

Weekly

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Workers' Memorial Day — April 28, 2007

Workers' Memorial Day, April 28, was established to recognize workers who died or were injured on the job. On average, nearly 16 workers in the United States die each day from injuries sustained at work (1), and 134 die from work-related diseases (2). Daily, an estimated 11,500 private-sector workers have a nonfatal work-related injury or illness, and as a result, more than half require a job transfer, work restrictions, or time away from their jobs (3). Approximately 9,000 workers are treated in emergency departments each day because of occupational injuries, and approximately 200 of these workers are hospitalized (4). In 2004, workers' compensation costs for employers totaled \$87 billion (5).

Workers' Memorial Day 2007 also will commemorate the thirty-sixth anniversary of the creation of the National Institute for Occupational Safety and Health in the U.S. Department of Health and Human Services and the Occupational Safety and Health Administration in the U.S. Department of Labor. Additional information on workplace safety and health is available online at http:// www.cdc.gov/niosh/homepage.html or by telephone, 800-356-4674.

References

- Bureau of Labor Statistics. National census of fatal occupational injuries in 2005. Washington, DC: US Department of Labor; 2006. Available at http://www.bls.gov/news.release/pdf/cfoi.pdf.
 Steenland K, Burnett C, Lalich N, Ward E, Hurrell J. Dying for
- Steenland K, Burnett C, Lalich 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. Bureau of Labor Statistics. Workplace injuries and illnesses in 2005. Washington, DC: US Department of Labor; 2006. Available at http://www.bls.gov/news.release/pdf/osh.pdf.
- 4. CDC. Nonfatal occupational injuries and illnesses—United States, 2004. MMWR 2007;56:393–7.
- Sengupta I, Reno V, Burton JF Jr. Workers' compensation: benefits, coverage, and costs, 2004. Washington, DC: National Academy of Social Insurance; 2006. Available at http://www.nasi.org/ usr_doc/NASI_workers_comp_2004.pdf.

Fixed Obstructive Lung Disease Among Workers in the Flavor-Manufacturing Industry — California, 2004–2007

Bronchiolitis obliterans, a rare and life-threatening form of fixed obstructive lung disease, is known to be caused by exposure to noxious gases in occupational settings and has been described in workers in the microwave-popcorn industry who were exposed to artificial butter-flavoring chemicals, including diacetyl (1,2). In August 2004, the California Department of Health Services (CDHS) and Division of Occupational Safety and Health (Cal/OSHA) received the first report of a bronchiolitis obliterans diagnosis in a flavormanufacturing worker in California. In April 2006, a second report was received of a case in a flavor-manufacturing worker from another company. Neither worker was employed in the microwave-popcorn industry; both were workers in the flavormanufacturing industry, which produces artificial butter flavoring and other flavors such as cherry, almond, praline, jalapeno, and orange. Both workers had handled pure diacetyl, an ingredient in artificial butter and other flavorings, and additional chemicals involved in the manufacturing process. Studies have indicated that exposure to diacetyl causes severe respiratory epithelial injury in animals (3-5). Because the manufacture of flavorings involves more than 2,000 chemicals, workers in the general flavor-manufacturing industry are

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exposed to more chemicals than workers in the microwavepopcorn industry, which primarily uses butter flavorings. Food flavorings are designated "generally recognized as safe" when approved by the U.S. Food and Drug Administration (6); flavorings are not known to put consumers at risk for lung disease. This report describes the first two cases of bronchiolitis obliterans in flavor-manufacturing workers in California, the findings of the public health investigation, and the actions taken by state and federal agencies to prevent future cases of occupational bronchiolitis obliterans. To identify cases and reduce risk for lung disease from occupational exposure to flavorings, a timely, effective response is needed, including medical surveillance, exposure monitoring, and reduced exposure.

Case Reports

Case 1. In September 2003, a man aged 29 years with no history of smoking, lung disease, or respiratory symptoms developed progressive shortness of breath on exertion, decreased exercise tolerance, intermittent wheezing, left-sided chest pain, and a productive cough 2 years after beginning employment as a flavor compounder. His job involved measuring diacetyl and other ingredients to prepare batches of powder flavorings. The workplace did not have effective methods for controlling exposure to the flavoring chemicals, such as local exhaust ventilation or adequate use of respirators to reduce exposure to organic compounds and powders. The worker reported wearing a paper dust mask and occasionally a cartridge respirator for organic vapors. However, he never received a fit test for the respirator. He had a beard at the time, which precluded a proper fit, and he was not adequately protected from both volatile organic chemicals and particulates.

In November 2003, the man went to his primary-care physician and was treated with antibiotics and bronchodilators for suspected bronchitis and allergic rhinitis. In January 2004, he stopped working because of his respiratory symptoms. His shortness of breath became more severe, with dyspnea after walking 10–15 feet. A high-resolution computed tomography (HRCT) scan of his chest showed cylindrical bronchiectasis in the lower lobes, with scattered peribronchial ground-glass opacities. In April 2004, spirometry showed severe obstructive lung disease, with a forced expiratory volume in 1 second (FEV₁) of 28% of the predicted normal value, without bronchodilator response. Static lung volumes by body plethysmography were consistent with severe air trapping. Diffusing capacity was normal.

In October 2004, the patient was referred for an occupational pulmonary consultation. Paired inspiratory and expiratory HRCT scans showed central peribronchial thickening with central airway dilatation and subtle areas of mosaic attenuation scattered throughout the lungs, predominantly in the right lower lobe. The diagnosis of work-related bronchiolitis obliterans was made on the basis of history, fixed airway obstruction with normal diffusing capacity, and typical HRCT findings (7). Diacetyl is considered the cause of this patient's disease on the basis of its known toxic effects; however, exposure to other less well-characterized flavoring chemicals might also have contributed.

Case 2. During 2002, a nonsmoking woman aged 40 years, who had no history of lung disease or respiratory symptoms when she began working as a flavor compounder, experienced nasal congestion and cough after 5 years on the job, which involved mixing dry powders with diacetyl and other ingredients to make artificial butter flavoring. The workplace did not have exposure-control measures such as local exhaust ventilation, and employees did not use respirators appropriately. The worker reported wearing a paper dust mask that had not been fit tested and did not provide adequate protection from either volatile organic compounds or particulates. The woman was treated with antibiotics and antihistamines by her primary-care physician. She experienced progressively worsening shortness of breath on exertion, decreasing exercise tolerance, and a nonproductive cough. In November 2005, she visited a pulmonary specialist who suspected work-related asthma and treated her with bronchodilators and oral corticosteroids, producing minimal improvement. An HRCT of the chest showed several small areas of patchy ground-glass opacities throughout the lungs.

In December 2005, the patient stopped working because of her respiratory symptoms. Spirometry revealed severe obstructive lung disease, with an FEV₁ of 18% of the predicted normal value, without bronchodilator response. Static lung volumes by body plethysmography were consistent with severe air trapping. Diffusing capacity was normal. Left thoracotomy with wedge resection of the left lower lobe did not indicate bronchiolitis obliterans in this area of the lung. However, other findings of peribronchial inflammation, interstitial fibrosis, and non-caseating–type granulomas suggested an inflammatory process. The diagnosis of work-related bronchiolitis obliterans was made on the basis of history, fixed airway obstruction with normal diffusing capacity, and typical HRCT findings (7).

Public Health Investigation and Response

In response to the two case reports, Cal/OSHA conducted enforcement investigations of the two companies in August 2004 and April 2006, respectively. The companies were required to conduct spirometry screening and reduce employee exposure to diacetyl and other flavoring ingredients using engineering controls (e.g., effective ventilation, improved work practices such as covering containers and minimizing spills), and protective respiratory measures (e.g., appropriate use of respirators with particulate filters and cartridges for protection against organic vapors). In April 2006, Cal/OSHA and CDHS implemented a cooperative intervention program to encourage the state's entire flavor-manufacturing industry to implement the same measures. CDHS used marketing databases, information from the Flavor and Extract Manufacturers Association, and a telephone survey to locate 26 additional flavor manufacturers statewide; the total of 28 companies is thought to represent this entire industry in California. All of the newly identified companies voluntarily agreed to participate in the program, which requires that they conduct medical surveillance of exposed workers, assess and control exposure to chemicals, and accept agency supervision of these activities.

The companies are in various stages of establishing their medical programs; by March 1, 2007, CDHS had received spirometry results for 419 of approximately 750 employees in the 28 companies (including the two companies in which the first two cases occurred). The Cal/OSHA consultation service is conducting or monitoring worksite industrial hygiene assessments for the participating companies and is evaluating data on exposure to airborne diacetyl and other chemicals. Industrial hygienists from CDC's National Institute for Occupational Safety and Health (NIOSH) have assessed exposures and developed guidance on work practices and exposure-control technology for three companies.

Since April 2006, five additional flavor-manufacturing workers have been identified with severe fixed obstructive lung disease, for a total of seven workers associated with four flavor manufacturers in California. None of the seven had ever smoked; one had a history of childhood asthma. Six (86%) were men. The mean age at which they first sought medical attention for respiratory problems was 34 years (range: 27-44). Six of the seven workers were employed as flavoring compounders who handled diacetyl and other chemicals when mixing flavorings; three made powdered flavorings only, and three prepared both liquids and powders. The seventh worker was a production worker who packaged powder flavorings. These companies did not have local exhaust ventilation to control chemical exposures. Six workers wore paper dust masks that were not fit tested and did not provide protection from volatile organic chemicals and particulates.

Symptoms reported by the seven workers included cough, wheezing, or shortness of breath on exertion, with onset ranging from 1 month to 5 years after beginning work in flavor manufacturing. FEV₁ ranged from 17% to 44% of predicted normal value for age, height, race, and sex, and the ratio of FEV₁ to forced vital capacity ranged from 30% to 61%. None of the FEV₁ values improved after bronchodilator administration. Initial diagnoses for these employees included asthma, bronchitis, and bronchiectasis.

In May 2006, CDHS disseminated outreach materials, including a diacetyl hazard alert and description of sentinel cases, to flavor manufacturers, health-care providers, and worker organizations (available at http://www.dhs.ca.gov/ohb/ flavorings.htm). CDHS also obtained current material safety data sheets* from 11 diacetyl manufacturers or distributors and determined that five mentioned bronchiolitis obliterans, and none listed potential symptoms or recommended medical surveillance for the disease. In addition to the seven persons with identified bronchiolitis obliterans, 22 current workers with obstructive abnormalities detected by spirometry are being medically evaluated, and Cal/OSHA is assessing their occupational exposure to flavoring chemicals to minimize risk for disease.

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Editorial Note: The emergence of bronchiolitis obliterans in California flavor-manufacturing workers underscores the challenges faced by workers, employers, government agencies, and medical professionals in responding to newly identified work hazards. Bronchiolitis obliterans was first identified in flavor-manufacturing workers in 1985 (8), although the chemical etiology was not identified at that time. The hazards of diacetyl and butter flavoring were documented in published literature in 2002 (1,3). However, by 2006, many flavoring suppliers still had not addressed the risk for bronchiolitis obliterans in their material safety data sheets. During 2004, NIOSH and the Flavor and Extract Manufacturers Association disseminated information encouraging flavor manufactures to implement exposure controls and medical surveillance (9,10). These

measures were virtually nonexistent in California during 2006, when industrywide government intervention measures began. Before June 2006, only eight California flavor-manufacturing companies had begun medical screening.

Bronchiolitis obliterans and fixed obstructive lung disease in the workers described in this report were not recognized initially as work-related conditions even though they occurred in young, previously healthy persons who had never smoked and had no evident nonwork etiology. Frequently, workers with occupational lung disease have worsening respiratory symptoms at work or improvement of symptoms while on vacation. The lack of this work-related pattern of respiratory symptoms likely delayed identification of a work-related origin. Single, sporadic cases in workers of a rare disease such as bronchiolitis obliterans might not be diagnosed accurately by clinicians or might not be attributed to a work-related exposure; initial misdiagnoses might include asthma, bronchitis, emphysema, or bronchiectasis.

Safe occupational exposure levels for diacetyl and many other flavoring chemicals have not been established. Employers should implement measures to minimize exposure. Engineering controls, including local exhaust ventilation and closed transfer of chemicals, should be the primary control measures. Work practices such as covering containers and minimizing spills also will reduce exposures. Employers should establish a comprehensive respiratory protection program for organic vapors and particulates that adheres to the OSHA Respiratory Protection Standard (29 CFR 1910.134 available at http:// www.osha.gov). Consultation with an industrial hygienist or occupational safety and health professional might be necessary to implement appropriate respiratory protection program.[†]

A better understanding of work-related risk factors for bronchiolitis obliterans in the flavoring industry will facilitate establishing priorities for preventive interventions. Cal/OSHA and CDHS will aggregate data from the 28 companies to identify manufacturing processes and types and concentrations of flavoring chemicals associated with occupational lung disease.

Evaluation of interventions to prevent bronchiolitis obliterans rely on early detection of abnormal spirometry results or unusual decreases in repeated measurements. Beginning in January 2007, with assistance from NIOSH, CDHS performed quality checks of submitted screening spirometry results. Many results did not meet American Thoracic Society quality criteria (available at http://www.thoracic.org/sections/ publications/statements/pages/pfet/pft2.html).

^{*} Material safety data sheets provide workers and emergency personnel with procedures for handling various substances and include information such as physical properties, toxicity, health effects from exposure, and spill or leak procedures. OSHA's Hazard Communication Standard requires persons who sell chemicals to provide material safety data sheets to inform their customers of hazards and safe-use practices.

[†] Information on respirators and selection of respirators is available at http:// www.cdc.gov/niosh/npptl/topics/respirators and http://www.cdc.gov/niosh/ docs/2005-100/default.html.

Flavor manufacturers and flavored-food producers are widely distributed in the United States. Bronchiolitis obliterans has been identified in microwave-popcorn workers in several states, including Missouri, Iowa, Ohio, New Jersey, and Illinois; bronchiolitis obliterans in flavor-manufacturing workers has been identified in Ohio, California, Maryland, and New Jersey. Although the risk for occupational lung disease has been established in the microwave-popcorn industry (1,2) and improvements have been made (e.g., isolating processes, increasing exhaust ventilation, and using respirators), the risk for occupational lung disease associated with the use of flavorings during production of other types of food has not been established. Additional information for physicians treating workers with respiratory disease who have been exposed to flavoring chemicals is available at http://www.cdc.gov/niosh/ topics/flavorings, and assistance is available from NIOSH, OSHA programs, and state health departments.

Acknowledgments

This report is based, in part, on contributions by A Gelb, MD, and P Harber, MD, Div of Occupational and Environmental Medicine, Univ of California.

