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International Walk to School Week — October 3–7, 2005

October 3–7, 2005, has been designated International Walk to School Week. The week enables children, parents, teachers, and community leaders to be part of a global event celebrating the benefits of walking and the need to create communities that are safe for pedestrians. In 2004, approximately 3 million walkers in 36 countries observed the weeklong event by walking to school.

CDC supports International Walk to School Week and walking and bicycling to school year-round through Safe Routes to School (SR2S) programs. *KidsWalk-to-School* is a community-based SR2S program that encourages walking and bicycling to school. As part of the program, communities build partnerships with schools, police officers, public works agencies, public officials, businesses, and civic associations to create an environment that supports safe and active travel to school. The program was developed in response to low rates of walking, inadequate physical activity levels, and a 300% increase in the proportion of overweight children since the early 1970s.

In 2005, Congress passed a transportation bill that includes \$612 million in funds for SR2S programs to enhance safety for children walking or bicycling to school. State departments of transportation will administer the program, and communities will be able to use the funds to make infrastructure improvements near schools (e.g., removing road hazards, slowing traffic, building sidewalks, and creating walking trails) and enhance safety through enforcement and education programs.

KidsWalk-to-School information is available at <http://www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm>. Information on International Walk to School Week is available at <http://www.walktoschool-usa.org> and <http://www.iwalktoschool.org>. Information on SR2S is available at <http://www.saferoutesinfo.org>.

Barriers to Children Walking to or from School — United States, 2004

Walking for transportation is part of an active lifestyle that is associated with decreased risks for heart disease, diabetes, hypertension, and colon cancer and an increased sense of well being (1). However, the percentage of trips made by walking has declined over time among both children (2) and adults (3). One of the objectives of *Healthy People 2010* (no. 22-14b) is to increase among children and adolescents the proportion of trips to school made by walking from 31% to 50% (4). In 1969, approximately half of all schoolchildren walked or bicycled to or from school, and 87% of those living within 1 mile of school walked or bicycled (5). Today, fewer than 15% of children and adolescents use active modes of transportation (2). This report examines data from the 2004 ConsumerStyles Survey and a follow-up recontact survey to describe what parents report as barriers to their children aged 5–18 years walking to or from school. Distance to school was the most commonly reported barrier, followed by traffic-related danger. Comprehensive initiatives that include behavioral, environmental, and policy strategies are needed to address these barriers to increase the percentage of children who walk to school.

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Notifiable Disease Morbidity and 122 Cities Mortality Data

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The ConsumerStyles and recontact surveys are conducted annually by a market-research firm with technical assistance from CDC. For the ConsumerStyles survey, stratified random sampling (by region, household income, population density, age, and household size) was used to identify 10,000 potential respondents from a larger consumer-mail panel of approximately 600,000 adults aged ≥ 18 years. A low income/minority supplement and a households-with-children supplement were used to ensure adequate numbers of respondents from those groups. Of the 10,000 identified, 6,207 responded to the initial survey (62% response rate). The recontact survey was mailed to all respondents within 4–6 months of the initial survey and had a 68% response rate ($N = 4,213$). For that survey, parents of children aged 5–18 years were asked how many times their youngest child walks to or from school during a usual week and whether one or more of six barriers (too dangerous because of traffic, too dangerous because of crime, live too far away, no protection from the weather, the school does not allow it, and other reasons) prevents that child from walking to school. Results were weighted to reflect the age, race/ethnicity, sex, income, and household size of the U.S. adult population, as determined by the 2000 U.S. Census.

Of the 1,705 adults who reported having a child aged 5–18 years, 1,588 (93%) answered the walk-to-school questions for their youngest child. Approximately 17% reported that their child walked to or from school at least once per week during a usual week. Among students who walked to school, the average number of trips per week to or from school was 7.1 (range: 1–10). The percentage of students who walked to or from school was higher among those aged 5–11 years than among those aged 12–18 years (18.7% versus 15.3%); this difference was not significant ($p = 0.08$).

The most commonly reported barrier was distance to school (61.5%), followed by traffic-related danger (30.4%), then weather (18.6%). Fifteen percent of parents cited an “other” barrier, 11.7% reported crime as a barrier, and 6.0% reported school policy as a barrier; 15.9% (95% CI = 14.1%–18.0%) of parents selected the response, “It is not difficult for my child to walk to school.” The frequency with which barriers were reported by parents varied slightly by age (5–11 years versus 12–18 years), although the relative ranking of the barriers did not differ by age (Table). Barriers also varied by walking status (walker versus nonwalker), with the largest difference observed for distance (72.9% [CI = 70.1%–75.5%] versus 6.8% [CI = 4.5%–10.4%]) (Figure).

