1	6	13	11
North Dakota	—	0	3	4	3	—	0	13	—	8	—	0	10	—	—
South Dakota	—	0	0	—	—	—	2	17	18	37	—	0	4	1	6
S. Atlantic	7	20	38	246	380	104	262	619	2,027	2,344	11	16	31	223	133
Delaware	—	0	0	—	—	—	3	11	26	24	—	0	2	3	1
District of Columbia	—	0	0	—	—	—	1	6	7	23	—	0	1	1	2
Florida	—	0	24	35	121	77	108	226	866	1,015	7	5	15	107	50
Georgia	—	0	0	—	—	—	43	142	349	294	—	2	7	19	18
Maryland [§]	7	6	15	78	106	9	18	57	156	193	3	2	9	26	18
North Carolina	—	0	0	—	—	8	24	240	289	455	—	2	10	29	11
South Carolina [§]	—	0	0	—	—	—	25	99	135	141	—	0	4	7	4
Virginia [§]	—	12	25	133	133	9	21	68	181	143	1	3	9	30	27
West Virginia	—	0	7	—	20	1	1	14	18	56	—	0	4	1	2
E.S. Central	—	3	7	43	47	9	55	177	454	446	1	5	22	47	39
Alabama [§]	—	1	7	27	11	1	20	52	132	144	—	1	4	10	11
Kentucky	—	0	4	3	2	1	11	32	87	85	—	1	6	7	4
Mississippi	—	0	1	—	—	—	18	67	92	79	—	0	12	3	4
Tennessee [§]	—	1	4	13	34	7	17	53	143	138	1	2	7	27	20
W.S. Central	6	0	30	37	10	21	140	505	728	879	3	8	134	53	36
Arkansas [§]	6	0	10	27	6	5	13	43	99	61	1	1	5	7	5
Louisiana	—	0	0	—	—	—	19	49	103	207	—	0	2	3	4
Oklahoma	—	0	30	10	4	9	12	95	85	69	—	1	40	7	1
Texas [§]	—	0	0	—	—	7	95	381	441	542	2	5	94	36	26
Mountain	—	1	7	5	15	18	52	113	505	641	13	11	33	87	103
Arizona	—	0	0	—	—	2	16	43	164	209	—	1	14	23	20
Colorado	—	0	0	—	—	7	10	24	123	151	3	3	21	9	30
Idaho [§]	—	0	2	—	1	1	3	9	46	38	4	2	7	16	11
Montana [§]	—	0	3	2	—	—	1	6	19	25	—	0	3	2	11
Nevada [§]	—	0	2	—	—	3	5	22	43	40	4	0	5	11	5
New Mexico [§]	—	0	2	3	4	—	5	19	44	71	1	1	6	10	10
Utah	—	0	2	—	—	—	5	17	48	90	—	2	8	14	13
Wyoming [§]	—	0	4	—	10	5	1	8	18	17	1	0	3	2	3
Pacific	—	1	13	13	44	64	117	291	1,101	1,286	9	12	52	106	82
Alaska	—	0	2	9	10	—	1	4	20	22	—	0	1	—	1
California	—	0	12	—	30	50	79	217	823	903	7	6	32	75	49
Hawaii	—	0	0	—	—	5	6	14	77	83	—	0	3	1	14
Oregon	—	0	2	4	4	1	8	48	80	186	—	2	11	14	9
Washington	—	0	0	—	—	8	15	71	101	92	2	2	18	16	9
Territories															
American Samoa	N	0	0	N	N	—	0	1	—	1	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	—	—	0	0	—	—
Puerto Rico	—	0	3	7	19	—	6	21	15	159	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Confirmed					Probable				
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
United States	119	274	627	2,309	3,916	1	2	10	17	13	2	28	196	78	122
New England	—	4	17	56	136	—	0	0	—	—	—	0	1	1	1
Connecticut	—	0	8	8	69	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	3	5	3	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	3	16	42	56	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	—	3	—	0	0	—	—	—	0	1	—	—
Rhode Island [§]	—	0	4	—	4	—	0	0	—	—	—	0	1	1	—
Vermont [§]	—	0	1	1	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	3	22	70	146	547	—	0	1	1	—	1	1	4	4	8
New Jersey	—	4	16	20	93	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	3	15	33	46	—	0	1	—	—	1	0	3	1	1
New York City	—	5	14	63	101	—	0	1	—	—	—	0	4	2	7
Pennsylvania	3	8	55	30	307	—	0	1	1	—	—	0	3	1	—
E.N. Central	3	21	45	148	779	—	0	1	—	—	—	1	10	4	6
Illinois	—	7	20	45	526	—	0	1	—	—	—	0	5	1	2
Indiana [§]	—	1	4	15	16	—	0	1	—	—	—	0	5	—	4