References

- CDC. Fixed obstructive lung disease in workers at a microwave popcorn factory—Missouri, 2000–2002. MMWR 2002;51:345–7.
- Kanwal R, Kullman G, Piacitelli C, et al. Evaluation of flavoringsrelated lung disease risk at six microwave popcorn plants. J Occup Environ Med 2006;48:149–57.
- Hubbs AF, Battelli LA, Goldsmith WT, et al. Necrosis of nasal and airway epithelium in rats inhaling vapors of artificial butter flavoring. Toxicol Appl Pharmacol 2002;185:128–35.
- 4. Hubbs AF, Battelli LA, Mercer RR, et al. Inhalation toxicity of the flavoring agent, diacetyl (2,3-butanedione), in the upper respiratory tract of rats. Toxicol Sci 2004;78(Suppl 1):438–9.
- Morgan DL, Flake G, Kirby PJ, et al. Respiratory tract toxicity of diacetyl in C57BL/6 mice. Toxicol Sci 2006;90(Suppl 1):210.
- 6. Food and Drug Administration, Department of Health and Human Services, Code of Federal Regulations, Title 21, Volume 3, Part 184, Direct Food Substances Affirmed as Generally Recognized as Safe. 21CFR184.1278. U.S. Government Printing Office. Revised April 1, 2006.
- California Department of Health Services. Food flavoring workers with bronchiolitis obliterans following exposure to diacetyl California. Available at http://www.dhs.ca.gov/ohb/flavoringcases.pdf;2006.
- CDC. Health hazard evaluation report: International Bakers Services, Inc., South Bend, Indiana. Cincinnati, OH: US Department of Health and Human Services, CDC, National Institute for Occupational Safety and Health; 1986. (DHHS [NIOSH] publication no. 85-171-1710.)
- CDC. NIOSH alert: preventing lung disease in workers that use or make flavorings. Cincinnati, OH: US Department of Health and Human Services, CDC, National Institute for Occupational Safety and Health; 2003. (DHHS [NIOSH] publication no. 2004-110.) Available at http://www.cdc.gov/niosh/docs/2004-110.

Nonfatal Occupational Injuries and Illnesses — United States, 2004

Data collected through a National Electronic Injury Surveillance System occupational supplement (NEISS-Work) provide information on persons treated for nonfatal workrelated injuries and illnesses in U.S. hospital emergency departments (EDs). CDC's National Institute for Occupational Safety and Health uses these data to monitor injury trends and aid prevention activities. This report summarizes 2004 NEISS-Work injury and illness surveillance data. In 2004, an estimated 3.4 million nonfatal ED-treated injuries and illnesses occurred among workers of all ages, with a rate of 2.5 cases per 100 full-time equivalent (FTE) workers aged \geq 15 years. Workers aged <25 years had the highest injury/ illness rates. More than three fourths of all nonfatal workplace injuries/illnesses were attributed to contact with objects or equipment (e.g., being struck by a falling tool or caught in machinery), bodily reaction or exertion (e.g., a sprain or strain), and falls. No substantial reduction was observed in the overall number and rate of ED-treated occupational injuries/illnesses during 1996-2004 (1-3). To reduce occupational injuries/ illnesses, interventions should continue to target workers at highest risk and reduce exposure to those workplace hazards with the greatest potential for causing severe injury or death. More emphasis should be placed on prevention-effectiveness studies and dissemination of successful interventions to reduce work-related injuries and illnesses.

NEISS-Work uses a national stratified probability sample of 67 U.S. hospitals with 24-hour EDs.* Hospitals in the sample were selected from the approximately 5,300 rural and urban U.S. hospitals after stratification into four size-based strata (i.e., by total annual ED visits) plus a children's hospital stratum. Each injury/illness was assigned a statistical weight correlating to the probability of selecting the treating hospital within its sample stratum. Weights were adjusted monthly for nonresponse among the sample hospitals and on an annual basis for national fluctuations in ED usage. ED-usage adjustments for 2004 were derived from a sampling frame of national hospital ED visits in 2003.

Flavor and Extract Manufacturers Association of the United States. Respiratory health and safety in the flavor manufacturing workplace. Washington, DC: Flavor and Extract Manufacturers Association of the United States; 2004. Available at http://www.femaflavor.org/html/ public/RespiratoryRpt.pdf.

^{*} The NEISS-Work data collection system is operated by the Consumer Product Safety Commission (CPSC) as a supplement to its NEISS surveillance of consumer product-related injuries. CPSC product-related injury estimates exclude work-related injuries. NEISS-Work estimates include all work-related injuries regardless of product involvement. NEISS-Work uses approximately two thirds of the CPSC sample of 101 hospitals. Because of hospital closures and other nonparticipation/nonresponse factors, the number of reporting hospitals can vary monthly and yearly.

Nonfatal occupational injuries/illnesses among civilian noninstitutionalized workers treated in the sample hospital EDs were identified by chart review. An injury or illness was considered work related if it occurred while the patient was working for pay or other compensation, working on a farm, or volunteering for an organized group (e.g., volunteer fire department) (3). Most cases involved injuries; illnesses (e.g., occupational asthma, conjunctivitis, and myocardial infarction) requiring ED treatment of patients amounted to approximately 5%–10% of all cases. Common illnesses (e.g., colds or other viral infections) or revisits to the same ED by a previously treated worker were excluded.

National injury/illness estimates were calculated by summing the statistical weights assigned to cases. Injury/illness rates were calculated on an FTE basis (i.e., 2,000 hours worked annually = one FTE) using employment estimates from the U.S. Current Population Survey, which includes workers aged \geq 15 years (4). Thus, in this report, the number of injuries/ illnesses is reported for all ages, whereas rates for workers treated in EDs are calculated for persons aged \geq 15 years. Ninety-five percent confidence intervals (CIs) were calculated using a variance procedure that accounted for the stratified nature of the sample and monthly fluctuations in hospital reporting.

The total estimated number of injuries/illnesses for which workers were treated in EDs in 2004 was 3.4 million (Table 1), the same as estimated in 2003; the total rate of 2.5 cases per 100 FTEs in 2004 also was the same as in 2003. In 2004, the median ages for injured/ill males and females were 34 and 36 years, respectively. Workers aged 25-54 years accounted for 70% of all injuries/illnesses. However, among age groups, workers aged 18-19 years had the highest rate (5.7 cases per 100 FTEs [CI = ± 1.6]), followed by workers aged 15–17 years (4.5 cases [CI = ± 1.0]), and workers aged 20–24 years $(4.4 \text{ cases } [CI = \pm 1.4])$. Workers aged 25–44 years (2.7 cases $[CI = \pm 0.6]$) had an intermediate rate, and workers aged 45 years and older (1.7 cases $[CI = \pm 0.4]$) had the lowest injury/ illness rate (Table 2). Overall, approximately 2% of workers treated at EDs were either admitted to the hospital or transferred to another hospital (e.g., trauma or burn center). Males accounted for 68% of the injuries and illnesses for which workers were treated and released but 85% of the workers requiring hospital admission.

Approximately 53% of all injuries/illnesses were categorized as sprains and strains or lacerations, punctures, amputations, and avulsions (Table 1). The majority of sprains and strains affected the trunk (i.e., shoulder, back, chest, or abdomen) (517,600 [CI = $\pm 178,800$]) and lower extremities (i.e., legs, feet, or toes) (233,100 [CI = $\pm 64,800$]). The majority of lacerations, punctures, amputations, and avulsions affected upper extremities (i.e., arms, hands, or fingers) (647,700 [CI = $\pm 145,800$]). Overall, dislocations and fractures accounted for 7% of the injuries/illnesses. However, dislocations and fractures (caused mostly by falls) produced 40% of hospitalizations for males (26,900 [CI = $\pm 8,400$]) and 33% of hospitalizations for females (4,300 [CI = $\pm 1,500$]).

Males and females had similar rates for fall-related injuries/ illnesses overall and by age group (Figure). Fall rates were highest among workers in the youngest and oldest age groups; rates among women aged ≥ 65 years were particularly high (0.64 per 100 FTEs [CI = ±0.16]). Fifty-five percent of falls were 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) (291,200 [CI = ±78,800]); 32% of falls were to a lower level (e.g., falling from a ladder or roof; falling down stairs or steps; falling through a floor or roof) (165,600 [CI = ±39,900]).[†] Females had six times more falls on the same level (165,000 [CI = ±43,700]) compared with falling to a lower level (28,200 [CI = ±7,200]). However, males had about an equal number of falls to a lower level (137,400 [CI = ±34,600]) and falls on the same level (126,200 [CI = ±36,500]).

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Editorial Note: The findings in this report indicate that, in 2004, the number (3.4 million) and rate (2.5 per 100 FTEs) of nonfatal occupational injuries/illnesses were similar to previous years (3.2, 3.6, and 3.4 million in 1996, 1998, and 2003, respectively; rates of 2.7, 2.9, and 2.5 per 100 FTEs in 1996, 1998, and 2003, respectively) (1-3). Focusing on common events that often produce severe injuries (e.g., falls) can substantially reduce fatalities, hospitalizations, and the number of injuries/illnesses overall. A previous analysis of falls among workers aged \geq 55 years determined that injuries sustained by older workers tended to be more severe, with a greater number of fractures and hospitalizations from falls on the same level. (6). Many falls on the same level involved floor contamination (e.g., with water, cleaning solutions, or grease) or tripping hazards that can be addressed in the workplace by keeping walking surfaces clean and dry, well lit, and free from cords and debris.

The Bureau of Labor Statistics (BLS) reports nonfatal occupational injuries/illnesses estimates annually based on a

[†] The total number of falls also included 1) falls, unspecified, 2) falls, jumps to a lower level, and 3) falls, not elsewhere classified.

^{\$} 1996 data were adjusted for a 1997 change in the NEISS-Work sample.

		Male			Female		1	Fotal	
Characteristic	No. (1,000s)	(95% CI)* (1,000s)	(%)	No. (1,000s)	(95% CI) (1,000s)	(%)	No. (1,000s)	(95% CI) (1,000s)	(%)
Total [†]	2,347	(<u>+</u> 583)	(100)	1,071	(<u>+</u> 261)	(100)	3,418	(<u>+</u> 835)	(100)
Age group (yrs)	,	<u> </u>	、		<u> </u>	、	,	<u> </u>	()
≤14	3	(<u>+</u> 2)	(<1)	§	_	_	4	(<u>+</u> 2)	(<1)
15–17	31	(+8)	(1)	19	(+4)	(2)	50	(<u>+</u> 11)	(1)
18–19	103	(<u>+</u> 28)	(4)	48	(<u>+</u> 15)	(4)	151	(<u>+</u> 42)	(4)
20–24	380	(<u>+</u> 125)	(16)	158	(<u>+</u> 47)	(15)	538	(<u>+</u> 170)	(16)
25–34	682	(±188)	(29)	258	(±71)	(24)	940	(<u>+</u> 256)	(28)
35–44	584	(<u>+</u> 127)	(25)	256	(<u>+</u> 57)	(24)	840	(<u>+</u> 181)	(25)
45–54	376	(<u>+</u> 80)	(16)	216	(<u>+</u> 48)	(20)	592	(<u>+</u> 126)	(17)
55-64	151	(<u>+</u> 37)	(10)	93	(<u>+</u> 25)	(20)	245	(<u>+</u> 60)	(7)
<u>≥</u> 65	38	(<u>+</u> 8)	(2)	21	(<u>+</u> 6)	(2)	58	(<u>+</u> 12)	(2)
	00	(<u>+</u> 0)	(2)	21	(<u>+</u> 0)	(2)	50	(± 12)	(~)
Diagnosis (selected)									
Lacerations, punctures, amputations, and									
avulsions	672	(<u>+</u> 157)	(29)	187	(<u>+</u> 38)	(17)	859	(<u>+</u> 193)	(25)
Sprains and strains Contusions, abrasions,	574	(<u>+</u> 195)	(24)	375	(<u>+</u> 109)	(35)	949	(<u>+</u> 302)	(28)
and hematomas	378	(<u>+</u> 97)	(16)	213	(<u>+</u> 50)	(20)	591	(<u>+</u> 145)	(17)
Dislocations and fractures	197	(<u>+</u> 43)	(8)	59	(<u>+</u> 15)	(5)	256	(<u>+</u> 57)	(7)
Burns	72	(<u>+</u> 16)	(3)	28	(<u>+</u> 7)	(3)	100	(<u>+</u> 22)	(3)
Body part affected		(<u> </u>	()		(/	()		\ /	()
Head and neck	452	(<u>+</u> 109)	(19)	153	(<u>+</u> 33)	(14)	604	(<u>+</u> 139)	(18)
Trunk	530	(<u>+</u> 154)	(23)	303	(<u>+</u> 81)	(28)	834	(+232)	(24)
Upper extremities	893	(+221)	(38)	377	(<u>+</u> 105)	(35)	1,270	(<u>+</u> 322)	(37)
Lower extremities	411	(<u>+</u> 104)	(18)	199	(<u>+</u> 46)	(19)	611	(<u>+</u> 147)	(18)
More than 25% of body	51	(<u>+</u> 14)	(10)	32	(±10)	(3)	83	(<u>+</u> 22)	(10)
Emergency department disp			(2)	02	(±10)	(0)	00	(±∠∠)	(~)
			(1.2.2)		((()		((
Treated and released ^{††}	2,261	(<u>+</u> 579)	(100)	1,051	(<u>+</u> 260)	(100)	3,313	(<u>+</u> 831)	(100)
Contact with objects and		((10)		((
equipment ^{§§}	1,082	(<u>+</u> 285)	(48)	286	(<u>+</u> 69)	(27)	1,368	(<u>+</u> 352)	(41)
Falls ^{¶¶}	298	(<u>+</u> 76)	(13)	202	(<u>+</u> 51)	(19)	500	(<u>+</u> 125)	(15)
Bodily reaction and exertion* Exposure to harmful		(<u>+</u> 161)	(22)	337	(<u>+</u> 99)	(32)	833	(<u>+</u> 258)	(25)
substances or environments		(<u>+</u> 38)	(7)	117	(<u>+</u> 28)	(11)	285	(<u>+</u> 62)	(9)
Transportation incidents	72	(<u>+</u> 19)	(3)	18	(<u>+</u> 6)	(2)	90	(<u>+</u> 24)	(3)
Fires and explosions	23	(<u>+</u> 7)	(1)	3	(<u>+</u> 1)	(<1)	25	(<u>+</u> 8)	(1)
Assaults and violent acts	84	(<u>+</u> 19)	(4)	72	(<u>+</u> 19)	(7)	156	(<u>+</u> 36)	(5)
Hospitalized ^{††} Contact with objects and	68	(±17)	(100)	13	(<u>+</u> 3)	(100)	80	(<u>+</u> 20)	(100)
equipment	25	(<u>+</u> 6)	(36)	2	(<u>+</u> 1)	(13)	26	(<u>+</u> 6)	(32)
Falls	18	(+6)	(27)	4	(<u>+</u> 1)	(32)	22	(+6)	(28)
Bodily reaction and exertion	7	(<u>+</u> 3)	(10)	3	(<u>+</u> 1)	(26)	10	(<u>+</u> 3)	(13)
Exposure to harmful	-	\ <u> </u>	()	-	\ <u>`</u> ''	()		(==)	(1.2)
substances or environments	s 5	(<u>+</u> 2)	(7)	_	_	_	5	(<u>+</u> 2)	(7)
Transportation incidents	8	(<u>+</u> 4)	(11)	_	_	_	9	(<u>+</u> 4)	(11)
Fires and explosions	_		(11)	_	_	_	_		(11)
Assaults and violent acts	_	_	_	_	_	_	3	(2)	(4)

TABLE 1. Estimated number of persons treated for nonfatal occupational injuries and illnesses in hospital emergency departments, by sex and selected characteristics — National Electronic Injury Surveillance System (NEISS-Work), United States, 2004

* Confidence interval.