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Editorial Note: In this study, distance to school was the most commonly cited barrier to walking to and from school. A simi-

TABLE. Percentage of parents reporting barriers to their youngest child walking to or from school, by barrier and age of child — United States, 2004

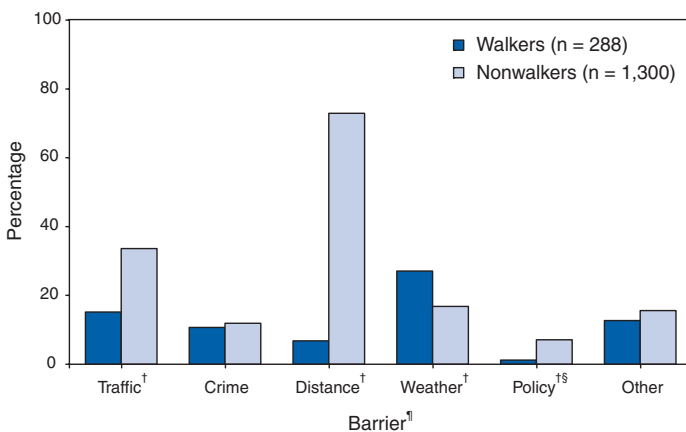
Barrier	5–11 years*		12–18 years [§]		Total [¶]	
	%	(95% CI) [†]	%	(95% CI)	%	(95% CI)
Too dangerous because of traffic	37.0	(33.5–40.7)	20.7	(17.8–23.9)	30.4	(27.9–33.0)
Too dangerous because of crime	14.2	(11.5–17.4)	8.1	(6.3–10.3)	11.7	(9.9–13.8)
Live too far away	58.3	(54.6–61.9)	66.1	(62.3–69.6)	61.5	(58.8–64.1)
No protection from the weather	20.4	(17.5–23.6)	16.0	(13.4–18.9)	18.6	(16.5–20.8)
The school does not allow it	7.3	(5.5–9.5)	4.3	(3.0–6.1)	6.0	(4.9–7.5)
Other reasons	17.0	(14.2–20.1)	12.4	(10.1–15.2)	15.1	(13.2–17.3)

* n = 894.

† Confidence interval.

§ n = 694.

¶ N = 1,588.

FIGURE. Percentage of parents (N = 1,588) reporting barriers to their youngest child walking to or from school, by walkers versus nonwalkers* — United States, 2004

* Walkers were defined as students who walked to or from school at least once per week. Nonwalkers were those who walked to school zero times per week.

† Significant difference between walkers and nonwalkers ($p < 0.05$).§ Coefficient of variation is > 0.30 for the walker estimate.

¶ Traffic = too dangerous because of traffic; Crime = too dangerous because of crime; Distance = student lives too far from school; Weather = no protection from the weather; Policy = school does not allow students to walk to or from school.

lar study conducted in 1999 (6) also found distance to be the most commonly cited barrier (55%). This finding might be attributable, in part, to an increase of 2 million students from 1969 to 2001 with a corresponding decrease in the number of schools, from 70,879 in 1969 to 69,697 in 2001 (7). As a result, a greater percentage of students might live farther than 1 mile from their schools.

Study results also indicated that students aged 5–11 years were more likely to walk to school than were those aged 12–18 years; however, this difference was not significant. One possible reason for this difference is that elementary schools are likely to be closer to children's homes because they outnumber junior and senior high schools in the United States (more than 70,000 elementary schools compared with approximately 28,000 jun-

ior and senior high schools) (7). This hypothesis is supported by the finding that parents of older children more frequently cited distance as a barrier, whereas parents of younger children more frequently cited other barriers.

The findings in this report are subject to at least three limitations. First, the data are subject to sampling biases because data could be collected only from parents who chose to respond to the survey. Second, because the age of each respondent's youngest child was derived from the ConsumerStyles survey, which was mailed 4–6 months earlier, some of the children's ages might have been misclassified. Finally, the survey did not ask parents how far the child lived from school, about whether the child attended a public or private school, or about the presence of sidewalks.

Efforts to overcome barriers to walking to school include the nationwide Safe Routes to School (SR2S) initiative, which has received federal and state funding. SR2S programs are designed to increase the percentage of students who walk or bicycle to school by addressing barriers through the "four Es" (engineering, enforcement, education, and encouragement). For example, to address the distance barrier, schools can arrange for children to meet within a mile of school and proceed to school in "walking school buses," in which an adult "driver" and an adult "caboose" escort several children walking together. This strategy might also alleviate fear of crime. To address the traffic barrier, programs might use engineering and enforcement approaches, such as crossing signals (engineering) and better enforcement of speed limits (enforcement). To further allay parental fears of traffic danger, programs might teach children pedestrian skills in the classroom (education). For example, one comprehensive SR2S program in Marin County, California, that uses all of the "four Es" experienced a 64% increase in walking and a 114% increase in bicycling by the second year of their program (8). The SR2S program in Tempe, Arizona, has made engineering improvements to enhance pedestrian safety and has promoted walking through an annual Walk to School Day, in which more than 8,000 students from 20 elementary schools participate. The program has con-

tributed to a decrease in automobile traffic near elementary schools during morning and afternoon rush hours (9). Implementing SR2S programs and removing or alleviating barriers that prevent children from walking to school might foster progress toward achieving the national health objective. Information about programs and resources related to SR2S is available at <http://www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm>, <http://www.walktoschool-usa.org>, <http://www.walkingschoolbus.org>, and <http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/safe-routes-2004>.