Michigan	1	5	10	35	64	—	0	0	—	—	—	0	1	1	—
Ohio	2	5	18	53	74	—	0	0	—	—	—	0	2	2	—
Wisconsin	—	1	21	—	99	—	0	0	—	—	—	0	1	—	—
W.N. Central	—	17	81	100	820	1	0	4	3	—	—	4	21	12	14
Iowa	—	1	4	5	15	—	0	0	—	—	—	0	1	1	—
Kansas [§]	—	4	13	21	62	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Missouri	—	11	66	70	734	1	0	4	3	—	—	4	20	11	14
Nebraska [§]	—	1	10	3	6	—	0	1	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	1	3	—	0	0	—	—	—	0	0	—	—
S. Atlantic	66	59	122	828	511	—	1	7	7	9	—	6	60	23	69
Delaware [§]	—	0	2	—	28	—	0	0	—	1	—	0	3	2	5
District of Columbia	—	0	3	6	8	—	0	1	1	—	—	0	0	—	—
Florida [§]	64	29	55	579	180	—	0	1	1	—	—	0	2	1	1
Georgia	—	16	27	117	174	—	0	6	2	4	—	0	0	—	—
Maryland [§]	1	2	8	26	30	—	0	1	1	1	—	0	5	1	7
North Carolina	—	3	36	63	42	—	0	3	1	3	—	2	48	12	51
South Carolina [§]	—	1	5	11	25	—	0	1	1	—	—	0	2	1	2
Virginia [§]	1	2	8	24	23	—	0	2	—	—	—	2	12	6	3
West Virginia	—	0	66	2	1	—	0	0	—	—	—	0	0	—	—
E.S. Central	7	14	40	128	149	—	0	3	—	2	1	5	29	15	15
Alabama [§]	—	5	14	48	21	—	0	1	—	—	—	1	8	7	3
Kentucky	7	2	28	21	48	—	0	2	—	1	—	0	0	—	—
Mississippi	—	1	6	23	11	—	0	0	—	—	—	0	3	—	—
Tennessee [§]	—	4	14	36	69	—	0	2	—	1	1	4	20	8	12
W.S. Central	23	54	387	409	551	—	0	7	—	1	—	2	186	3	8
Arkansas [§]	—	2	6	11	13	—	0	2	—	—	—	1	29	1	3
Louisiana	—	5	13	34	58	—	0	0	—	—	—	0	1	—	—
Oklahoma	2	3	46	29	84	—	0	4	—	—	—	0	152	1	1
Texas [§]	21	44	337	335	396	—	0	1	—	1	—	0	5	1	4
Mountain	4	16	32	209	167	—	0	5	6	—	—	0	7	16	1
Arizona	—	7	19	47	92	—	0	4	6	—	—	0	7	16	—
Colorado [§]	2	2	8	29	20	—	0	1	—	—	—	0	1	—	—
Idaho [§]	1	0	3	7	4	—	0	0	—	—	—	0	1	—	—
Montana [§]	—	0	15	74	4	—	0	1	—	—	—	0	1	—	—
Nevada [§]	—	0	6	6	9	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	1	3	10	37	29	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	9	9	—	0	0	—	—	—	0	1	—	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	13	22	73	285	256	—	0	2	—	1	—	0	1	—	—
Alaska	—	0	1	1	—	N	0	0	N	N	N	0	0	N	N
California	11	19	58	221	207	—	0	2	—	1	—	0	0	—	—
Hawaii	—	1	4	22	16	N	0	0	N	N	N	0	0	N	N
Oregon	1	1	4	22	22	—	0	0	—	—	—	0	1	—	—
Washington	1	2	17	19	11	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	—	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	1	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] invasive disease										Syphilis, primary and secondary					
	All ages					Age <5					Current week		Previous 52 weeks		Cum 2011	Cum 2010
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
		Med	Max				Med	Max				Med			Max	
United States	153	296	890	5,377	6,409	18	32	106	471	950	32	252	353	3,065	3,890	
New England	4	8	68	91	184	1	1	4	11	33	2	9	20	112	127	
Connecticut	—	0	46	—	—	—	0	3	—	—	—	1	8	13	22	
Maine [§]	—	2	13	45	52	—	0	1	2	4	—	0	3	5	11	
Massachusetts	—	1	5	14	38	—	0	3	6	25	2	5	15	72	81	
New Hampshire	—	0	7	—	54	—	0	0	—	3	—	0	2	9	5	
Rhode Island [§]	—	1	36	8	5	—	0	3	—	—	—	0	4	9	6	
Vermont [§]	4	1	5	24	35	1	0	1	3	1	—	0	2	4	2	
Mid. Atlantic	11	31	60	568	468	4	5	19	67	125	11	30	46	324	540	