[†] Totals include workers of unknown age and sex; in addition, numbers and percentages might not add to totals or 100 because of rounding.

[§] Did not meet NEISS-Work minimum reporting requirements because the number was too small, the coefficient of variation exceeded 33%, or both.
 [¶] Disposition includes treated and released; hospitalized or transferred to another facility; and other dispositions not shown (e.g., held for observation and left without being seen = 25,000 [95% CI = ±10,000]).

** Event or exposure per Bureau of Labor Statistics Occupational Injury and Illness Classification System (5).

^{††} Totals include cases with event unspecified.

§§ Struck by, struck against, caught in, crushed by, or rubbed/abraded by an object, equipment, or surface; excludes falls.

III Excludes slips, trips, and loss of balance without a fall.

*** Injury/illness from free bodily motion, excessive physical effort, or repetition of a bodily motion; usually nonimpact; includes slips/trips without a fall.

TABLE 2. Rate* of nonfatal occupational injuries and illnesses among workers treated in hospital emergency departments, by sex and age group — National Electronic Injury Surveillance System (NEISS-Work), United States, 2004

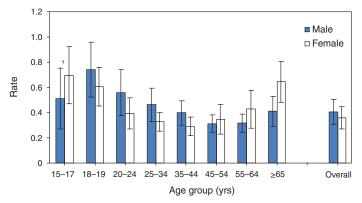
Age group		Male	F	emale	1	Γotal⁺
(yrs)	Rate	95% CI§	Rate	95% CI	Rate	95% CI
Total	3.0	±0.7	1.9	±0.5	2.5	±0.6
15–17	5.6	±1.5	3.5	±0.8	4.5	±1.0
18–19	7.0	±2.0	4.0	±1.3	5.7	±1.6
20–24	5.5	±1.8	2.9	±0.9	4.4	±1.4
25–34	3.7	±1.0	2.1	±0.6	3.1	±0.8
35–44	2.8	±0.6	1.7	±0.4	2.4	±0.5
45–54	2.0	±0.4	1.5	±0.3	1.8	±0.4
55–64	1.6	±0.4	1.3	±0.3	1.5	±0.4
<u>≥</u> 65	1.7	±0.4	1.4	±0.4	1.6	±0.3

^{*} Per 100 full-time equivalent workers aged ≥15 years.

¹ Includes cases with unknown sex; cases with unknown age are excluded. § Confidence interval.

survey of private industry employers (7).⁹ BLS results indicate a general decline in private industry nonfatal injuries/ illnesses in recent years. Despite differences between NEISS-Work and BLS surveillance (e.g., in worker populations, types of medical treatment, sample sizes, and data sources), analogous results were observed for fall injuries. The BLS reported that, in 2004, for nonfatal cases involving 1 or more days away from work, falls were the third most common cause, accounting for 255,600 (20%) of 1,259,320 injuries/illnesses. The majority of these falls occurred on the same level (65%, 167,010) or to a lower level (31%, 79,800) (8). Education and health services, along with the leisure and hospitality industries, had the highest rate of falls on the same level (0.27 per 100 FTEs), whereas the construction industry had the highest rate of falls to a lower level (0.33 per 100 FTEs). For workers aged \geq 55 years, falls were the second leading injury/ illness event for cases involving days away from work (32%, 48,730 of 152,760 cases), with the majority of falls occurring on the same level (75%, 36,310 of 48,730 cases). Although direct data comparisons must be made with caution, these two national data systems can augment each other in guiding nonfatal occupational injury/illness prevention.

The findings in this report are subject to at least five limitations. First, the NEISS-Work data only address injuries/ illnesses for which workers are treated in EDs; these are FIGURE. Rate* of nonfatal occupational fall-related injuries and illnesses among workers treated in hospital emergency departments, by age group and sex of worker — National Electronic Injury Surveillance System (NEISS-Work), United States, 2004



* Per 100 full-time equivalent workers aged ≥15 years.
[†]95% confidence intervals.

estimated to represent about one third of all workplace injuries/illnesses for which persons require medical treatment (3). Second, NEISS-Work includes only a proportion of workrelated illnesses; the majority of workers with chronic illnesses are not treated in an ED, and the work-relatedness of illnesses such as arthritis, cancer, or high blood pressure is difficult to establish. Third, work-related cases were identified from ED charts and hospital admissions information. Additional documentation (e.g., workers' compensation claims) was not required to confirm that injuries/illnesses were work related and might have resulted in an overestimation; conversely, a lack of incident detail or a clear association with a workrelated cause in ED charts and economic disincentives for patients to identify their injuries/illnesses as work related might have resulted in underestimation. Fourth, patient demographics, nature or severity of injury, and incident-event characteristics might have biased the identification of work-related cases, affecting the distribution of these characteristics. Finally, the large standard errors (10%-20%) resulting from the hospital sample size might have obscured injury/illness trends.

These findings indicate that the rate of workers treated in an ED for nonfatal occupational injuries/illnesses has not declined substantially in the United States in recent years. Younger workers aged <25 years continued to experience the highest rates of injuries/illnesses. NEISS-Work is used to track progress toward a *Healthy People 2010* objective, which targets a 30% reduction in the rate of workers aged 15–17 years who are treated in an ED for occupational injuries and illnesses.**

⁹ The BLS survey includes cases that meet Occupational Safety and Health Administration criteria for reportable work-related nonfatal injuries and illnesses that involve days away from work, job transfer or restriction, loss of consciousness, or medical treatment other than first aid. All federal, state, and local government workers (certain states include state and local workers), selfemployed workers, private household workers, and workers on farms with fewer than 11 employees are excluded (approximately 22% of U.S. workers). The BLS survey provides occupational injury and illness counts and rates by detailed industry. The survey only reports demographic and case characteristics for cases involving days away from work. Rates are available for selected case characteristics; rates for demographic characteristics are being developed.

^{**} Objective 20-02h: reduce work-related injuries among adolescent workers from a 1997–1998 baseline of 4.9 injuries per 100 full-time equivalent workers to 3.5. Available at http://www.healthypeople.gov/data/midcourse/pdf/ FA20.pdf.

To attain this objective, better safety training for these young workers might help overcome inexperience, improve attitudes toward risk, and lead to safer work habits later in life. The U.S. Department of Labor is proposing changes to child labor regulations to improve safety for young workers (9). To address some of the more severe nonfatal injuries and illnesses, safety practices and interventions must more effectively target workers and work practices at highest risk. For example, targeting hazards such as slippery surfaces, pathway obstacles, or tripping dangers, particularly in food service or health care, can reduce serious falls (10). Integrating workplace fall-prevention programs with community-based initiatives for older adults that address indoor and outdoor factors such as lighting, floor and walkway surfaces, and railings might further reduce hospitalization rates among older workers and benefit business customers and visitors. The effectiveness of all safety practices should be evaluated carefully and take into account the demographics of the worker population at risk.

References

- 1. CDC. Surveillance for nonfatal occupational injuries treated in hospital emergency departments—United States, 1996. MMWR 1998;47:302-6.
- CDC. Nonfatal occupational injuries and illnesses among workers treated in hospital emergency departments—United States, 1998. MMWR 2001;50:313–7.
- CDC. Nonfatal occupational injuries and illnesses among workers treated in hospital emergency departments—United States, 2003. MMWR 2006;55:449–52.
- 4. Bureau of Labor Statistics. Current population survey, 2004 (microdata files) and labor force data from the current population survey. In: BLS handbook of methods. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2003. Available at http://www.bls.gov/cps/home.htm.
- Bureau of Labor Statistics. Occupational injury and illness classification manual. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 1992. Available at http://www.bls.gov/iif/oshoiics.htm.
- Layne LA, Pollack KM. Nonfatal occupational injuries from slips, trips, and falls among older workers treated in hospital emergency departments, United States 1998. Am J Ind Med 2004;46:32–41.
- Bureau of Labor Statistics. Workplace injuries and illnesses in 2004. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2005. Available at http://www.bls.gov/iif/oshsum.htm.
- Bureau of Labor Statistics. Lost-worktime injuries and illnesses: characteristics and resulting time away from work, 2004. Supplemental table 6: cases involving falls. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2005. Available at http://www.bls.gov/ iif/oshcdnew.htm#04supplemental%20tables.
- 9. Department of Labor. Child labor regulations, orders, and statements of interpretation. Federal Register 2007;72:19337–73.
- Courtney TK, Sorock GS, Derek PM, Collins JW, Holbein-Jenny MA. Occupational slip, trip, and fall-related injuries—can the contribution of slipperiness be isolated? In: Measuring slipperiness—human locomotion and surface factors. Chang W-R, Courtney TK, Gronqvist R, Redfern MS. New York, NY: Taylor and Francis; 2003:17–36.

Lead Exposure Among Females of Childbearing Age — United States, 2004

For centuries, exposure to high concentrations of lead has been known to pose health hazards, and evidence is mounting regarding adverse health effects from moderate- and lowlevel blood lead concentrations. Public health authorities use higher levels to define blood lead levels (BLLs) of concern in nonpregnant females ($\geq 25 \ \mu g/dL$) compared with children $(\geq 10 \ \mu g/dL)$ and a lower level $(\geq 5 \ \mu g/dL)$ for pregnant females (1-3). This difference in levels for nonpregnant and pregnant females has raised concern because of the recognition that a proportion of nonpregnant females with BLLs $\geq 5 \,\mu g/dL$ will become pregnant and potentially expose their infants to a risk for adverse health effects from lead. Maternal and fetal BLLs are nearly identical because lead crosses the placenta unencumbered (4). This report summarizes 2004 surveillance data regarding elevated BLLs among females of childbearing age (i.e., aged 16-44 years) in 37 states participating in CDC's Adult Blood Lead Epidemiology and Surveillance (ABLES) program. The results indicated that rates of elevated BLLs ranged from 0.06 per 100,000 females of childbearing age at BLLs of $\geq 40 \ \mu g/dL$ to 10.9 per 100,000 females at BLLs of $\geq 5 \mu g/dL$. Primary and secondary prevention of lead exposure among females of childbearing age is needed to avert neurobehavioral and cognitive deficits in their offspring.

ABLES tracks laboratory-reported BLLs in persons aged ≥ 16 years who have been tested through workplace monitoring programs or on the basis of clinical suspicion of lead exposure; BLLs are reported for both occupational and nonoccupational exposures.* The Occupational Safety and Health Administration (OSHA) mandates BLL testing of all persons working in areas where airborne lead exceeds a certain level. States participating in ABLES require all laboratories to report BLL results. The lowest reportable BLL varies by state. During 2004, a total of 37 states participated in ABLES. These states all reported BLL rates of $\geq 25 \ \mu g/dL$ and $\geq 40 \ \mu g/dL$. Ten of the 37 states also reported BLLs of any level, enabling these states to calculate prevalences of persons with BLLs $\geq 5 \ \mu g/dL$ and $\geq 10 \ \mu g/dL$, in addition to the two higher levels.

To assess the prevalence of elevated BLLs in females of childbearing age, ABLES data for 2004 were analyzed at four different BLLs: 1) 5 μ g/dL, the level at or above which the

^{*}Additional information regarding the ABLES program is available at http:// www.cdc.gov/niosh/topics/ables/ables.html.

Association of Occupational and Environmental Clinics recommends intervention for pregnant women (3); 2) 10 μ g/dL, the level at or above which CDC recommends intervention for children (1); 3) 25 μ g/dL, the limit set by *Healthy People* 2010 in its public health objective to eliminate elevated BLLs in adults (2); and 4) 40 μ g/dL, the limit at or below which OSHA will permit a worker to return to work after being medically removed from work because of lead poisoning (5). Unique identifiers were used to exclude females who had multiple tests performed in 2004; for females with multiple tests, only the highest value was included.

Occupationally exposed females were defined as those whose medical records contained either a valid industry code or a report of work-related exposure. Exposures lacking at least one of these two criteria were considered nonoccupational. Occupational denominators were based on the Bureau of Labor Statistics 2004 Current Population Survey (6). Rates of elevated BLLs resulting from all exposures (i.e., both occupational and nonoccupational) also were calculated per 100,000 female residents aged 16–44 years in the reporting states, using U.S. census population estimates for 2004 as the denominators. Using case data from all 37 ABLES states, rates of BLLs \geq 25 µg/dL and BLLs \geq 40 µg/dL among occupationally exposed females aged 16–44 years were calculated per 100,000 female workers aged 16–44 years overall and in individual industries with high numbers of workers with elevated BLLs. Using data from 10 ABLES states, rates also were calculated at BLLs of $\ge 5 \ \mu g/dL$ and $\ge 10 \ \mu g/dL$.

In 2004, in 10 ABLES states, a total of 10,527 females aged 16–44 years were tested, and all BLLs for this group were reported. Of the number tested, 1,370 (13.0%) had BLLs $\geq 5 \ \mu g/dL$ (10.9 per 100,000 female residents aged 16–44 years), and 476 had BLLs $\geq 10 \ \mu g/dL$ (3.8 per 100,000 female residents aged 16–44 years) (Table). A total of 442 (32.3%) of the 1,370 females with BLLs $\geq 5 \ \mu g/dL$ had occupational exposures. In all 37 ABLES states, the total number of females aged 16–44 years who were tested is unknown. Among those tested, 0.7 per 100,000 female residents aged 16–44 years had BLLs $\geq 25 \ \mu g/dL$, and 0.08 per 100,000 female residents had BLLs $\geq 40 \ \mu g/dL$ (Table).

The rates of elevated BLLs associated with occupational exposure were similar to or lower than the rates associated with all exposures (i.e., both occupational and nonoccupational) at all four levels examined; however, certain industryspecific rates of occupational exposure were substantially higher than all other rates (Table). The majority of occupationally

	BLL ≥5	µg/dL	BLL ≥1	0 <i>µ</i> g/dL	BLL ≥	25 µg/dL	BLL ≥4	10 <i>μ</i> g/dL
Occupational exposure status	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Among 10 states that reported								
all BLLs to ABLES*								
All exposures [†]	1,370	10.9	476	3.8	86	0.7	8	0.06
Occupational exposure§	442	5.0	254	2.9	55	0.6	2	0.02
Among all 37 states that								
participated in ABLES [¶]								
All exposures [†]	**	_	_	_	342	0.7	42	0.08
Occupational exposure§		—	—	_	224	0.6	14	0.04
All manufacturing								
(CIC ^{††} 1070–3990)	—	—	—	—	199	7.1	11	0.4
Electrical machinery, equipment,								
and supplies manufacturing,								
not elsewhere classified								
(CIC 3490 [includes battery								
manufacturing])	_			—	178	244 ^{§§}	6	8.4
Metal ore mining (CIC 0390)	_	_	_	_	13	_	1	_
Construction (CIC 0770)	_	_	_	_	7	1.2	0	_
Other industry	—	—	—	—	2	0.006	2	0.006

TABLE. Number and rate of females aged 16–44 years with elevated blood lead levels (BLLs), by BLL and occupational exposure status — Adult Blood Lead Epidemiology and Surveillance (ABLES), United States, 2004

* California, Hawaii, Iowa, Minnesota, Missouri, Montana, New Mexico, Rhode Island, Wisconsin, and Wyoming. A total of 10,527 females aged 16–44 years were tested by these 10 states.