References

1. US Department of Health and Human Services. Physical activity and health: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 1996.
2. US Environmental Protection Agency. Travel and environmental implications of school siting. Washington, DC: US Environmental Protection Agency; 2003. Available at http://www.epa.gov/smartgrowth/pdf/school_travel.pdf.
3. US Department of Transportation, Federal Highway Administration. Summary of travel trends: 2001 National Household Transportation Survey. Washington, DC: US Department of Transportation; 2004. Available at <http://nhts.ornl.gov/2001/pub/STT.pdf>.
4. US Department of Health and Human Services. Healthy people 2010: understanding and improving health. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at <http://www.health.gov/healthypeople>.
5. US Department of Transportation, Federal Highway Administration. 1969 National Personal Transportation Survey: travel to school. Washington, DC: US Department of Transportation; 1972. Available at <http://www.fhwa.dot.gov/ohim/1969/q.pdf>.
6. CDC. Barriers to children walking and biking to school—United States, 1999. *MMWR* 2002;51:701–4.
7. US Department of Education, National Center for Education Statistics. Digest of education statistics, 2003. Washington, DC: US Department of Education; 2004. Available at <http://nces.ed.gov/programs/digest/d03/index.asp>.
8. Staunton CE, Hubsmith D, Kallins W. Promoting safe walking and biking to school: the Marin County success story. *Am J Public Health* 2003;93:1431–4.
9. IWALK Steering Committee. Tempe transit/pedestrian program. Chapel Hill, NC: Pedestrian and Bicycle Information Center, University of North Carolina. Available at http://www.iwalktoschool.org/award_app_template.cfm?ID=121.

Outbreak of Pruritic Rashes Associated with Mites — Kansas, 2004

In late August 2004, the Kansas Department of Health and Environment (KDHE) received reports from the Crawford County Health Department (CCHD) of approximately 300 residents of Pittsburg, Kansas (2000 population: 19,243), seeking care for a pruritic rash of unknown etiology. In early September, three neighboring counties in Kansas and two neighboring states (Missouri and Nebraska) also reported such

cases. These events prompted KDHE to request assistance from CDC. Additional cases subsequently were reported in Oklahoma and Texas. This report describes the investigation in Crawford County, Kansas, by public health agencies and entomologists to identify the etiology of the pruritic rash and to assess the extent of the outbreak. A microscopic itch mite (*Pyemotes herfsi*) was identified as the likely cause of the outbreak, which affected an estimated 54% of the Crawford County population (2000 population: 38,242). Entomologists confirmed the return of *P. herfsi* in Kansas in August 2005 and have recommended prevention measures, such as use of DEET-containing products, to help minimize exposure for persons outdoors.

Through initial reports, KDHE characterized the rash as closely resembling an insect bite (i.e., pruritic, erythematous, and papular), but few persons reported seeing or feeling a bite. The rash, often with multiple papules, occurred primarily on the limbs, face, and neck. The rash typically resolved after a few days through use of topical steroids. Initial reports did not clearly associate rash with age, sex, or occupation among affected persons.

Entomologists from Kansas State University (KSU), Pittsburg State University (PSU), and the University of Nebraska—Lincoln, hypothesized that mites from the *Pyemotes* genus probably caused the insect bites. They based their hypothesis on the similar distribution of rash among persons with reported bites and observations of an infestation of a species of *Pyemotes* mites in leaf galls* in pin oak trees in the area. KDHE, CCHD, and CDC conducted a community-based survey to assess the extent of the outbreak in Crawford County and to characterize the nature of the rash. Environmental samples were collected to help characterize the mite and to examine the extent of the mite population in Crawford County.

After initial investigation of case reports and consultation with a dermatologist, a case was defined as a rash or three or more pruritic, erythematous, and papular lesions or rash that occurred during August 1–September 23, 2004, in a Crawford County resident. Investigators developed an instrument to gather individual demographic, rash, and environmental exposure data.

Investigators used a modified cluster-sampling method to estimate the extent of pruritic rash among Crawford County residents (1). They created a random sample of 30 clusters by using data from the 2000 U.S. Census. The clusters were assigned with a probability proportionate to the size of the population; every person in the population had the same probability for selection. Within each cluster, seven households were randomly selected for interview. Investigators recorded

* Irregular plant growths caused by reactions between plant hormones and growth-regulating chemicals produced by some insects or mites.

the age, sex, and case status of all persons in each selected household and then systematically selected one person in each household for interview. If one household member had a rash or lesion consistent with the case definition, that person was interviewed. If more than one person had a rash or lesion consistent with the case definition, investigators used the randomly generated list of numbers to select an interviewee from among them. If no one in the household had a rash consistent with the case definition, one person was selected randomly.