New Jersey	—	1	8	26	44	—	1	5	16	21	3	4	10	49	75	
New York (Upstate)	1	2	11	30	64	1	1	9	18	48	5	2	18	56	26	
New York City	—	14	33	262	163	—	1	14	9	31	—	13	29	117	317	
Pennsylvania	10	12	24	250	197	3	1	5	24	25	3	7	16	102	122	
E.N. Central	36	61	105	1,172	1,316	3	5	12	83	170	1	29	53	262	594	
Illinois	—	1	6	25	48	—	1	4	25	42	—	12	25	48	297	
Indiana	—	10	28	199	298	—	0	4	7	27	—	3	14	38	50	
Michigan	7	13	29	249	299	—	1	4	13	42	—	4	9	56	89	
Ohio	26	25	45	535	527	3	2	5	31	41	1	10	22	109	140	
Wisconsin	3	7	21	164	144	—	0	4	7	18	—	1	3	11	18	
W.N. Central	3	8	25	159	178	—	1	5	26	39	—	7	18	93	90	
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	3	4	
Kansas	—	2	6	32	49	—	0	2	2	8	—	0	3	5	7	
Minnesota	—	0	0	—	—	—	0	0	—	—	—	3	10	38	20	
Missouri	1	3	10	76	50	—	1	4	21	19	—	2	9	45	56	
Nebraska [§]	2	2	9	51	57	—	0	1	3	8	—	0	2	2	3	
North Dakota	—	0	11	—	12	—	0	1	—	—	—	0	0	—	—	
South Dakota	—	0	2	—	10	—	0	2	—	4	—	0	1	—	—	
S. Atlantic	52	71	171	1,351	1,918	5	8	25	119	251	7	61	153	830	862	
Delaware	—	1	6	27	13	—	0	1	—	—	—	0	4	4	3	
District of Columbia	—	0	2	5	15	—	0	2	1	3	2	3	15	52	43	
Florida	40	26	68	676	726	4	3	13	60	95	—	23	44	305	318	
Georgia	—	16	53	161	637	—	2	7	15	74	—	12	108	99	138	
Maryland [§]	12	9	32	247	207	1	1	4	12	25	1	8	16	133	68	
North Carolina	—	0	0	—	—	—	0	0	—	—	—	6	19	106	158	
South Carolina [§]	—	8	25	216	252	—	1	4	12	25	—	3	10	63	43	
Virginia [§]	—	1	4	19	25	—	1	4	19	23	4	4	16	68	88	
West Virginia	—	0	14	—	43	—	0	6	—	6	—	0	2	—	3	
E.S. Central	6	24	45	470	581	1	2	7	32	56	1	15	39	153	263	
Alabama [§]	—	0	0	—	—	—	0	0	—	—	—	4	11	29	82	
Kentucky	1	4	11	67	70	1	0	3	10	4	—	2	12	30	25	
Mississippi	—	1	8	4	31	—	0	2	—	6	—	3	16	31	62	
Tennessee [§]	5	20	36	399	480	—	1	6	22	46	1	5	11	63	94	
W.S. Central	13	31	366	641	761	2	4	38	67	131	4	37	71	439	580	
Arkansas [§]	2	4	23	104	65	—	0	3	10	9	3	3	10	48	76	
Louisiana	—	2	10	86	49	—	0	2	6	16	—	8	36	62	112	
Oklahoma	1	0	8	14	28	1	0	8	14	28	1	1	6	14	25	
Texas [§]	10	25	333	437	619	1	3	27	37	78	—	23	33	315	367	
Mountain	23	33	75	794	880	2	3	8	59	127	3	12	24	110	153	
Arizona	5	11	39	368	432	1	1	5	27	57	—	4	9	7	62	
Colorado	15	10	23	188	218	1	1	3	9	32	1	3	8	35	40	
Idaho [§]	—	0	2	4	6	—	0	2	3	2	—	0	2	3	2	
Montana [§]	—	0	2	4	7	—	0	1	—	—	—	0	2	1	—	
Nevada [§]	2	2	8	49	34	—	0	1	3	4	2	2	9	41	25	
New Mexico [§]	1	3	13	109	78	—	0	2	7	12	—	1	4	18	8	
Utah	—	4	8	61	97	—	0	3	10	18	—	1	5	5	16	
Wyoming [§]	—	0	15	11	8	—	0	1	—	2	—	0	0	—	—	
Pacific	5	6	24	131	123	—	0	5	7	18	3	50	66	742	681	
Alaska	—	2	11	49	54	—	0	2	3	14	—	0	1	—	2	
California	5	3	23	81	69	—	0	5	4	4	1	41	57	589	577	
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	3	13	
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	7	28	19	
Washington	—	0	0	—	—	—	0	0	—	—	2	6	14	122	70	
Territories																
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	4	15	65	54	
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	

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[†] Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).