[†] Rate per 100,000 female residents aged 16–44 years in reporting states based on U.S. census estimates for 2004.

§ Rate per 100,000 female workers aged 16–44 years in reporting states based on Bureau of Labor Statistics 2004 Current Population Survey data (available at http://www.bls.gov/data).

[¶] Ålabama, Alaska, Arizona, Čalifornia, Connecticut, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Washington, Wisconsin, and Wyoming.

** Data not available.

^{††} 2002 Census Industry Code.

§§ Three cases reported from Oklahoma were excluded from the rate calculation because denominator data were not available for the state.

exposed females were employed in the manufacturing sector, with 178 of 199 (89%) working in the industry that includes battery manufacturing (Table).[†] For that industry, these 178 females yielded a rate of 244 cases of BLLs \geq 25 µg/dL per 100,000 females aged 16–44 years employed in the industry. This rate compares with rates of 7.1 cases of BLLs \geq 25 µg/dL per 100,000 in the entire manufacturing sector and 0.6 cases per 100,000 employed in all sectors. Similarly, the industry that includes battery manufacturing had a rate of 8.4 cases of BLLs \geq 40 µg/dL per 100,000 females aged 16–44 years employed in that industry, compared with rates of 0.4 per 100,000 employed in all sectors (Table).

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Editorial Note: Health effects in infants born to females with moderately elevated BLLs (i.e., $10-15 \mu g/dL$) include preterm birth, decreased gestational maturity, lower birth weight, reduced postnatal growth, increased incidence of minor congenital anomalies, and early neurologic or neurobehavioral deficits (7). How long these neurologic effects are likely to persist is unclear, but some evidence documents associations between prenatal elevated BLLs and decreased intelligence at ages 3–7 years (8).

Conducting surveillance of elevated BLLs among all females of childbearing age is important because approximately one third to one half of U.S. pregnancies are unplanned (9). Identification of a female with elevated BLLs can facilitate prevention of any further lead exposure that might, in the event she becomes pregnant, endanger the health of the fetus.

Estimates of the number and rate of females of childbearing age with elevated BLLs have varied widely. Data from the National Health and Nutrition Examination Survey (NHANES) for 1999-2002 suggest a national rate of 300 cases of BLLs >10 µg/dL per 100,000 women aged 20-59 years, a 25% decrease from 1991-1994 NHANES estimates of 400 cases per 100,000 population. For comparison, in this report, data from the 10 states that reported all BLLs to ABLES in 2004 indicated a rate of only 3.8 cases of BLLs $\geq 10 \mu g/dL$ per 100,000 females aged 16-44 years for all types of exposures. Because the rates of BLLs $\geq 25 \,\mu g/dL$ and BLLs $\geq 40 \,\mu g/dL$ from the 10 states were similar to the rates derived from reports of all 37 ABLES states (Table), the ABLES data offer no indication that lead exposures in the 10 states would differ substantially from exposures in all 50 states combined. The data presented in this report, however, used the general population of female residents aged 16–44 years as the denominator. For the ABLES rate to approximate the rate from NHANES, all females in that population who met lead exposure criteria for workplace monitoring programs or who were suspected of lead exposure by health-care providers would have been tested and reported to ABLES. However, the low numbers (10,527) of females tested in the 10 states suggests this likely was not the case; using the NHANES rate, approximately 37,000 females aged 16–44 years in the 10 states would have had BLLs $\geq 10 \mu g/dL$. The difference between the ABLES population-based rates and the rates from NHANES suggest that a large proportion of females with moderately elevated BLLs likely are not being tested or the results are not being reported to ABLES.

Rates of elevated BLLs detected in ABLES among females in the manufacturing sector, especially in the industry that includes battery manufacturing, were much higher than rates among the general population for all lead exposures. These higher rates suggest that despite OSHA's recent focus on reducing workplace lead exposures among all U.S. workers, the workplace remains a substantial source of exposure, and clinicians should consider work history when determining whether to measure BLLs.

The findings in this report are subject to at least three limitations. First, elevated BLLs are underreported by ABLES because all employers might not provide BLL testing to all lead-exposed workers as required by OSHA regulations, and testing of nonoccupationally exposed adults is dependent on a clinician's index of suspicion. Underreporting likely varies by industry. For example, high rates of elevated BLLs in the industry that includes battery manufacturing might partially reflect more thorough testing programs in this industry. In addition, certain laboratories might not report all tests as required by state regulations. Second, data on occupational sources of exposure might be incomplete, resulting in misclassification of occupational versus nonoccupational cases. Finally, a wide margin of error is associated with certain industry-specific rates because of the small sample size.

The difference between BLLs that are considered elevated in females who are pregnant and those who might become pregnant has substantial public health implications. Identifying and counseling females of childbearing age who might become pregnant and expose children to lead in utero might help to prevent neurobehavioral and cognitive deficits.

Acknowledgment

This report is based, in part, on data contributed by ABLES state coordinators.

[†]2002 Census Industry Code 3490.

References

- 1. CDC. Preventing lead poisoning in young children. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/nceh/lead/publications/prevleadpoisoning.pdf.
- 2. US Department of Health and Human Services. Healthy people 2010 (conference ed, in 2 vols). Washington, DC: US Department of Health and Human Services; 2000. Available at http://www.health.gov/healthypeople.
- 3. Association of Occupational and Environmental Clinics. Medical management guidelines for lead-exposed adults. Washington, DC: Association of Occupational and Environmental Clinics; 2005. Available at http://www.aoec.org/documents/positions/mmg_final.pdf.
- 4. Goyer RA. Transplacental transport of lead. Environ Health Perspect 1990;89:101-5.
- Occupational Safety and Health Administration. Standard 29 CFR 1910.1025: Lead. Washington, DC: US Department of Labor, Occupational Safety and Health Administration. Available at http:// www.osha.gov.
- Bureau of Labor Statistics. Current population survey 2004 microdata files. Washington DC: US Department of Labor, Bureau of Labor Statistics; 2004.
- Dietrich KN. Human fetal lead exposure: intrauterine growth, maturation, and postnatal neurobehavioral development. Fundam Appl Toxicol 1991;16:17–9.
- Wasserman GA, Liu X, Popovac D, et al. The Yugoslavia prospective lead study: contributions of prenatal and postnatal lead exposure to early intelligence. Neurotoxicol Teratol 2000;22:811–8.
- CDC. Monitoring progress toward achieving maternal and infant healthy people 2010 objectives—19 states, Pregnancy Risk Assessment Monitoring System (PRAMS), 2000–2003. MMWR 2006;55(No. SS-9).

Notice to Readers

Annual Conference on Assessment Initiative — August 22–24, 2007

The Annual Conference on Assessment Initiative, sponsored by CDC, will be held August 22–24, 2007, in Atlanta, Georgia. This meeting will focus on sharing information on innovative systems and methods that improve the way data are used in public health programs, services, and policies at the local and state levels. Sessions will address data dissemination, health assessment research, applied data analysis, presentation techniques, and community health-assessment processes and outcomes.

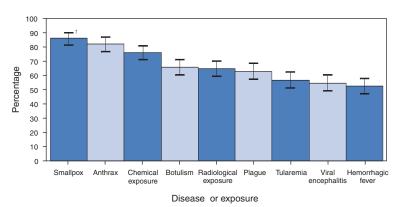
Participants will include staff members from local and state health departments, federal agencies, and community organizations interested in the collection, analysis, and dissemination of data for community health assessments. Conference attendees can register online at http://www.signup4.net/Public/ ap.aspx?EID=ASSE11E; the deadline for online registration is August 10, and no registration fee is charged. The deadline for making reservations with the Sheraton Atlanta Hotel is July 14 (at the conference web site or by telephone, 800-833-8624 or 404-659-6500).

Abstracts for the poster session are due by July 27 and should be e-mailed to nba7@cdc.gov. Abstracts should be a maximum of 250 words and clearly state the purpose of the poster. Topics of interest include approaches to assessment, impact and outcome of community health assessment, systems and approaches used for data dissemination, community partnerships, and statistical methods used in assessment. A maximum of 40 abstracts will be accepted, and applicants will be notified of acceptance by August 6. Additional information regarding the Assessment Initiative is available at http:// www.cdc.gov/epo/dphsi/ai/conference_training.htm.

QuickStats



Percentage of Hospitals with Staff Members Trained to Respond to Selected Terrorism-Related Diseases or Exposures* — National Hospital Ambulatory Medical Care Survey, United States, 2003–2004



* The staff person responsible for the hospital's emergency response plan for bioterrorism or mass casualties was asked the following question: "Have your hospital staff members received special training (e.g., in-service or other courses, continuing medical education, grand rounds, or self-guided study) since September 11, 2001, in the identification, diagnosis, and treatment of the following diseases/conditions? Smallpox, anthrax, plague, botulism, tularemia, viral hemorrhagic fever, viral encephalitis, chemical exposure, nuclear/radiologic exposure."

[†]95% confidence interval.

During 2003–2004, the percentage of hospitals with emergency department staff members with bioterrorismpreparedness training for certain related diseases or exposures varied from 52.3% for hemorrhagic fever to 86.0% for smallpox.

SOURCE: Niska RW, Burt CW. Training for terrorism-related conditions in hospitals: United States, 2003–04. Advance data from vital and health statistics; no. 380. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2006. Available at http://www.cdc.gov/nchs/data/ad/ ad380.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 21, 2007 (16th Week)*

	Current	Cum	5-year weekly	Total o	ases rep	orted for	previou	s years	
Disease	week	2007		2006	2005	2004	2003	2002	States reporting cases during current week (No.)
Anthrax	—	—	—	1	—	—	—	2	
Botulism:									
foodborne	—	—	0	19	19	16	20	28	
infant	_	17	1	96	85	87	76	69	
other (wound & unspecified)		4	1	45	31	30	33	21	
Brucellosis	2	31	3	121	120	114	104	125	NE (1), CA (1)
Chancroid	1	2	1	34	17	30	54	67	NC (1)
Cholera	_		0	7	8	5	2	2	
Cyclosporiasis§	1	16	6	135	543	171	75	156	FL (1)
Diphtheria		_	_	_	_	_	1	1	
Domestic arboviral diseases ^{§,1} :			0	60	00	110	100	104	
California serogroup	_		0	63	80	112	108	164	
eastern equine	_	_	_	7 1	21 1	6 1	14	10 1	
Powassan St. Louis	_		0	9		12	41	28	
western equine	_	_		9	13	12	41	20	
Ehrlichiosis [§] :	_	_	_	_	_	_	_	_	
human granulocytic	_	14	3	593	786	537	362	511	
human monocytic	1	31	1	498	506	338	321	216	AL (1)
human (other & unspecified)	_	11	1	237	112	59	44	23	··= (·)
Haemophilus influenzae,**				207		00		20	
invasive disease (age <5 yrs):									
serotype b	1	4	0	13	9	19	32	34	UT (1)
nonserotype b	1	25	3	123	135	135	117	144	CO (1)
unknown serotype	2	82	4	226	217	177	227	153	PA (1), GA (1)
Hansen disease	3	15	1	62	87	105	95	96	NYC (1), FL (1), CA (1)
Hantavirus pulmonary syndrome§	_	2	0	37	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal§	4	32	2	268	221	200	178	216	FL (1), AZ (1), CA (2)
Hepatitis C viral, acute	5	188	21	850	652	713	1,102	1,835	PA (2), NC (1), TN (1), CO (1)
HIV infection, pediatric (age <13 yrs) ^{††}	—	_	3	52	380	436	504	420	
Influenza-associated pediatric mortality §,§§	6	49	1	41	45	_	N	N	NM (1), NYC (1), TN (1), WA (3)
Listeriosis	6	139	10	828	896	753	696	665	PA (1), CO (1), CA (3), HI (1)
Measles ¹¹	_	6	1	52	66	37	56	44	
Meningococcal disease, invasive***:		07	-	005	007				
A, C, Y, & W-135	4	67	5	235	297	_	_	_	FL (2), OK (2)
serogroup B	1	30	2	146	156	_	_	—	IN (1)
other serogroup	1	7	1	25	27	_	_	_	FL(1)
unknown serogroup	11 20	231 290	18 124	704 6,561	765 314	258	231	270	NY (1), PA (2), OH (1), FL (4), AZ (1), CA (2)
Mumps	20	290	124	0,501	314	200	231	270	PA (2), OH (1), KS (1), MD (1), NC (10), TX (1), WA (4)
Novel influenza A virus infections	_	_	_	Ν	Ν	Ν	Ν	Ν	
Plague	_	_	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	_	_	_	1	_	_	_	
Poliovirus infection, nonparalytic§	—	_	—	N	N	Ν	N	N	
Psittacosis [§]	1	3	0	21	16	12	12	18	MI (1)
Q fever§	1	40	2	176	136	70	71	61	MI (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubellattt	_	10	0	9	11	10	7	18	
Rubella, congenital syndrome	_	_	0	1	1	—	1	1	
SARS-CoV ^{\$.555}	—	_	0	_	_	_	8	N	
Smallpox [§]	—								
Streptococcal toxic-shock syndromes	_	22	4	104	129	132	161	118	
Syphilis, congenital (age <1 yr)	1	47	/	340	329	353	413	412	NY (1)
Tetanus		3	0	34	27	34	20	25	
Toxic-shock syndrome (staphylococcal)§	2	23	2 0	94 12	90 16	95 5	133	109	OH (1), NC (1)
Trichinellosis Tularemia	1	1 3	1	13 89	16 154		6 120	14	OK (1)
Typhoid fever	5	- 3 70	5	89 316	154 324	134 322	129 356	90 321	OK (1) NE (1), MD (1), CA (3)
Vancomycin-intermediate Staphylococcus aur		2	5	5	324	322	356 N	321 N	NE(I), ND(I), OR(S)
Vancomycin-resistant Staphylococcus aureus			0	1	2	1	N	N	
Vibriosis (non-cholera <i>Vibrio</i> species infections		35	_	N	Ň	Ň	N	N	OH (1), FL (4), CA (1)
Yellow fever	-, -	00						1	

Cum: Cumulative vear-to-date counts. -: No reported cases. N: Not notifiable.