Each survey team had at least one member who was a health-care provider and who completed the checklist of clinical signs for persons who had rash or lesions at the time of interview. In addition, investigators collected a minimum of two pin oak leaves with galls during the community-based survey at each surveyed home that had at least one pin oak tree on its lot.

Of 187 respondents selected for interview, 108 (58%) had a rash consistent with the case definition. The mean age of all case respondents was 39.0 years (range: 2.0–80.0 years; median: 37.0 years). Sixty-four (59%) were female, and most classified themselves as white (103 [95%]) and non-Hispanic (104 [97%]). The mean age of the 79 (42%) persons interviewed whose condition was not consistent with the case definition was 54.0 years (range: 2.0–93.0 years; median: 59.0 years).

Three (3%) respondents whose condition was consistent with the case definition recalled having similar rash or lesions before August 1, 2004; more than 70% recalled rash onsets after August 20 (Figure 1), when students began to return to PSU for the fall semester and residents in the county began attending PSU functions, such as football games.

Forty-eight (48%) and 37 (37%) of the 100 case respondents who answered the question regarding location of rash

reported rash on the neck and arms, respectively. Other commonly affected areas included the shoulders and upper torso. Of the 65 (60%) respondents without active rash or lesions at time of interview and who reported rash duration, 38 (62%) reported that the rash resolved within 1–7 days. Fewer than 20% of persons with rash reported accompanying symptoms, including fever, runny nose, and wheeze.

A total of 103 (95%) case respondents reported spending time outdoors 24 hours before onset of rash or lesions; 12 (12%) of them used a DEET-containing product. Six (6%) case respondents recalled an insect bite within 24 hours before the appearance of the rash or lesion. Respondents consistently described the rash as extremely itchy. Forty-four (42%) of the 106 case respondents who reported scratching their rash indicated that scratching did not alleviate the itch, and 44 (42%) reported that scratching the rash caused pain. Seventy-six of the 105 (72%) case respondents who provided an answer to treatment of rash reported using an over-the-counter (OTC) or prescription medication to alleviate the itch; topical steroids were used most frequently.

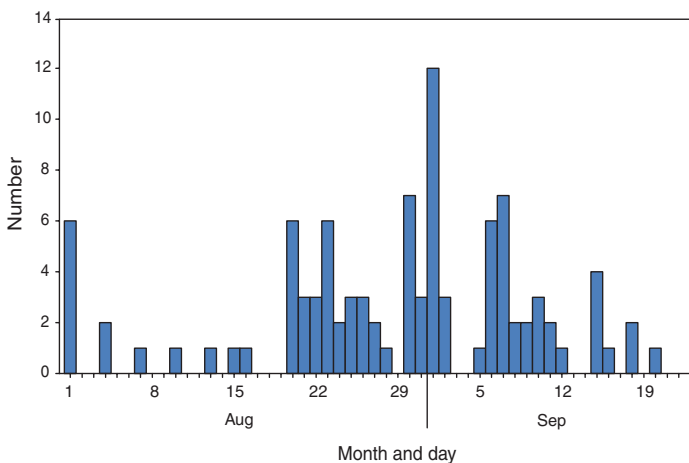
Health-care providers evaluated 40 (37%) case respondents who had rash at the time of interview. Approximately 77% of rashes were erythematous, well demarcated, and papular; less than 22% were pustular, macular, or confluent.

Household-specific data also were collected from 29 of the 30 clusters that had households available for interview. In 28 of the remaining 29 clusters, at least one household had a resident whose rash was consistent with the case definition. Most of the households with at least one case were located in or near Pittsburg or Girard, two urban areas in Crawford County. In 70 (37%) of the 187 households, all residents reported no rash or had a rash that was not consistent with the case definition. Lots of 90 (48%) of the 187 households had at least one pin oak tree with leaf galls.

The 187 households surveyed had a total of 504 residents. Information about case status was missing for nine (2%) of the household residents. Mean age of the household residents ($n = 499$) was 37.4 years (range: 0.6–101.0 years; median: 33.0 years). Residents with rashes typically were younger (mean age: 33.1 years; range: 0.6–82.0 years; median: 27.5 years) than residents without rashes (mean age: 43.6 years; range: 0.8–101.0 years; median: 43.0 years).

Data on household residents were used to calculate the prevalence of pruritic rash in Crawford County through a weighted analysis (2). Approximately 54% of the county population was affected by pruritic rash. Investigators hypothesized that environmental risk factors for having rash, including residence in an urban area or presence of a pin oak tree, varied by age. The regression model revealed a statistical interaction between

FIGURE 1. Number of rash cases, by onset date — Crawford County, Kansas, August 1–September 23, 2004



risk factors and age. For ease of analysis, age was stratified by the median age of 33 years. For residents aged ≤ 33 years, the odds of having rash were 4.9 times greater for an affected resident of an urban area compared with those aged ≤ 33 years who did not reside in urban areas, and 3.9 times greater for residents who had at least one pin oak tree on their lot compared with those aged ≤ 33 years who did not report having a pin oak on their lot. Conversely, among residents aged > 33 years, no statistically significant association was found (Table).