[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 23, 2011, and April 24, 2010 (16th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Neuroinvasive				Nonneuroinvasive [§]					
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
United States	124	242	573	3,427	5,604	—	1	71	—	1	—	0	53	—	3
New England	—	18	46	227	345	—	0	3	—	—	—	0	2	—	—
Connecticut	—	4	20	—	82	—	0	2	—	—	—	0	2	—	—
Maine [¶]	—	5	16	75	84	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	5	17	103	91	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	2	9	9	49	—	0	1	—	—	—	0	0	—	—
Rhode Island [¶]	—	0	4	6	8	—	0	0	—	—	—	0	0	—	—
Vermont [¶]	—	2	13	34	31	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	19	25	62	382	589	—	0	19	—	—	—	0	13	—	—
New Jersey	—	6	23	91	212	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	—	—	0	7	—	—
New York City	—	0	0	—	1	—	0	7	—	—	—	0	4	—	—
Pennsylvania	19	19	41	291	376	—	0	3	—	—	—	0	3	—	—
E.N. Central	35	71	154	1,106	2,024	—	0	15	—	—	—	0	7	—	—
Illinois	5	18	43	262	530	—	0	10	—	—	—	0	4	—	—
Indiana [¶]	12	5	24	96	202	—	0	2	—	—	—	0	2	—	—
Michigan	8	25	53	351	658	—	0	6	—	—	—	0	1	—	—
Ohio	10	21	58	396	502	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	5	20	1	132	—	0	0	—	—	—	0	1	—	—
W.N. Central	—	11	31	69	310	—	0	7	—	—	—	0	11	—	1
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas [¶]	—	2	18	45	143	—	0	1	—	—	—	0	3	—	1
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	3	—	—
Missouri	—	7	23	10	138	—	0	1	—	—	—	0	0	—	—
Nebraska [¶]	N	0	0	N	N	—	0	3	—	—	—	0	7	—	—
North Dakota	—	0	10	11	20	—	0	2	—	—	—	0	2	—	—
South Dakota	—	1	7	3	9	—	0	2	—	—	—	0	3	—	—
S. Atlantic	38	33	100	495	702	—	0	6	—	—	—	0	4	—	2
Delaware [¶]	—	0	3	3	6	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	5	6	—	0	1	—	—	—	0	1	—	—
Florida [¶]	34	15	57	350	361	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	2
Maryland [¶]	N	0	0	N	N	—	0	3	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina [¶]	—	0	13	—	58	—	0	1	—	—	—	0	0	—	—
Virginia [¶]	4	10	29	137	140	—	0	1	—	—	—	0	1	—	—
West Virginia	—	5	26	—	131	—	0	0	—	—	—	0	0	—	—
E.S. Central	1	5	22	101	86	—	0	1	—	1	—	0	3	—	—
Alabama [¶]	1	5	22	96	85	—	0	1	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	2	5	1	—	0	1	—	1	—	0	2	—	—
Tennessee [¶]	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	25	39	258	672	1,054	—	0	16	—	—	—	0	3	—	—
Arkansas [¶]	1	2	17	64	88	—	0	3	—	—	—	0	1	—	—
Louisiana	—	1	4	13	24	—	0	3	—	—	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas [¶]	24	37	247	595	942	—	0	15	—	—	—	0	2	—	—
Mountain	1	17	50	303	467	—	0	18	—	—	—	0	15	—	—
Arizona	—	0	0	—	—	—	0	13	—	—	—	0	9	—	—
Colorado [¶]	—	6	31	111	162	—	0	5	—	—	—	0	11	—	—
Idaho [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana [¶]	—	3	28	82	82	—	0	0	—	—	—	0	0	—	—
Nevada [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
New Mexico [¶]	1	1	8	13	39	—	0	6	—	—	—	0	2	—	—
Utah	—	4	26	92	179	—	0	1	—	—	—	0	1	—	—
Wyoming [¶]	—	0	3	5	5	—	0	1	—	—	—	0	1	—	—
Pacific	5	2	20	72	27	—	0	8	—	—	—	0	6	—	—
Alaska	—	1	5	22	13	—	0	0	—	—	—	0	0	—	—
California	3	0	17	35	2	—	0	8	—	—	—	0	6	—	—
Hawaii	2	1	4	15	12	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	4	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	8	30	49	141	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/ndss/phs/infdss.htm.

¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

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TABLE III. Deaths in 122 U.S. cities,* week ending April 23, 2011 (16th week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
New England	529	369	120	18	12	10	54	S. Atlantic	1,136	729	284	77	28	18	83
Boston, MA	137	77	48	5	3	4	10	Atlanta, GA	132	77	39	9	5	2	3
Bridgeport, CT	29	23	5	1	—	—	5	Baltimore, MD	148	90	40	10	6	2	15
Cambridge, MA	17	15	2	—	—	—	3	Charlotte, NC	79	58	16	5	—	—	9
Fall River, MA	20	17	1	2	—	—	2	Jacksonville, FL	165	104	40	15	3	3	14
Hartford, CT	51	34	11	3	3	—	6	Miami, FL	73	50	16	7	—	—	5
Lowell, MA	27	23	4	—	—	—	1	Norfolk, VA	40	32	7	—	1	—	—
Lynn, MA	5	3	2	—	—	—	—	Richmond, VA	60	38	14	5	1	2	7
New Bedford, MA	34	25	8	1	—	—	—	Savannah, GA	67	46	14	4	2	1	4
New Haven, CT	34	24	4	2	4	—	5	St. Petersburg, FL	55	28	19	2	3	3	5
Providence, RI	49	36	10	—	—	3	4	Tampa, FL	178	122	37	12	4	3	9
Somerville, MA	5	3	2	—	—	—	1	Washington, D.C.	128	80	35	8	3	2	12
Springfield, MA	41	33	4	2	2	—	3	Wilmington, DE	11	4	7	—	—	—	—
Waterbury, CT	21	16	5	—	—	—	5	E.S. Central	798	515	194	58	20	11	80
Worcester, MA	59	40	14	2	—	3	9	Birmingham, AL	161	111	33	13	3	1	21
Mid. Atlantic	1,821	1,237	430	99	29	26	99	Chattanooga, TN	76	50	16	7	2	1	2
Albany, NY	39	28	10	1	—	—	1	Knoxville, TN	78	56	16	5	1	—	12
Allentown, PA	28	24	3	—	—	1	1	Lexington, KY	67	45	16	4	1	1	7
Buffalo, NY	84	53	21	9	—	1	8	Memphis, TN	137	82	34	12	6	3	13
Camden, NJ	23	13	7	2	—	1	2	Mobile, AL	115	72	36	4	3	—	10
Elizabeth, NJ	7	6	1	—	—	—	1	Montgomery, AL	13	7	2	4	—	—	2
Erie, PA	58	47	9	1	—	1	3	Nashville, TN	151	92	41	9	4	5	13
Jersey City, NJ	16	8	8	—	—	—	1	W.S. Central	1,253	831	265	95	34	27	101
New York City, NY	953	677	201	52	14	9	54	Austin, TX	65	46	12	4	1	2	3
Newark, NJ	22	11	6	4	—	1	—	Baton Rouge, LA	56	40	10	5	—	1	—
Paterson, NJ	18	7	6	4	—	1	2	Corpus Christi, TX	69	47	19	3	—	—	6
Philadelphia, PA	282	151	92	23	9	7	9	Dallas, TX	199	105	61	18	8	7	9
Pittsburgh, PA§	33	24	6	—	2	1	—	El Paso, TX	78	51	18	5	1	3	8
Reading, PA	31	25	5	—	1	—	4	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	72	41	27	—	2	2	5	Houston, TX	229	163	15	29	15	7	19
Schenectady, NY	15	12	3	—	—	—	2	Little Rock, AR	76	53	17	3	3	—	—
Scranton, PA	28	19	9	—	—	—	—	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	74	61	8	3	1	1	2	San Antonio, TX	280	191	62	15	6	5	25