t §

No reported cases. N: Not notifiable. Cum: Cumulative year-to-cate counts. Incidence data for reporting years 2006 and 2007 are provisional, whereas data for 2002, 2003, 2004, and 2005 are finalized. 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/epo/dphsi/phs/files/5yearweeklyaverage.pdf. Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except 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/epo/dphsi/phs/infdis.htm. Includes both neuroinvasive and non-neuroinvasive. 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 monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV **††** reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly. Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. A total of 50 cases were reported for the 2006–07 flu season. 88

11 No measles cases were reported for the current week. ***

Data for meningococcal disease (all serogroups) are available in Table II. No rubella cases were reported for the current week. +++

\$8\$ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

(16th Week)*			Chlamyd	lia†			Coccid	ioidomy	cosis			Cry	otosporid	iosis	
			vious				Pre	vious				Pre	vious		
Reporting area	Current week	<u>52 v</u> Med	veeks Max	Cum 2007	Cum 2006	Current week	52 v Med	veeks Max	Cum 2007	Cum 2006	Current week	52 v Med	veeks Max	Cum 2007	Cum 2006
United States	10,581	19,795	23,587	280,210	306,967	132	151	649	2,452	2,551	26	69	301	685	778
New England Connecticut Maine [§]	359 44	674 201 47	1,364 833 73	9,933 2,208 751	9,245 2,052 634	N	0 0 0	0 0 0	N	N	_	3 0 0	22 7 6	26 7 7	71 38 9
Massachusetts New Hampshire Rhode Island [§] Vermont [§]	253 26 22 14	307 39 63 20	604 69 108 45	5,092 601 992 289	4,572 557 1,032 398	 N	0 0 0 0	0 0 0 0	 N	 N		0 1 0 1	14 5 5 5	6 6	21 1 2
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	2,052 141 478 902 531	2,533 387 509 757 805	4,164 541 2,745 1,555 1,260	42,257 5,009 7,381 13,357 16,510	37,520 5,903 6,641 12,732 12,244	N N N	0 0 0 0	0 0 0 0	N N N N	N N N N	2 2 —	10 0 3 2 4	33 1 13 12 18	88 — 33 14 41	128 9 26 32 61
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	1,205 560 362 208 75	3,221 998 376 763 651 375	5,910 1,258 632 1,225 3,715 528	47,293 13,027 6,033 10,832 11,947 5,454	52,771 17,003 6,416 8,523 13,996 6,833	 N	1 0 1 0	3 0 3 2 0	10 — 8 2 N	11 — 7 4 N	7 1 1 5	15 2 1 2 5 4	110 22 18 9 33 53	158 13 13 35 60 37	175 24 10 30 64 47
W.N. Central lowa Kansas Minnesota Missouri Nebraska [§] North Dakota South Dakota	108 	1,192 155 149 241 440 99 29 50	1,445 240 266 314 628 180 64 84	15,408 2,390 2,446 2,952 5,220 1,260 387 753	19,150 2,677 2,533 4,066 6,886 1,602 607 779	N N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0	54 0 54 1 0 0	3 N N 3 N N N N N	N N N N N N N N N N N N N N N N N	2 2 	12 2 1 2 1 0 1	77 28 8 25 21 16 1 7	102 18 13 28 19 6 1 17	109 9 16 43 26 5 1 9
S. Atlantic Delaware District of Columbia Florida Georgia Maryland [§] North Carolina South Carolina [§] Virginia [§] West Virginia	2,460 50 72 	3,672 69 67 960 708 345 624 395 470 54	6,115 111 161 1,187 3,022 961 1,772 2,105 685 96	45,861 1,088 1,551 3,300 7,608 6,884 9,355 7,770 7,623 682	58,119 1,115 861 14,346 10,004 5,441 11,111 7,102 7,270 869	N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0 0 0 0	1 0 0 0 1 0 0 0 0	1 N N 1 N N N	2 N N 2 N N N N	11 	17 0 8 5 0 1 1 0	68 32 32 12 2 11 14 5 3	195 2 3 93 52 7 13 12 11 2	182 5 72 54 6 25 5 13 2
E.S. Central Alabama [§] Kentucky Mississippi Tennessee [§]	656 219 437	1,473 421 126 401 531	2,093 539 691 959 706	23,284 5,436 2,055 6,777 9,016	23,789 7,882 3,122 5,061 7,724	N N N	0 0 0 0	0 0 0 0	N N N N	N N N N N	 	3 0 1 0 1	14 11 3 5 5	31 12 9 5 5	24 8 8 1 7
W.S. Central Arkansas [§] Louisiana Oklahoma Texas [§]	1,680 193 26 270 1,191	2,180 157 303 263 1,427	3,027 337 610 473 1,910	32,037 2,635 3,722 4,076 21,604	34,408 2,506 5,445 3,164 23,293	N N N	0 0 0 0	1 0 1 0 0	N N N	N N N	 	5 0 1 1 2	45 2 9 4 36	29 2 11 11 5	39 5 10 24
Mountain Arizona Colorado Idaho [§] Montana [§] Nevada [§] New Mexico [§] Utah Wyoming [§]	246 38 49 43 12 26 78 	1,238 431 315 49 51 107 181 96 28	2,018 993 416 253 144 397 324 200 54	13,349 2,997 1,874 1,175 736 2,234 2,591 1,384 358	19,690 5,893 4,772 1,058 737 2,012 3,214 1,558 446	114 114 N N 	101 99 0 0 1 0 1 0	296 296 0 0 3 3 4 0	1,729 1,693 N N 12 5 19	1,950 1,894 N N 25 5 24 2	4 3 	4 0 1 0 0 0 0 0 0	39 3 7 5 26 1 5 3 11	39 10 11 3 3 1 6 1 4	29 4 7 3 5 3 2 5
Pacific Alaska California Hawaii Oregon [§] Washington	1,815 85 937 172 621	3,376 86 2,669 107 161 350	4,069 157 3,255 130 394 548	50,788 1,265 39,544 1,510 2,913 5,556	52,275 1,269 40,604 1,807 2,974 5,621	18 N 18 N N N	53 0 53 0 0	299 0 299 0 0 0	709 N 709 N N N	588 N 588 N N N	 	1 0 0 1 0	5 1 0 1 4 0	17 — — 17 —	21 — — 21 —
American Samoa C.N.M.I. Guam	U U	0	46	U U	U U	U U	0	0	U U	U U		0	0	U U	U U
Puerto Rico U.S. Virgin Islands	137 U	114 4	236 9	2,274 U	1,394 U	N U	0 0	0 0	N U	N U	N U	0 0	0 0	N U	N U

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 21, 2007, and April 22, 2006

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2006 and 2007 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly. Chamydia refers to genital infections caused by *Chlamydia trachomatis*. S Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

<u>(16th Week)*</u>			Giardiasi	s			G	onorrhea	a		Hae		<i>is influen</i> es, all ser	<i>zae</i> , invas otypes†	ive
	Current	Prev 52 w		Cum	Cum	Current		evious weeks	Cum	Cum	Current		vious veeks	Cum	Cum
Reporting area	week	Med	Мах	2007	2006	week	Med	Max	2007	2006	week	Med	Max	2007	2006
United States	152	314	999	3,780	4,435	3,601	6,839	8,665	89,848	104,399	34	43	143	728	719
New England Connecticut	5	18 5	44 25	143 59	321 81	56 11	111 42	259 203	1,565 479	1,518 513	2 2	2 0	12 7	24 17	38 8
Maine [§] Massachusetts	2	4 0	14 18	43	22 150	39	2 48	8 96	20 849	39 729	_	0	4 7	4	5 19
New Hampshire	1	0	9	2	1		3	9	45	73	_	0	3	3	1
Rhode Island [§] Vermont [§]	2	0 3	17 12	3 36	23 44	5 1	10 1	19 5	154 18	146 18	_	0 0	3 2	_	2 3
Mid. Atlantic	29	66	123	672	924	474	676	1,519	11,050	10,097	8	10	26	172	164
New Jersey New York (Upstate)	13	7 24	17 101	36 245	144 279	38 111	104 122	156 1,035	1,432 1,844	1,648 1,812	4	1 3	5 14	17 49	30 38
New York City Pennsylvania	7 9	16 14	33 35	217 174	289 212	174 151	176 239	376 412	2,927 4,847	3,111 3,526	4	2 3	6 10	35 71	36 60
E.N. Central	18	41	96	535	754	389	1,289	2,426	19,110	20,885	5	6	14	77	106
Illinois Indiana	N	9 0	27 0	81 N	175 N	189	356 154	485 289	4,607 2,439	6,280 2,809	2	1 1	5 10	10 15	31 19
Michigan	4	13	38	173	212	67	307	880	4,765	3,206	_	0	5	9	15
Ohio Wisconsin	14	15 8	32 24	212 69	224 143	110 23	320 136	1,572 181	5,374 1,925	6,353 2,237	3	2 0	6 3	43	27 14
W.N. Central	4	23	514	258	379	27	385	515	4,804	5,774	3	3	23	44	31
lowa Kansas	3	5 3	16 11	52 35	71 48	25	38 43	63 87	555 714	555 713	_	0 0	1 2	4	4
Minnesota Missouri	_	0 9	489 28	12 120	78 128	_	66 195	87 269	786 2,354	944 3,042	3	1	17 5	15 19	11 13
Nebraska§	1	2	9	23	24	_	24	48	290	381	_	Ó	2	5	3
North Dakota South Dakota	_	0 1	4 6	1 15	5 25	2	2 6	6 15	16 89	35 104	_	0 0	2 0	1	_
S. Atlantic	23	53 0	98	725 7	639 8	1,286	1,599 28	2,696	17,973	25,156 451	9	11	28	198	183
Delaware District of Columbia	_	1	4 7	15	18	25 37	36	44 63	434 672	553	_	0 0	3 2	5 2	1 1
Florida Georgia	18	24 12	44 26	336 162	269 143	1	446 349	549 1,539	1,564 3,159	6,589 4,548	2 3	3 2	9 6	64 53	55 45
Maryland§	2	4	12 0	65	42	232	119	234 608	2,089	2,047	4	2	5	36	26
North Carolina South Carolina§	_	2	8	18	24	676 196	314 167	1,026	4,873 3,137	5,547 3,215	_	1	8 3	15 16	15 15
Virginia [§] West Virginia	3	9 0	28 21	114 8	129 6	110 9	124 19	238 44	1,850 195	1,981 225	_	0 0	7 6	1 6	16 9
E.S. Central	8	8	34	112	113	229	579	878	8,335	9,394	1	2	9	38	51
Alabama [§] Kentucky	N	4 0	22 0	50 N	57 N	84	192 48	271 268	2,212 708	3,607 1,071	1	0 0	3 1	8 2	11 4
Mississippi Tennessee [§]	N 8	0 5	0 12	N 62	N 56	145	157 195	434 240	2,368 3,047	1,896 2,820	_	0 1	1 6	 28	4 32
W.S. Central	7	7	21	95	44	606	952	1,483	13,116	14,551	2	1	26	38	26
Arkansas [§] Louisiana	6	3	13	43	21	107	81	142	1,283	1,394	_	0	2	2	2
Oklahoma	1	1 2	6 11	22 30	23	40 69	184 107	366 237	2,359 1,669	3,159 1,117	2	0 1	24	4 30	1 22
Texas [§]	N 13	0 30	0 68	N 364	N 398	390 62	568 264	931 455	7,805 2.553	8,881 4,223	4	0 4	2 14	2 99	1 86
Mountain Arizona	3	3	11	57	37	12	105	220	660	1,450	1	2	9	48	31
Colorado Idaho [§]	4	10 3	26 12	120 32	138 46	27 1	71 2	93 20	586 75	1,092 65	1	1 0	4	21 3	27 3
Montana§	—	2	11	23	22 29	_	3 30	20	27 534	44	—	0	0	5	
Nevada [§] New Mexico [§]	_	1	6	25 21	17	9	30	135 65	443	699 534	_	0 0	2 2	9	10
Utah Wyoming [§]	6	7 1	27 4	74 12	103 6	13	16 2	28 5	210 18	285 54	_2	0 0	3 1	12 1	9
Pacific	45	60	147	876	863	472	785	971	11,342	12,801	_	2	8	38	34
Alaska California	1 19	1 43	17 71	17 624	9 654	9 303	11 645	27 833	130 9,556	173 10,588	_	0 0	2 6	4	3 9
Hawaii Oregon [§]	1	1 9	4 14	17 118	19 115	 18	15 27	30 46	179 333	327 432	_	0 1	1 6	2 32	6 15
Washington	24	9 8	68	100	66	142	75	131	1,144	1,281	_	0	2	32	15 1
American Samoa C.N.M.I.	U U	0	0	U U	U U	U U		_2	U U	U U	U U	0		U U	U U
Guam Puerto Rico	3	5	19	48	30	8	6	16	114	109		0	2		
U.S. Virgin Islands	U	0	0	U	U	U	0	3	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. U: Unavailable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