Of the 20 clusters identified with pin oak leaf galls, 17 clusters had leaf galls infested with a *Pyemotes* spp. itch mite. Fifty-nine percent of galls analyzed were infested with a *Pyemotes* spp. itch mite, indicating that the density and population of mites present for dispersal were high. Entomologists later characterized the species of itch mite as *P. herfsi*.

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Editorial Note: The species of mite (*P. herfsi*) that likely was associated with the pruritic rash (Figure 2) in Crawford County is not native to the United States, and the Kansas outbreak might be the first recorded domestic outbreak involving this mite. *P. herfsi*, a European species of itch mite that preys on gall-making midge larvae on oak leaves, was first documented in Europe in 1936. The characteristics of the rash described by clinicians and affected persons in Kansas support the findings of an itch mite because these bites produce a rash-like dermatitis consistent with the outbreak. Participants also consistently reported multiple pruritic bites without recalling being bitten, supporting the source of bites as other than mosquitoes or chiggers. Humans typically feel itch from mite bites 10–16 hours after contact (A Broce, PhD, KSU, personal communication, 2005).

Historically, cooler temperatures and moist conditions have led to increased mite populations. Similar trends have been observed in previous occurrences involving itch mites, and

FIGURE 2. Pruritic rash caused by the microscopic itch mite *Pyemotes herfsi*



Photo/A Broce, L Zurek, Kansas State University

researchers attributed a larger mite population and increased reports of pruritic bites among persons who handled straw to mild winter weather and cooler summer temperatures (3). Similar trends in temperature conditions in 2004 probably promoted the oak gall infestation with itch mites in Crawford County. Entomologists hypothesized that larvae of midges, or small nonbiting flies, were responsible for the leaf galls on pin oaks, and midges often served as prey for the mites. The increased exposure among persons in predominantly urban areas probably resulted from the frequent use of pin oak trees in landscaping, especially on the PSU campus. Similarly, an increased risk for rash among persons aged ≤ 33 years, especially if they resided in an urban area or had a pin oak on their lot, might have derived from their activities outdoors and type of clothing worn outside.

In the spring of 2005, entomologists at KSU and the University of Nebraska–Lincoln, observed colonies of midges on the leaves again in high proportions in areas in Kansas and Nebraska (4). After itch mites feed on the midge larvae inside the galls, an estimated 16,000 mites can emerge from the galls from one leaf and, when carried by the wind or falling from trees, can provide a ubiquitous source of exposure to persons nearby. According to KDHE and entomologists, reports of rash occurred again in Kansas in the late summer of 2005, and *P. herfsi* has been identified in leaf samples collected from Lincoln, Nebraska, and Pittsburg, Kansas.

In 2004, KSU and CCHD issued several press releases with recommendations to minimize exposure to the itch mites. Suggested prevention measures included using a DEET-

TABLE. Environmental risk factors for rash, by age group — Crawford County, Kansas, 2004

Age group (yrs)/Risk factor	OR*	(95% CI†)
≤ 33		
Reside in an urban area	4.9	(2.6–9.2)
≥ 1 pin oak with galls on lot	3.9	(2.0–7.5)
> 33		
Reside in an urban area	1.6	(1.0–2.7)
≥ 1 pin oak with galls on lot	1.3	(0.8–2.1)

* Odds ratio.

† Confidence interval.

containing product before going outdoors, because DEET is known to repel some mite species (5). Anecdotal reports from the Kansas outbreak, however, suggest that DEET might not provide complete protection against *P. herfsi*. Other recommendations include wearing light-colored and tightly woven clothing and immediately washing clothes and showering with soap and water after spending time in wooded or grassy areas. Persons working in the garden or yard should handle clippings and fallen leaves with gloves. Residents in areas where pin oaks predominate should keep windows closed. Similar precautions were recommended for the summer and fall of 2005. Treating the rash with calamine lotion, an oral antihistamine, or an OTC hydrocortisone product can help reduce the itching. Spraying the trees with insecticide is not recommended because the mites remain protected inside the leaf galls.

References

1. Hoshaw-Woodard S. Description and comparison of the methods of cluster sampling and lot quality assurance sampling to assess immunization coverage. Geneva, Switzerland: World Health Organization; 2001.
2. Brogan D, Flagg D, Deming M, Waldman R. Increasing the accuracy of the Expanded Programme on Immunization's cluster survey design. *Ann Epidemiol* 1994;4:302–11.
3. Booth BH, Jones RW. Epidemiological and clinical study of grain itch. *JAMA* 1952;150:575–9.
4. Peter M. Beware of oak leaf gall mites; they may be coming back. K-State Research and Extension News; May 6, 2005. Available at http://www.oznet.ksu.edu/news/sty/2005/oakleaf_gallmites050605.htm.
5. World Health Organization, Division of Control of Tropical Diseases. Vector control—methods for use by individuals and communities. Geneva, Switzerland: World Health Organization; 1997. Available at http://www.who.int/docstore/water_sanitation_health/vectcontrol/ch27.htm#mites.