Trenton, NJ	9	6	3	—	—	—	—	Shreveport, LA	25	18	4	2	—	1	5
Utica, NY	13	10	3	—	—	—	1	Tulsa, OK	176	117	47	11	—	1	26
Yonkers, NY	16	14	2	—	—	—	3	Mountain	901	612	198	53	19	19	73
E.N. Central	2,003	1,337	466	93	43	33	166	Albuquerque, NM	154	102	36	13	2	1	18
Akron, OH	57	35	16	1	1	4	6	Boise, ID	69	44	20	4	1	—	4
Canton, OH	35	26	9	—	—	—	—	Colorado Springs, CO	65	47	12	3	—	3	2
Chicago, IL	248	152	73	13	10	—	20	Denver, CO	92	60	16	9	1	6	8
Cincinnati, OH	84	55	25	2	—	2	13	Las Vegas, NV	310	211	68	18	10	3	25
Cleveland, OH	206	157	41	5	3	—	16	Ogden, UT	44	31	11	2	—	—	3
Columbus, OH	270	176	61	19	6	8	26	Phoenix, AZ	U	U	U	U	U	U	U
Dayton, OH	125	82	6	3	1	2	9	Pueblo, CO	41	32	8	—	1	—	3
Detroit, MI	164	88	49	18	7	2	8	Salt Lake City, UT	126	85	27	4	4	6	10
Evansville, IN	47	39	8	—	—	—	1	Tucson, AZ	U	U	U	U	U	U	U
Fort Wayne, IN	90	65	20	1	—	4	4	Pacific	1,707	1,168	386	94	34	25	166
Gary, IN	10	4	4	2	—	—	1	Berkeley, CA	13	11	2	—	—	—	2
Grand Rapids, MI	65	45	10	3	3	4	8	Fresno, CA	107	67	26	8	4	2	10
Indianapolis, IN	179	108	53	12	4	2	12	Glendale, CA	25	17	8	—	—	—	9
Lansing, MI	52	37	12	1	—	2	3	Honolulu, HI	65	51	9	2	1	2	8
Milwaukee, WI	69	41	22	3	2	1	7	Long Beach, CA	70	48	14	4	2	2	10
Peoria, IL	35	26	8	1	—	—	2	Los Angeles, CA	246	159	55	22	5	5	27
Rockford, IL	53	41	8	1	3	—	3	Pasadena, CA	22	18	3	1	—	—	2
South Bend, IN	58	51	6	—	1	—	6	Portland, OR	122	73	38	10	1	—	9
Toledo, OH	101	70	21	6	2	2	10	Sacramento, CA	229	163	48	12	5	1	26
Youngstown, OH	55	39	14	2	—	—	11	San Diego, CA	161	108	39	10	4	—	8
W.N. Central	595	411	127	30	8	19	35	San Francisco, CA	114	84	23	4	1	2	13
Des Moines, IA	72	48	17	5	1	1	4	San Jose, CA	204	153	39	6	2	4	17
Duluth, MN	40	34	5	1	—	—	7	Santa Cruz, CA	27	20	4	1	2	—	1
Kansas City, KS	32	21	5	6	—	—	2	Seattle, WA	118	67	34	9	4	4	4
Kansas City, MO	93	66	18	3	—	6	6	Spokane, WA	65	47	16	—	—	2	9
Lincoln, NE	33	27	3	2	—	1	—	Tacoma, WA	119	82	28	5	3	1	11
Minneapolis, MN	60	39	12	3	2	4	5	Total¶	10,743	7,209	2,470	617	227	188	857
Omaha, NE	97	67	23	2	3	2	4								
St. Louis, MO	43	24	13	3	1	2	1								
St. Paul, MN	51	33	12	3	—	3	3								
Wichita, KS	74	52	19	2	1	—	3								

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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