¹ Incidence data for reporting years 2006 and 2007 are provisional.
 ¹ Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
 ⁸ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(16th Week)*			Hepati	tis (viral, a	cute), by ty	/pe [†]									
			A					B					gionellos	sis	
	Current	Prev 52 w		Cum	Cum	Current	Prev 52 w	ious eeks	Cum	Cum	Current		/ious /eeks	Cum	Cum
Reporting area	week	Med	Max	2007	2006	week	Med	Max	2007	2006	week	Med	Max	2007	2006
United States	31	56	117	704	1,157	53	80	287	1,089	1,234	14	49	108	391	390
New England	_	1	19	10	66	1	2	5	19	41	1	2	13	9	18
Connecticut Maine [§]	_	1 0	3 2	4 1	10 3	1	0	5 2	10 1	20 4	1	0 0	9 2	3	3 2
Massachusetts	_	0	2	_	46	_	0	1	_	13	_	0	4	_	10
New Hampshire Rhode Island [§]	_	0 0	15 2	2 3	1 2	_	0	2 4	2 5	3	_	0 0	2 6	5	2
Vermont§	_	0	2		4	_	0	4	1	1	_	0	2	1	1
Mid. Atlantic	2	7	19	92	93	4	9	19	121	157	2	15	53	101	112
New Jersey	_	1	4	15	30		2	6	26	48	2	2	11	12	15
New York (Upstate) New York City	2	2 2	12 11	26 37	16 32	4	1 2	14 6	23 21	21 33	2	5 2	30 20	31 16	35 17
Pennsylvania	—	1	4	14	15	—	3	7	51	55	—	5	19	42	45
E.N. Central	1	6	13	69	95	6	8	19	117	140	5	10	30	78	80
Illinois Indiana	_	1 0	4 7	17 6	21 6	2	1 0	5 17	14 11	51 9	1	1	11 5	5	13 3
Michigan	—	2	8	24	33	_	2	8	39	46	_	3	10	29	17
Ohio Wisconsin	1	1 0	4 4	22	25 10	4	3 0	10 3	48 5	32 2		4 0	19 3	43 1	34 13
W.N. Central	7	2	17	42	39	_	3	15	42	44	2	1	16	16	12
Iowa	_	0	1	6	3	_	0	3	7	7		0	3	2	1
Kansas Minnoacto	4	0	1 17	24	15 2	_	0 0	2 14	4 4	6 2	1	0 0	3 11	2 2	1
Minnesota Missouri	4 1	1	3	24 6	2 10	_	1	5	4 22	26	1	0	2	28	7
Nebraska [§]	2	0	2	4	4	—	0	3	3	2	_	0	2	1	2
North Dakota South Dakota	_	0 0	0 2	2	5	_	0	0 1	2	1	_	0 0	0 1	1	1
S. Atlantic	8	9	27	134	172	14	23	53	296	357	2	9	24	103	94
Delaware	_	0	2	_	4	_	0	4	4	13	_	0	2	1	1
District of Columbia Florida	_	0 3	5 13	9 50	1 62	8	0 7	2 14	1 99	4 133	2	0 3	5 9	48	4 46
Georgia	1	1	5	16	12	2	3	8	39	49	_	1	5	11	2
Maryland [§] North Carolina	4 1	1 0	7 11	21 7	25 40	1 3	2 1	8 16	27 52	54 58	_	2 0	8 5	22 9	15 11
South Carolina [§]	_	Ő	3	4	7	_	2	5	21	22	_	0	2	4	2
Virginia [§] West Virginia	1	1 0	4 3	26 1	20 1	_	2 0	5 23	39 14	11 13	_	1 0	5 4	5 3	12 1
E.S. Central	I	2	7	21	39	2	6	20	68	108	2	2	9	17	13
Alabama§	_	0	2	2	2		1	10	20	27	_	0	2	1	3
Kentucky	—	0	4 5	4 5	18 2	—	1 0	5 7	2 7	26 12	1	1 0	6 2	8	3 1
Mississippi Tennessee§	_	1	5	10	17	2	3	7	39	43	1	1	7	8	6
W.S. Central	_	6	18	40	106	18	19	128	186	187	_	1	12	17	8
Arkansas§	_	0	2	4	27	_	1	4	7	16	_	0	1	1	1
Louisiana Oklahoma	_	0 0	4 3	7	3 3	2	1 1	5 14	14 11	5 1	_	0 0	2 6	1	1
Texas§	_	5	15	29	73	16	15	108	154	165	_	1	12	15	6
Mountain	3	5	17	92	101	2	3	9	66	43	_	2	8	25	18
Arizona Colorado	2 1	3 1	13 3	78 7	60 16	1	0	6 4	29 8	2 11	_	1 0	4	8 5	5 4
Idaho§	_	0	2	1	4	_	0	2	4	4	_	0	3	1	2
Montana [§] Nevada [§]	_	0 0	3 2	3	1 5	_	0 1	0 5	12	13	_	0 0	1 2	1 2	3
New Mexico [§]	_	0	2	1	6	_	0	2	4	6	_	0	2	2	
Utah	_	0	2 1	2	8 1	1	0 0	4	9	7	_	0 0	2	4	4
Wyoming [§]		0			-			1					1	2	
Pacific Alaska	10	15 0	52 1	204 1	446 1	6	11 0	38 3	174 4	157 1	_	1 0	11 1	25	35
California	9	12	48	183	415	4	8	26	133	122	—	1	11	20	35
Hawaii Oregon [§]	_	0 1	2 3	2 9	6 11	_	0 2	1 5	26	2 24	_	0 0	0 0	_	_
Washington	1	1	4	9	13	2	1	12	11	8	_	Ő	2	5	_
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I. Guam	U	_	_	U	U	U	_	_	U	U	U	_	_	U	U
Puerto Rico	1	1	10	15	15	2	1	9	14	7	_	0	1	_	_
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. * Incidence data for reporting years 2006 and 2007 are provisional. * Data for acute hepatitis C, viral are available in Table I. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

(16th Week)*		L	yme dise	ase			Γ	Malaria			Men		cal disea	se, invasi Jps	ve†
Reporting area	Current week		vious veeks Max	Cum 2007	Cum 2006	Current week		/ious /eeks Max	Cum 2007	Cum 2006	Current week		vious veeks Max	Cum 2007	Cum 2006
United States	36	253	1,029	1,589	1,747	10	25	50	197	321	18	19	37	335	459
New England Connecticut Maine [§] Massachusetts	5 1 —	22 9 2 0	255 227 39 3	75 21 12	94 47 18 21	1	0 0 0 0	6 3 1 3	4 3 	9 1 2 5	 	1 0 0 0	3 2 3 1	7 2 2	15 4 2 9
New Hampshire Rhode Island [§] Vermont [§]	3 1	5 0 1	97 93 15	34 8	2 1 5	1 	0 0 0	3 1 0	1 	1		0 0 0	2 1 1	1 _2	
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	11 9 2	147 27 52 2 45	571 190 392 24 237	787 102 223 5 457	1,222 297 505 17 403	2 	5 1 3 1	18 7 9 4	47 — 13 28 6	91 25 7 48 11	3 	2 0 1 1 0	8 2 4 4 5	36 1 9 6 20	76 8 13 27 28
E.N. Central Illinois Indiana Michigan Ohio	 	10 0 1 0	158 1 3 5 5	19 1 6 2	98 	 	3 1 0 0	10 6 2 2 2	30 10 1 7 7	41 15 5 11	3 1 2	2 0 0 1	7 2 4 3 4	40 10 9 9 12	62 17 8 10 18
Wisconsin W.N. Central Iowa	3	9 5 1	154 190 8	9 36 6	82 37 5		0 1 0	3 13 1	5 13 2	5 6 1		0 1 0	2 5 3	28 7	9 20 4
Kansas Minnesota Missouri Nebraska [§] North Dakota South Dakota	3 	0 2 0 0 0 0	2 190 2 0 1	2 26 2 — —	31 1 		0 0 0 0 0	2 12 1 1 0 0	7 2 2	2 1 1 1		0 0 0 0 0	1 3 3 1 1	1 8 9 1 1 1	2 8 5 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland [§] North Carolina South Carolina [§] Virginia [§] West Virginia	11 1 8 2	42 8 0 0 21 0 0 6 0	135 28 7 3 1 104 4 2 36 14	615 108 2 10 399 6 4 82 4	262 87 6 7 1 149 8 1 3 	1 - 1 	5 0 1 1 1 0 0 1 0	15 1 2 4 6 4 2 4 1	47 1 13 4 15 4 9	83 2 	7 	3 0 1 0 0 0 0 0	9 1 1 6 3 2 6 2 2 2 2	50 	80 2 32 6 5 14 8 12 1
E.S. Central Alabama [§] Kentucky Mississippi Tennessee [§]	2 2	0 0 0 0 0	4 3 2 1 2	7 1 — 6	1 1 —	1 1	0 0 0 0	3 2 1 1 2	9 1 1 1 6	8 3 1 2 2	 	1 0 0 0	4 2 1 4 2	16 3 1 4 8	16 3 4 3 6
W.S. Central Arkansas [§] Louisiana Oklahoma Texas [§]	 	1 0 0 1	6 0 1 0 6	10 2 8	2 — — 2	 	1 0 0 1	7 2 1 2 6	3 1 1 1	14 — 1 2 11	2 2	1 0 0 0	9 2 4 3 9	36 5 9 9 13	29 5 4 5 15
Mountain Arizona Colorado Idaho ^{\$} Montana ^{\$} New Mexico ^{\$} Utah Wyoming ^{\$}	1 1 	0 0 0 0 0 0 0 0 0 0	4 2 1 1 1 1 1	3 - 1 1 	3 3 - - - -	1 1	1 0 0 0 0 0 0 0 0 0	6 3 2 1 1 1 2 0	11 4 - 1 - 2	18 3 6 1 1 7	1 1 — — — —	1 0 0 0 0 0 0 0 0	4 3 2 1 1 1 2 2	32 10 8 2 1 3 1 6 1	30 9 10 1 3 1 4 2
Pacific Alaska California Hawaii Oregon [§] Washington	3 3 N 	3 0 3 0 0	17 1 14 0 3 3	37 2 30 N 5	28 28 	4 3 1	4 0 2 0 0	14 4 6 2 3 11	33 2 25 5 1	51 4 40 4 3	2 2 —	5 0 3 0 0	11 1 9 2 3 5	90 1 62 2 12 13	131 2 86 4 20 19
American Samoa C.N.M.I. Guam Puerto Rico	U U N	0 0	0 0	U U N	U U N	U U	0 0	0 1	U U 1	U U	U U	0 0	0 1		2
U.S. Virgin Islands	N U	0	0	N U	N U	U	0	0	U	U	U	0	0	3	

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2006 and 2007 are provisional. * Data for meningococcal disease, invasive caused by serogroups A, C, Y, & 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).

(16th Week)*			Pertussi	s			Bab	ies, anim	al		Bo	ocky Mo	untain sn	otted feve	er
		Prev	vious	-			Prev	vious				Pre	vious		
Reporting area	Current week	<u>52 w</u> Med	<u>eeks</u> Max	Cum 2007	Cum 2006	Current week	<u>52 v</u> Med	veeks Max	Cum 2007	Cum 2006	Current week	<u>52 v</u> Med	veeks Max	Cum 2007	Cum 2006
United States	74	245	951	1,915	4,174	31	100	173	968	1,541	12	30	115	134	300
New England	4	16	54	74	451	8	11	26	126	183	_	0	8	_	_
Connecticut Maine [†]	1	2 2	9 15	15 32	23 23	4 1	4 2	14 8	42 24	38 26	N	0 0	0 0	N	N
Massachusetts New Hampshire	2	0 2	22 28		335 16	1	0 1	17 5	10	94	_	0 0	1 1	_	_
Rhode Island [†] Vermont [†]	_	0	30	_	20	_	0	3	11	5	—	0 0	8	—	_
Mid. Atlantic	1 8	1 32	14 159	16 375	34 510	2	2 16	6 57	39 120	20 215	_	2	0 7	— 12	 15
New Jersey	_	4	12	39	115	_	0	0			_	0	2		3
New York (Upstate) New York City	8	20 0	150 6	233	167	_	0 1	0 5	23	1	_	0 0	2 3	3	2
Pennsylvania	—	9	22	103	228	_	16	56	97	214	_	1	4	9	10
E.N. Central Illinois	21	39 9	79 23	437 50	650 162	1	2 0	18 7	8 3	8 1	_	1 0	6 4	2 1	3 1
Indiana Michigan	2 1	3 10	37 39	9 101	54 131	_	0 1	2 5	4	5	_	0 0	1	1	_
Ohio Wisconsin	18	12 3	56 10	244 33	212 91	_	0 0	9 0	1	2	_	0 0	4 1	_	_2
Wisconsin W.N. Central	5	3 17	116	132	472	2	5	20	49	64	2	2	13	18	6
lowa Kansas		4	16 14	37 53	137 115	1	1	7	6 31	8 25	_	0	1		_
Minnesota		0	96	—	15	_	0	6	3	6	_	0	2	_	1
Missouri Nebraska [†]	2	4 1	10 4	20 7	136 59	1	1 0	6 0	3	5	2	2 0	12 5	18	5
North Dakota South Dakota	_	0 0	9 4	1 14	4 6	_	0 0	7 4	6	2 18	_	0 0	0 0	_	_
S. Atlantic	10	17	162	275	309	11	38	62	538	702	8	10	67	78	253
Delaware District of Columbia	_	0 0	1 2	1 2	1 3	_	0 0	0 0	_	_	_	0 0	3 1	3	4
Florida	5	4	18	91	71	_	0	15	38	176	—	0	4	3	5
Georgia Maryland†	1	0 2	3 7	40	8 59	_	4 5	16 12	36 80	72 118	_	1 1	5 6	2 11	4 6
North Carolina South Carolina [†]	4	0 3	111 11	79 26	63 47	11	10 3	22 11	141 35	93 37	8	4 1	61 5	45 5	228 3
Virginia† West Virginia	_	2	19 19	32 4	53 4	_	11 2	31 8	185 23	182 24	_	2 0	13 2	8 1	3
E.S. Central	1	6	24	70	82	_	4	13	27	57	2	5	27	23	16
Alabama [†] Kentucky	_	1 0	17 5	21 1	21 12	_	1 0	8 4	6	19 4	_	1 0	9 1	5	6
Mississippi	_	0	7	7	10	_	0	1	—	3	_	0	1	_	_
Tennessee [†] W.S. Central	1	3 16	11 147	41 91	39 188	7	2 2	7 34	21 24	31 229	2	4	22 28	18	10 5
Arkansas [†]	_	1	13	2	15		0	5	7	8	_	Ó	10	_	4
Louisiana Oklahoma	_	0 0	2 9	5	5 2	7	0 0	0 9	17	11	_	0 0	1 18	_	_
Texas [†]	_	14	134	84	166	_	0	29	_	210	—	0	6	_	1
Mountain Arizona	22 2	37 6	75 30	387 93	1,029 187	_	3 2	28 10	22 21	37 33	_	0 0	5 2	1	1
Colorado Idaho†	6 1	8 1	23 7	102 12	409 27	_	0 0	0 24	_	_	_	0 0	1 3	1	_
Montana [†]	—	1	8	13	40 19	—	0	2	_	3	_	0	2	_	
Nevada† New Mexico†	_	0 2	9 8	13	27	_	0 0	2	_	1	_	0 0	1 2	_	1
Utah Wyoming [†]	13	10 1	50 8	139 12	297 23	_	0 0	1 2	1	_	_	0 0	0 1	_	_
Pacific	3	33	229	74	483	2	4	12	54	46	_	0	1	_	1
Alaska California	_	1 22	8 226	8	27 292	1	0 3	6 11	25 29	8 38	N	0 0	0 1	N	N
Hawaii		1	7	7	40	N	0	0	N	N	N	0	0	N	N
Oregon [†] Washington	1 2	1 4	6 46	19 40	48 76	_	0 0	4 0	_	_	N	0 0	1 0	N	1 N
American Samoa C.N.M.I.	U U	0	0	U U	U U	U U	0	0	U U	U U	U U	0	0	U U	U U
Guam	_	_	_	—	—	_	_	_	_	_	N	_	_	Ň	N
Puerto Rico U.S. Virgin Islands	U	0 0	1 0	U	U	2 U	1 0	6 0	17 U	30 U	N U	0 0	0 0	N U	N U