Use of Dietary Supplements Containing Folic Acid Among Women of Childbearing Age — United States, 2005

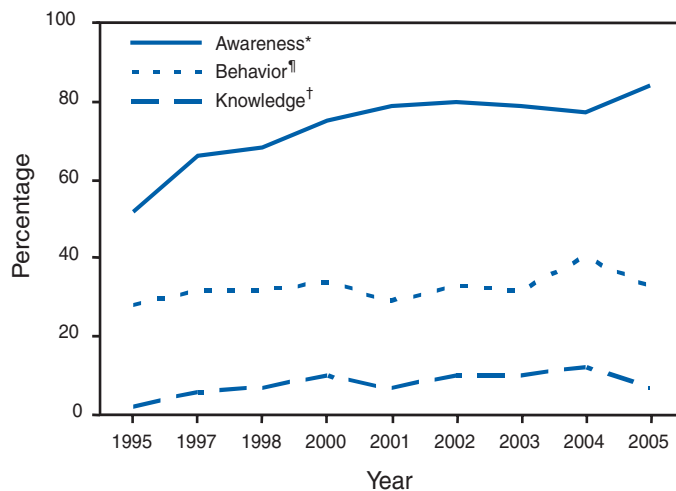
Neural tube defects (NTDs) are serious birth defects of the spine (spina bifida) and brain (anencephaly), affecting approximately 3,000 pregnancies each year in the United States (1). Daily periconceptional consumption of 400 μg of folic acid, as recommended by the Public Health Service (PHS) since 1992, reduces the occurrence of NTDs by 50%–70% (2). The Food and Drug Administration ordered mandatory fortification with folic acid of U.S. cereal grain products, beginning in 1998. However, despite a 26% reduction in NTDs, not all women of childbearing age receive adequate levels of folic acid from their diets (1). Therefore, increasing the number of women who take dietary supplements containing 400 μg of folic acid daily remains an important component of NTD

prevention (3). This report summarizes results from the 2005 March of Dimes Gallup survey, which determined a decrease in the proportion of childbearing-aged women who reported taking folic acid in dietary supplements daily,* from 40% in 2004 to 33% in 2005, returning to a level consistent with that reported during 1995–2003 (Figure). These results emphasize the need for innovative programs to increase folic acid consumption to further reduce NTDs.

The Gallup survey has been conducted since 1995 using a random-digit-dialed telephone interview of a proportionate stratified sample. Response rate for the 2005 survey was 32%, with 2,647 women aged 18–45 years responding; response rates for previous surveys ranged from 24% to 52%. Statistical estimates were weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones. The margin of error for estimates based on the total sample was $\pm 2\%$. To assess awareness of folic acid, respondents were asked, “Have you

* Women who reported taking a multivitamin, prenatal vitamin, or a folic-acid-only supplement in response to the question “What type of vitamin or mineral supplements do you take?” were coded as taking a vitamin containing folic acid (consistent with all previous surveys).

FIGURE. Percentage of women aware of* or knowledgeable about† folic acid and percentage using vitamins containing folic acid daily, by year — United States, 1995–2005§



* Includes women who responded yes to the question, “Have you ever heard, read, or seen anything about folic acid?”

† Includes women who said they knew that folic acid should be taken before pregnancy, in response to the question, “What have you heard, read, or seen about folic acid?”

§ Estimates weighted to reflect the total population of women aged 18–45 years.

¶ Women who reported taking a multivitamin, prenatal vitamin, or a folic-acid-only supplement in response to the question “What type of vitamin or mineral supplements do you take?” were coded as taking a vitamin containing folic acid (consistent with all previous surveys).

ever heard, read, or seen anything about folic acid?" To assess knowledge about folic acid, respondents were asked, "What have you heard, read, or seen about folic acid?" In addition, the survey asked questions regarding motivating factors and barriers to taking folic acid.

In the 2005 survey, 33% of women of childbearing age reported taking folic acid daily, compared with 40% in 2004. This decrease was consistent across most demographic characteristics, with nonwhite, young, less educated, and lower-income women the least likely to report taking folic acid daily (Table 1). The percentage of women reporting awareness of folic acid increased from 78% in 2004 to 84% in 2005, an all-time high for the survey. However, the percentage of women knowing that folic acid prevents birth defects remained unchanged at 25%, and the percentage of women knowing that folic acid should be taken before pregnancy decreased from 12% in 2004 to 7% in 2005, the lowest percentage since 1997 (Figure).

Twenty-six percent of women aged 18–45 years reported dieting during the preceding 6 months, relatively unchanged from 24% in 2004 (4). Of the women reporting dieting, 37% were taking folic acid daily and were nearly 30% more likely

TABLE 1. Percentage of women aged 18–45 years who reported taking folic acid daily, by selected sociodemographic characteristics — United States, 2003–2005*

Characteristic	2003 %	2004 %	2005 %
Race			
White	34	43	36
Nonwhite	28	31	23
Ethnicity			
Hispanic	29	38	27
Non-Hispanic	33	40	34
Age group (yrs)			
18–24	25	31	24
25–34	34	39	36
35–45	35	46	37
Education			
Less than high school	21	19	20
High school	28	32	31
College (any)	37	48	35
Annual household income			
<\$25,000	24	30	27
\$25,000–\$39,999	31	40	28
\$40,000–\$49,999	39	48	37
≥\$50,000	38	46	38
Pregnancy status			
Pregnant	82	81	90
Not pregnant	30	37	31
Total	32	40	33

* Estimates weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones.

to be taking folic acid than nondieters (odds ratio [OR] = 1.27; 95% confidence interval [CI] = 1.13–1.41). Dieters were 50% more likely than nondieting women to believe that folic acid is important for women of childbearing age (OR = 1.50; CI = 1.34–1.68). Twenty-seven percent of dieting women reported being on low-carbohydrate diets, down substantially from 48% in 2004. Of the women on low-carbohydrate diets, 37% reported taking folic acid daily, down from 49% in 2004 (Table 2). In addition, 37% of women on other diets reported taking folic acid daily, down from 40% in 2004. Whereas in 2004 women on low-carbohydrate diets were 50% more likely to take folic acid daily than women on other diets, in 2005 folic acid consumption was similar among women in the two dieting groups (OR = 1.00; 95% CI = 0.81–1.24. Although

TABLE 2. Selected characteristics among women aged 18–45 years, by dieting behavior — United States, 2005*†

Characteristic	Dieting		Nondieting %
	Low-carbohydrate diet %	Other diet %	
Age group (yrs)			
18–24	18	16	28
25–34	28	38	33
35–45	53	47	40
Marital status			
Single/Never married	20	25	34
Married	69	66	57
Divorced	9	7	6
Separated	2	1	2
Widowed	1	1	1
Pregnancy status			
Not pregnant	96	98	95
Pregnant	1	2	5
Race			
White	86	82	79
Nonwhite	13	18	20
Ethnicity			
Hispanic	9	7	9
Non-Hispanic	91	93	91
Education			
Less than high school	8	6	10
High school	31	29	29
College (any)	55	56	53
Annual household income			
<\$25,000	19	18	24
\$25,000–\$39,999	16	18	18
\$40,000–\$49,999	16	7	10
≥\$50,000	46	52	42
Take folic acid daily			
Yes	37	37	32
No	63	63	68

* Refused/don't know responses not included.

† Estimates weighted to reflect the total population of women aged 18–45 years in the contiguous United States who resided in households with telephones.

in 2004, low-carbohydrate dieters were 30% more likely to believe that folic acid is important for women of childbearing age than women on other diets, in 2005, no difference was evident between women in these dieting groups (OR = 0.95; 95% CI = 0.76–1.18).

Women were asked questions to determine why they do or do not take vitamin or mineral supplements. Women who did not report taking supplements were asked, “Why do you not take any vitamin or mineral supplements on a daily basis?” The most common barriers women noted were forgetting to take supplements (28%), perceiving they do not need them (16%), and believing they get needed nutrients and vitamins from food (9%).

In 2005, to determine what might motivate women not taking vitamins or supplements to begin taking folic acid daily, respondents were asked, “For what specific need would you start taking a vitamin or mineral supplement?” The most common reported needs were being sick or in poor health (20%), a doctor’s recommendation (20%), the need for energy (9%), being pregnant (8%), being deficient in any vitamins or minerals (7%), balancing the diet (6%), and keeping bones strong (6%). In addition, 11% cited no specific need that would motivate them to begin taking a vitamin or supplement. Among women who reported not consuming a vitamin or mineral supplement daily, 31% indicated they had received a doctor’s recommendation. Older women were more likely to report receiving a doctor’s recommendation (aged 35–45 years, 38%; 25–35 years, 38%; 18–24 years, 24%).

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Editorial Note: From 2004 to 2005, the percentage of women of childbearing age taking folic acid daily decreased from 40% to 33%. At least two possible explanations exist for this decline. First, 2004 survey results might have indicated a true increase in women’s reported behavior that was not sustained; hence, in 2005, folic acid consumption returned to a level consistent with survey results since 1995. The reasons for such an increase in 2004 remain unclear. A second possible explanation is that the 2004 survey data were an anomaly and did not accurately reflect women’s daily use of folic acid. The same sampling design and methodology have been used each year; however, multiple factors could have produced anomalous findings (e.g., nonrepresentative sampling or low response rates).