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(16th Week)*		S	almonello	osis		Shiga t	oxin-pro	ducing E	. coli (ST	EC)†			Shigellos	is	
			vious					vious					vious	•	
Reporting area	Current week	52 w Med	eeks Max	Cum 2007	Cum 2006	Current week	Med	veeks Max	Cum 2007	Cum 2006	Current week	Med	veeks Max	Cum 2007	Cum 2006
United States	338	833	1,336	7,500	8,291	33	76	179	521	579	166	258	523	2,957	2,769
New England Connecticut	5	18 0	82 68	156 68	791 503	1	2 0	16 5	22 5	106 84	_	2 0	14 8	22 8	124 67
Maine [§]	2	2	14	29	17	_	0	8	10	4	_	0	5	12	_
Massachusetts New Hampshire	2	0 4	53 26	21	246 6	_	0 0	9 4	4	15	_	0 0	11 2	1	52
Rhode Island [§] Vermont [§]	1	2 1	15 6	25 13	13 6	1	0 0	2 4	1 2	1 2	_	0 0	3 2	1	4 1
Mid. Atlantic	43	99	194	1,023	983	8	9	62	66	64	6	14	48	127	253
New Jersey New York (Upstate)	 31	19 27	50 93	52 327	189 198	5	1 3	16 14	1 28	16 20	4	3 3	34 43	7 34	76 74
New York City	1	24 30	50	259	272	—	0 3	4 47	5	8 20	1	5 1	14 6	67	73 30
Pennsylvania E.N. Central	11 45	103	67 198	385 811	324 1,182	3	3 9	47 59	32 62	20 92	8	23	68	19 153	30 284
Illinois	—	27	61	58	347		1	7	2	15	- - 1	10	50	19	102
Indiana Michigan	10 4	15 18	55 35	138 167	122 206	1	1 1	8 6	13	10 19	_	2 2	17 5	18 10	38 67
Ohio Wisconsin	29 2	23 17	56 27	284 164	296 211	1	3 2	18 39	31 11	23 25	7	4 3	14 10	75 31	47 30
W.N. Central Iowa	31 1	48 8	109 26	599 86	546 93	_2	11 2	45 38	70 11	78 13	34	41 2	76 14	588 18	234 9
Kansas	7	7	16	96	80	_	0	4	6	2	_	2	11	9	22
Minnesota Missouri	13 7	11 15	60 35	141 193	128 153	1	3 3	26 13	28 16	30 23	5 28	4 13	24 68	82 457	22 130
Nebraska [§] North Dakota	3	3 0	9 5	34 8	55 6	1	1 0	11 0	9	7	1	1 0	14 18	6 4	26 4
South Dakota	—	3	11	41	31	—	0	5	—	3	—	6	24	12	21
S. Atlantic Delaware	76	225 2	395 10	2,361 18	1,913 23	7	12 0	32 3	136 4	87 1	61	70 0	143 2	1,093 4	652
District of Columbia Florida	36	1 95	4 176	8 1,001	19 871	7	0 2	1 8		 15		0 36	5 76	3 690	3 277
Georgia	19	34	66	408	264		1	7	16	16	22	24	54	318	234
Maryland [§] North Carolina	8 5	14 29	32 130	166 375	78 363	_	2 2	9 11	25 23	6 21	2 3	1 1	10 14	22 19	16 65
South Carolina [§] Virginia [§]	3 4	19 20	55 58	174 180	104 169	_	0 2	3 11	1 23	3 25	2 1	0 2	10 9	16 20	41 16
West Virginia	1	1	31	31	22	—	Ō	5	1		_	ō	2	1	_
E.S. Central Alabama [§]	17 5	53 10	138 70	456 114	433 147	_	4 0	21 5	24 3	40 4	8 5	12 4	75 66	199 76	183 38
Kentucky Mississippi	_	9 12	23 51	93 51	83 81	_	1 0	12 0	8	10	_	2	15 37	23 37	95 26
Tennessee§	12	17	32	198	122	_	2	9	13	26	3	4	14	63	20
W.S. Central Arkansas [§]	19 7	84 14	186 45	305 92	682 229	3	3 0	52 7	25 5	26 2	28 6	37 2	187 10	279 30	340 22
Louisiana	_	17	42	94	58	_	0	1	—	—	—	3	24	57	8
Oklahoma Texas [§]	12	8 46	40 107	83 36	56 339	2 1	0 2	17 48	7 13	1 23	1 21	2 30	9 174	15 177	27 283
Mountain	34 8	52 19	86 45	588 225	570	2	8 2	36 13	60 25	59 15	8 4	26 11	87 35	194 99	217
Arizona Colorado	13	11	30	143	163 158		1	8	9	15	4 3	3	15	30	115 28
Idaho [§] Montana [§]	1	3 2	9 10	32 26	36 31	_	1 0	8 0	4	9	1	0 0	3 13	3 9	6 1
Nevada [§] New Mexico [§]	_	4 5	20 15	45 46	41 50	_	0	5 5	4 9	10 4	—	1 2	20 15	11 25	23 30
Utah	12	4	14	56	71	_	1	14	9	5	_	1	4	5	11
Wyoming [§] Pacific		0 116	4 306	15 1,201	20 1,191	7	0 5	3 24	 56	1 27	— 13	0 32	19 94	12 302	3 482
Alaska		1	5	21	28	N	0	0	N	N	_	0	2	6	4
California Hawaii	49	89 5	218 16	938 53	891 68	4	0 0	5 3	31 3	N 4	9	28 1	81 3	239 11	365 11
Oregon [§] Washington	2 17	7 11	17 83	72 117	108 96	3	1 2	9 22	9 13	15 8	1 3	1 2	6 13	15 31	57 45
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I. Guam	<u>U</u>			U	U 	U N	_	_	U N	U N	U	_	_	U 	U
Puerto Rico U.S. Virgin Islands	8 U	14 0	65 0	118 U	67 U	U	0 0	0 0	U	U	U	0 0	6 0	5 U	2 U

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	Stre	ptococcal	disease, i	invasive, g	roup A		Strept		<i>neumoniae</i> Age <5 yea	e, invasive (ars	disease [†]	
			ious			-		Prev	ious			
Reporting area	Current week	52 w Med	eeks Max	Cum 2007	Cum 2006		Current week	52 wo	eeks Max	Cum 2007	Cum 2006	
United States	100	88	217	1,632	2,024		20	24	93	466	426	
New England	18	2	15	45	69		_	1	4	9	21	
Connecticut	17	0	0	17	—		_	0	0	_	—	
Maine [§] Massachusetts	_	0 0	2 5	7	8 52		_	0 0	2 4	_	21	
New Hampshire	1	0	9	11	2		_	0	4	5	_	
Rhode Island [§] Vermont [§]	_	0 0	6 2	 10	4 3		_	0 0	3 1	3 1	_	
Mid. Atlantic	17	17	39	318	415		6	3	20	42	71	
New Jersey	<u> </u>	2	6	28	72		_	0	4	42	24	
New York (Upstate)	13	5	26	117	126		6	2	14	42	47	
New York City Pennsylvania	4	3 6	9 11	66 107	79 138		N	0 0	3 0	N	N	
E.N. Central	20	14	31	282	471		1	6	14	73	128	
Illinois	—	4	11	63	149		—	1	6	9	33	
Indiana Michigan	8 3	2 3	12 10	42 72	50 102		1	0 1	10 5	8 31	17 31	
Ohio	9	4	14	105	114		_	1	7	24	25	
Wisconsin	_	1	6	—	56		_	0	2	1	22	
W.N. Central	3	4	32	135	154		3	2	10	44	31	
lowa Kansas	2	0 0	0 3	19	32		_	0 0	0 3	3	8	
Minnesota	_	0	29	60	67		3	1	6	25	10	
Missouri Nebraska§	1	2 0	6 2	38 7	28 16		_	0 0	3 2	12 3	8 4	
North Dakota		0	2	8	6		_	Ő	1	1	1	
South Dakota	—	0	2	3	5		_	0	0	—	_	
S. Atlantic	25	20	42	400	390		1	2	11	91	18	
Delaware District of Columbia	_	0 0	2 2	4	4 4		_	0 0	0 1	_	_	
Florida	9	5	16	96	95			0	5	21	—	
Georgia Maryland§	6 4	5 4	11 10	94 71	104 45		1	0 1	5 6	31 26	13	
North Carolina	6	0	26	51	59		_	Ó	0	_		
South Carolina [§]	_	1	5	26 52	28		_	0	3 1	9 2	_	
Virginia [§] West Virginia	_	2 0	10 6	52 6	43 8		_	0	3	2	5	
E.S. Central	1	4	11	66	89		1	0	6	28	5	
Alabama§	N	0 0	0 4	N	N		Ν	0 0	0	Ν	Ν	
Kentucky Mississippi	N	0	4	16 N	26 N		_	0	2	2	5	
Tennessee§	1	3	7	50	63		1	0	6	26	—	
W.S. Central	7	6	61	112	161		4	4	39	88	66	
Arkansas§ Louisiana	_	0 0	2 2	10 3	13 2		_	0 0	2 4	7 18	12 2	
Oklahoma	1	2	5	36	50		_	1	12	21	14	
Texas [§]	6	3	56	63	96		4	1	24	42	38	
Mountain Arizona	8	11 5	42 34	236 97	244 138		3 2	4 2	11 7	79 46	83 52	
Colorado	4	3	9	67	46		_	1	4	19	21	
Idaho [§] Montana [§]	N	0	1 0	5 N	4 N		1 N	0 0	1 0	2 N	1 N	
Nevada§		0	1	1	1		IN	0	1	1	_	
New Mexico [§]	—	1	4	19	31		—	0	4	11	9	
Utah Wyoming [§]	_	1 0	7 1	45 2	22 2		_	0 0	0 0	_	_	
Pacific	1	3	9	38	31		1	0	4	12	3	
Alaska		0	2	8	N		1	0	2	10	_	
California Hawaii	N 1	0 2	0 9	N 30	N 31		N	0 0	0 2	N 2	N 3	
Oregon§	N	0	0	N	N		N	0	0	N	Ν	
Washington	N	0	0	N	N		N	0	0	N	N	
American Samoa C.N.M.I.	U U	0	0	U U	U U		U U	0	0	U U	U U	
Guam	_	_	_	_	_		N	_	_	N	N	
Puerto Rico U.S. Virgin Islands	U	0 0	0 0	 U	U		N U	0 0	0 0	N U	N U	
	Ŭ.	5	v	<u> </u>	Ŭ		5	5	0	~	0	

C.N.M.L: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2006 and 2007 are provisional. Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717). § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		Str			<i>oniae</i> , inva	sive diseas	, U								
			All ages	;				<5 year	s		Syp			d second	ary
	Current	Prev 52 w		Cum	Cum	Current	Prev	ious eeks	Cum	Cum	Current		vious veeks	Cum	Cum
Reporting area	week	Med	Max	2007	2006	week	Med	Max	2007	2006	week	Med	Max	2007	2006
United States	29	43	241	893	992	4	6	32	130	137	117	181	262	2,363	2,684
New England	1	1	7	21	14	1	0	1	2	2	7	4	13	56	64
Connecticut Maine [§]	_	0	0 2	4	3	1	0	0 0	1	1	_	0 0	10 1	6 1	15 3
Massachusetts	_	0	0	-		_	0	0	_	_	1	2	7	34	34
New Hampshire Rhode Island [§]	_	0	0 4	8	3	_	0	0	1	_	1 5	0 0	2	5 9	5 5
Vermont [§]	1	0	4	8 9	8	_	0	1 1	_	1	5	0	3 1	9	5
Mid. Atlantic	2	3	8	61	52	_	0	5	14	8	33	24	45	484	329
New Jersey New York (Upstate)	- 1	0 1	0 5	21	15	_	0	0 4	7	3	2 5	3 2	8 14	57 37	52 45
New York City	—	0	0	_	—	_	0	0	_	_	21	14	35	320	156
Pennsylvania	1	2	6	40	37	—	0	2	7	5	5	4	12	70	76
E.N. Central Illinois	7	10 0	40 2	224 3	220 8	1	1 0	7 1	25 1	39 3	11 2	15 6	32 13	169 35	280 156
Indiana	4	2	30	48	46	_	0	5	3	11	—	1	5	14	26
Michigan Ohio	3	0 5	3 38	173	9 157	1	0 1	1 5	21	1 24	3 5	2 4	10 9	37 68	27 58
Wisconsin	N	0	0	N	N	_	0	0			1	1	4	15	13
W.N. Central	1	1	124	37	16	_	0	15	5	1	2	5	14	50	72
lowa Kansas	1	0	0 1	4	_	_	0	0 0	_	_	2	0 0	3 3	1 7	6 9
Minnesota	_	0	123	_	_	_	0	15	_	_	_	1	5	21	19
Missouri Nebraska [§]	_	1 0	6 1	28 2	16	_	0	2 0	3	1	_	3 0	9 2	21	36 2
North Dakota	_	0	0	_	_	_	0	0	_	_	_	0	1	_	
South Dakota	_	0	3	3	—	—	0	1	2	—	—	0	3	—	
S. Atlantic Delaware	15	21 0	54 1	428 1	557	_2	3 0	8 1	64 1	49	15	41 0	136 3	431 3	580 8
District of Columbia	_	0	2	4	17	_	0	Ó	_	2	1	2	11	48	37
Florida	9 6	12 6	29 17	247 157	255 246	_2	2 0	8 1	58	46 1	_	13 6	23 105	68 20	216 48
Georgia Maryland§		0	1	1	240	_	0	Ó	_	_	6	5	15	20 96	105
North Carolina	_	0	0	—	_	—	0	0	_	—	3	5	23	103	99
South Carolina [§] Virginia [§]	N	0	0 0	N	N	_	0 0	0 0	_	_	4 1	1 4	5 17	29 62	23 43
West Virginia	—	1	17	18	39	—	0	1	5	—	—	0	2	2	1
E.S. Central	2	2 0	7 0	54	81	_	0	3	9	16	15	14	29	232	178
Alabama [§] Kentucky	N 1	0	2	N 12	N 21	_	0 0	0 1	1	3	4	5 1	17 7	73 29	86 21
Mississippi	_	0	0	—	—	_	0	0	_			2	8	36	20
Tennessee§	1	2	7	42	60	_	0	3	8	13	11	6	12	94	51
W.S. Central Arkansas [§]	1	1 0	7 3	50 1	9 4	_	0	2 0	5	3 2	22 4	29 1	56 7	428 35	420 27
Louisiana	_	1	2	17	5	_	0	1	2	1	9	5	30	91	61
Oklahoma Texas [§]	1	0	6 0	32	_	_	0	2 0	3	_	2 7	1 21	5 31	27 275	23 309
Mountain	_	1	5	18	43	_	0	5	6	19	1	8	27	65	134
Arizona	_	0	0	_	_	_	0	0	_	_	_	2	16	11	58
Colorado Idaho§	N	0 0	0	N	N	_	0	0 0	_	_	_	1 0	5 1	5 1	23 2
Montana§	_	0	0	—	—	_	0	0		—	_	0	1	1	_
Nevada [§] New Mexico [§]	_	0	3 0	12	8	_	0	2 0	3	_	1	1	12 5	19 24	29 20
Utah	_	0	5	4	21	_	0	4	2	13	_	0	2	3	2
Wyoming [§]	_	0	3	2	14	—	0	2	1	6	—	0	1	1	
Pacific Alaska	_	0	0	_	_	_	0	0 0	_	_	11	37 0	52 2	448 3	627 5
California	Ν	0	Ō	Ν	Ν	_	0	0	_	_	6	34	49	398	540
Hawaii Oregon [§]	N	0	0	N	N	_	0	0 0	_	_	_	0 0	1 6	1 5	8 5
Washington	N	0	0	N	N	_	0	0	_	_	5	2	11	41	69
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I. Guam	U N	_	_	U N	U N	U	_	_	U	U	U	_	_	U	U
Puerto Rico	N	0	0	N	Ν	_	0	0	_	_	_	2	11	33	43
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Max * Incidence data for reporting years 2006 and 2007 are provisional. * Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720). * Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Max: Maximum.

(16th week)*		Maria		Neu	Wes	Non-neuroinvasive [§]											
	Varicella (chickenpox)					Neuroinvasive Previous						Previous					
	Current	Previous 52 weeks		Cum	Cum	Current	52 weeks		Cum	Cum	Current		vious veeks	Cum	Cum		
Reporting area	week	Med	Max	2007	2006	week	Med	Max	2007	2006	week	Med	Max	2007	2006		
United States	983	794	1,461	14,175	17,469	_	0	178	_	9	_	1	399	_	1		
New England	48	21	74	223	467	_	0	3	_	—	_	0	2	—	_		
Connecticut Maine ¹	_	0 1	0 17	_	109	_	0 0	3 0	_	_	_	0 0	1 0	_	_		
Massachusetts	_	0	1	_	92	_	0	1	_	_	_	ŏ	1	_	_		
New Hampshire Rhode Island ¹	10	5 0	43 0	80	21	_	0	0 0	_	_	_	0 0	0 0	_	_		
Vermont [®]	38	10	66	143	245	_	0	0	_	_	_	0	0	_	_		
Mid. Atlantic	98	103	193	1,823	2,043		0	11	_	_	_	0	4	_	_		
New Jersey	N	0	0	Ń	Ń	_	0	2	—	—	—	0	1	—	—		
New York (Upstate) New York City	N	0	0	N	N	_	0	5 4	_	_	_	0 0	1 2	_	_		
Pennsylvania	98	103	193	1,823	2,043	_	0	2	_	—	_	0	1	—	_		
E.N. Central	249	219	562	4,151	6,767	_	0	43	_	_	_	0	33	_	_		
Illinois Indiana	_	1 0	10 0	54	39	_	0	23 7	_	_	_	0 0	23 12	_	_		
Michigan	62	92	258	1,652	1,967	_	0	11	_	_	_	0	2	_	_		
Ohio Wisconsin	187	122 12	449 64	2,162 283	4,241 520	_	0 0	11 2	_	_	_	0 0	3 2	_	_		
W.N. Central	77	30	136	836	900	_	0	36	_	_	_	0	79	_	_		
lowa	N	0	0	N	N	_	0	3	_	_	_	0	4	_	_		
Kansas Minnesota	19	8 0	52 0	335	160	_	0	3 6	_	_	_	0 0	3 7	_	_		
Missouri	58	15	78	391	697	_	0	14	_	_	_	0	2	_	_		
Nebraska ¹	Ν	0	0	N	N	—	0	9	—	—	—	0	38	—	—		
North Dakota South Dakota	_	0 1	60 15	84 26	18 25	_	0 0	5 7	_	_	_	0 0	28 22	_	_		
S. Atlantic	55	86	176	1,668	1,814	_	0	2	_	_	_	0	7	_	_		
Delaware District of Columbia	_	1 0	6 5	9	37	_	0	0 0	_	—	_	0 0	0 1	_	_		
Florida	26	0	5 42	439	14 N	_	0	1	_	_	_	0	0	_	_		
Georgia	N	0	0	N	N	_	0	1	—	—	—	0	4	—	—		
Maryland ¹ North Carolina	N	0	0	N	N	_	0	2 1	_	_	_	0 0	2 0	_	_		
South Carolina ¹	1	22	72	492	487	_	0	1	_	—	_	0	0	—	_		
Virginia ¹ West Virginia	28	25 25	142 56	237 491	582 694	_	0	0 1	_	_	_	0 0	2 0	_	_		
E.S. Central	9	5	43	121	11	_	0	15	_	3	_	0	16	_	_		
Alabama ¹	9	5	43	119	11	—	0	2	—	—	—	0	0	—	—		
Kentucky Mississippi	N	0	0 2	N 2	N	_	0	2 10	_	3	_	0 0	1 16	_	_		
Tennessee ¹	Ν	Ō	0	N	Ν	_	0	4	_	_	_	Ō	2	_	_		
W.S. Central	384	200	966	4,245	4,143	_	0	58	_	4	_	0	26	_	1		
Arkansas ¹ Louisiana	1	10 1	92 11	171 41	334 28	_	0 0	4 13	_	_	_	0 0	2 9	_	1		
Oklahoma	_	0	0	—	_	_	0	6	_	_	_	0	4	_	_		
Texas ¹	383	172	873	4,033	3,781	_	0	38	_	4	_	0	16	_	_		
Mountain Arizona	63	55 0	105 0	1,088	1,324	_	0 0	61 9	_	2	_	1 0	228 15	_	_		
Colorado	47	22	51	417	675	_	0	10	_	2	_	0	51	_	_		
Idaho [¶] Montana [¶]	N	0 0	0 26	N 134	N N	_	0 0	30 3	_	_	_	0 0	157 8	_	_		
Nevada ¹	_2	0	20		2	_	0	9	_	_	_	0	16	_	_		
New Mexico ¹		4	19	123	252	—	0	1	—	—	—	0	1	—	—		
Utah Wyoming ¹	14	19 0	65 11	404 10	384 11	_	0 0	8 7	_	_	_	0 0	17 10	_	_		
Pacific	_	0	9	20	_	_	0	15	_	_	_	0	51	_	_		
Alaska California	_	0 0	9 0	20	N N	_	0 0	0 15	_	_	_	0 0	0 37	_	_		
Hawaii	_	0	0	_	—	_	0	0	_	_	_	0	0	_	_		
Oregon [®]	N N	0	0	N	N N	_	0	2 0	—	_	—	0	14 2	—	—		
Washington American Samoa	N U	0	0	N U	N U	 U	0	0	 U	 U	— U	0	2	 U	 U		
C.N.M.I.	U		_	U	U	U			U	U	U			U	U		
Guam Puerto Rico	3	 12	30	158	179	_	0	0	_	_	_	0	0	_	_		
U.S. Virgin Islands	Ŭ	0	0	Ŭ	Ű	U	Ő	0	U	U	U	Ő	Ő	U	U		

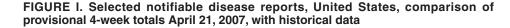
C.N.M.L. Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. Incidence data for reporting years 2006 and 2007 are provisional. Updated weekly from reports to the Division of Vector-Borne Infectious 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 notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except 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/epo/dphsi/phs/infdis.htm.

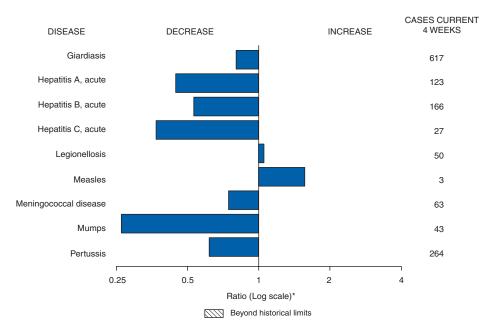
TABLE III. Deaths in 122 U.S. cities,* week ending April 21, 2007 (16th Week)

		n 122 U.S. cities,* week ending April 21, 2007 (16th Week) All causes, by age (years)							All causes, by age (years)						
Poporting Area	All	All P&I [↑] Ages >65 45-64 25-44 1-24 <1 Total Reporting Area		Poporting Area	All	- 6E	45.64	25-44	1-24	<1	P&I [†] Total				
Reporting Area	Ages 581	<u>≥</u> 05 427	110	23-44 22	9	13	53	S. Atlantic	Ages 1,033	<u>≥</u> 65 607	45-64 253	23-44 72	39	62	46
Boston, MA	163	110	39	8	1	5	15	Atlanta, GA	92	42	35	8	6	1	2
Bridgeport, CT	32	25	6	_	1	_	2	Baltimore, MD	158	98	42	11	5	2	13
Cambridge, MA	18	17	_	1	_	_	4	Charlotte, NC	112	74	24	6	5	3	8
Fall River, MA	20	18	1	_	_	1	2	Jacksonville, FL	U	U	U	U	U	U	U
Hartford, CT	61	39	16	2	2	2	10	Miami, FL	128	83	22	14	8	1	2
Lowell, MA	24	16	7	1	_	_	3	Norfolk, VA	65	40	9	6	6	4	2
Lynn, MA	10	8	1	1	_	_	1	Richmond, VA	73	42	20	5	5	1	2
New Bedford, MA	28	25	2	1	—	—	2	Savannah, GA	48	29	18	1	—	—	3
New Haven, CT	28	22	5	1	_	_	3	St. Petersburg, FL	48	33	10	2		3	
Providence, RI	69	49	11	4	3	2	4	Tampa, FL	225	145	57	15	4	4	14
Somerville, MA				_	_	_	_	Washington, D.C.	76	15	15	3	_	43¶	_
Springfield, MA	32	19	8	2	1	2	3	Wilmington, DE	8	6	1	1	_	_	_
Waterbury, CT	26 70	23 56	3 11	1	1	1	2 2	E.S. Central	1,030	690	237	58	29	16	70
Worcester, MA	70	50	11	1	'	1	2	Birmingham, AL	190	130	42	10	4	4	16
Mid. Atlantic	2,102	1,445	479	111	37	30	104	Chattanooga, TN	81	53	21	6	_	1	5
Albany, NY	56	44	7	1	1	3	6	Knoxville, TN	125	86	26	8	5	_	7
Allentown, PA	30	28	2	—	_			Lexington, KY	97	62	24	7	1	3	6
Buffalo, NY	102	66	28	7	_	1	13	Memphis, TN	215	144	51	11	7	2	19
Camden, NJ	66	27	23	10	2	4		Mobile, AL	117	81	20	9	6	1	6
Elizabeth, NJ	19	11	7	1	_	_	1	Montgomery, AL	42	25	15	1	1	_	2
Erie, PA	59	42	14 4	3 2	2	_	3	Nashville, TN	163	109	38	6	5	5	9
Jersey City, NJ	20	12 756	4 247		15	9	1 35	W.S. Central	1,650	1,039	379	127	51	54	76
New York City, NY Newark, NJ	1,075 52	24	17	48 6	15	9 4	6	Austin, TX	101	66	24	5	3	3	5
Paterson, NJ	14	12		2	_	_	_	Baton Rouge, LA	68	42	12	8	3	3	_
Philadelphia, PA	181	110	47	14	6	4	9	Corpus Christi, TX	69	42	20	5	—	2	7
Pittsburgh, PA§	41	22	10	5	1	3	1	Dallas, TX	186	116	36	18	5	11	9
Reading, PA	29	19	9	1	_	_	4	El Paso, TX	52	38	7	4	3	_	1
Rochester, NY	126	95	24	2	4	1	8	Fort Worth, TX	125	78	29	8	1	9	7
Schenectady, NY	36	26	7	1	1	1	1	Houston, TX	435	254	113	44	16	8	18
Scranton, PA	31	27	4	_	_	_	1	Little Rock, AR New Orleans, LA**	84 U	53 U	16 U	4 U	5 U	6 U	4 U
Syracuse, NY	103	81	15	3	4	_	10	San Antonio, TX	306	196	72	23	10	5	15
Trenton, NJ	25	18	5	2	—	—	2	Shreveport, LA	64	45	15	20	10	1	5
Utica, NY	18	14	4	—	_	_	2	Tulsa, OK	160	109	35	6	4	6	5
Yonkers, NY	19	11	5	3	_	_	1								
E.N. Central	1,988	1,323	467	112	38	48	149	Mountain	1,091 131	700 78	259 36	78 10	23 4	31 3	79 12
Akron, OH	42	25	9	4	1	3	—	Albuquerque, NM Boise, ID	32	24	4	2	4	2	3
Canton, OH	44	29	11	3	—	1	6	Colorado Springs, CO	60	35	19	4	1	1	
Chicago, IL	145	88	43	12		2	16	Denver, CO	100	59	26	8	_	7	12
Cincinnati, OH	95	58	28	4	2	3	13	Las Vegas, NV	257	168	52	25	7	5	24
Cleveland, OH	263	181	67	6	2	7	8	Ogden, UT	27	22	4	1	_	_	5
Columbus, OH	204	136	44	16	6	2	19	Phoenix, AZ	201	117	57	15	7	5	11
Dayton, OH Detroit, MI	136 160	92 86	32 58	7 11	2 1	3 4	9 7	Pueblo, CO	39	29	9	1	_	_	3
Evansville, IN	48	35	10	2	_	4	1	Salt Like City, UT	132	94	22	7	3	6	8
Fort Wayne, IN	79	59	17	2	1	_	8	Tucson, AZ	112	74	30	5	1	2	1
Gary, IN	22	6	9	3	2	2	1	Pacific	1,507	1,072	311	67	25	32	121
Grand Rapids, MI	67	42	13	2	3	7	5	Berkeley, CA	18	.,0.1	5	1		3	1
Indianapolis, IN	193	123	42	14	8	6	17	Fresno, CA	182	128	39	8	5	2	13
Lansing, MI	56	40	12	2	1	1	7	Glendale, CA	U	U	U	U	U	U	U
Milwaukee, WI	117	78	27	8	3	1	12	Honolulu, HI	96	72	16	5	1	2	7
Peoria, IL	66	50	8	5	1	2	6	Long Beach, CA	86	67	16	2	_	1	7
Rockford, IL	55	40	8	3	3	1	1	Los Angeles, CA	U	U	U	U	U	U	U
South Bend, IN	44	36	7			1	4	Pasadena, CA	22	17	3	1	1		1
Toledo, OH	92	67	16	6	2	1	3	Portland, OR	128	89	25	7	4	3	8
Youngstown, OH	60	52	6	2	_	_	6	Sacramento, CA	217	148	47	12	5	5	16
W.N. Central	641	409	143	46	23	20	41	San Diego, CA	149	106	31	5	1	6 2	13
Des Moines, IA	63	45	13	3	1	1	7	San Francisco, CA San Jose, CA	112 198	71 141	27 38	9 12	3 3	2 4	17 20
Duluth, MN	31	22	6	1	1	1	4	Santa Cruz, CA	28	25	38	12		4	20
Kansas City, KS	24	17	3	1	2	1	—	Seattle, WA	103	23 77	23	1	_	2	6
Kansas City, MO	87	62	11	6	4	4	7	Spokane, WA	64	46	23 14	2	1	1	6
Lincoln, NE	51	35	11	3	2	_	6	Tacoma, WA	104	76	24	2	1	1	6
Minneapolis, MN	62	39	14	3	3	3	1								
Omaha, NE	71	46	15	4		6	3	Total	11,623††	7,712	2,638	693	274	306	739
St. Louis, MO	115 59	56	37	14	6	2	5								
Ct Doul MAN		40	9	5	3	2	4	1							
St. Paul, MN Wichita, KS	78	47	24	6	1	-	4								

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. [¶] Increased reporting because of backlog filing. ** Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

⁺⁺ Total includes unknown ages.





* 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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