The 2005 findings indicated that only 33% of women of childbearing age reported consuming folic acid daily. Data from NHANES indicate no change during 1991–2000 in

reported consumption of 400 μg of folic acid daily among nonpregnant women aged 15–44 years (CDC, unpublished data, 2005). Given that reported folic acid consumption through supplementation has changed minimally during the preceding decade, new programs are needed. As one example, CDC is developing a program focused on ensuring that young women achieve optimal nutrition by encouraging that women in college consume a daily multivitamin containing 400 μg of folic acid. Fortification of food is a second approach demonstrated to reduce occurrence of NTDs (1). A recent report indicated a significant decrease in the prevalence of NTDs after implementation of folic acid fortification, reiterating the important role of fortification in reducing NTDs (5). Another report indicated an increase in blood folate levels for all segments of the U.S. population since fortification (6). Given the reported success of fortification and given that only one third of women report folic acid supplement use, another approach to reducing NTDs might be to develop programs that encourage women to consume folic acid from fortified foods. These foods, especially breakfast cereals, might be an easy alternative to ensure that women consume 100% of the recommended daily amount of folic acid every day.

The reduction in the proportion of women who reported being on low-carbohydrate diets is consistent with other reports indicating a diminishing trend in use of low-carbohydrate diets (7). The slowing of this trend could facilitate NTD prevention because more women might be consuming foods fortified with folic acid (e.g., breads), which are the largest contributor of folate to diets in the United States (8).

The findings in this report are subject to at least two limitations. First, the low response rate for this survey might have produced biased results. Second, because the majority of respondents to the survey were white, had at least some college, and had a median household income of approximately \$50,000, the survey might not reflect the total U.S. population of women of childbearing age.

With 67% of women not consuming a vitamin containing folic acid daily, innovative programs are needed to prevent NTDs. These programs must effectively address motivations and barriers regarding folic acid consumption to meet the national health objective for 2010 of increasing to 80% the proportion of women consuming 400 μg of folic acid daily (objective no. 16–16a) (9).

References

1. CDC. Spina bifida and anencephaly before and after folic acid mandate—United States, 1995–1996 and 1999–2000. *MMWR* 2004;53:362–5.
2. Medical Research Council Vitamin Study Research Group. Prevention of neural tube defects: results of the Medical Research Council Vitamin Study. *Lancet* 1991;338:131–7.

- CDC. Recommendation for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. *MMWR* 1992;41(No. RR-14).
- CDC. Use of vitamins containing folic acid among women of child-bearing age—United States, 2004. *MMWR* 2004;53:847–50.
- Williams LJ, Rasmussen SA, Flores A, Kirby RS, Edmonds LD. Decline in the prevalence of spina bifida and anencephaly by race/ethnicity: 1995–2002. *Pediatrics* 2005;116:580–6.
- Pfeiffer CM, Caudill SP, Gunter EW, Osterloh J, Sampson EJ. Biochemical indicators of B vitamin status in the US population after folic acid fortification: results from the National Health and Nutrition Examination Survey 1999–2000. *Am J Clin Nutr* 2005;82:442–50.
- The NPD Group. Dieting trends—United States, 2004–2005. *Dieting Monitor* 2005;2(8).
- Dietrich M, Brown CJP, Block G. The effect of folate fortification of cereal-grain products on blood folate status, dietary folate intake, and dietary folate sources among adult non-supplement users in the United States. *J Am Coll Nutr* 2005;24:266–74.
- US Department of Health and Human Services. Healthy people 2010: understanding and improving health. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at <http://www.health.gov/healthypeople>.

Laboratory Surveillance for Wild and Vaccine-Derived Polioviruses, January 2004–June 2005

A global network of 145 virology laboratories has been established by the World Health Organization (WHO) to support surveillance activities of the Polio Eradication Initiative (PEI). The Global Polio Laboratory Network analyzes stool specimens from patients with acute flaccid paralysis (AFP) and environmental samples for the presence of polioviruses. Surveillance systems detect at least one AFP case per 100,000 persons aged <15 years, collect adequate stool samples* from patients, and send the samples to network laboratories for analysis. Laboratory data are used to identify locations where wild polioviruses (WPVs) or vaccine-derived polioviruses (VDPVs) are circulating,

* At least 2 stool samples are collected, 1–2 days apart and within 14 days of paralysis onset.

target supplementary immunization activities (SIAs) to interrupt transmission chains, and investigate genetic relationships among viral isolates. This report updates previous publications (1–3) and describes the laboratory network's performance during the period January 2004–June 2005.

Laboratory Network Performance

The Global Polio Laboratory Network operates in all six WHO regions and includes 123 National Laboratories, 15 Regional Reference Laboratories, and seven Global Specialized Reference Laboratories. High-quality performance is ensured through a WHO-administered laboratory accreditation program that evaluates network laboratories for proper procedures, accuracy, and timeliness of reporting. Ninety-seven percent of network laboratories were fully accredited by WHO in 2004. Samples from nonaccredited laboratories are referred and tested in parallel in accredited laboratories to ensure that reliable virology results are available for program use.

During January 2004–June 2005, the laboratory network tested 134,855 stool samples, an increase of 37% over the previously reported comparable 18-month period (1). Approximately 97% of samples had virus isolation results available within 28 days of receipt of samples in laboratories (program target: >80% within 28 days) (Table 1). For 83% of AFP cases with poliovirus isolates, the results of intratypic differentiation (ITD) tests confirmed either the wild or vaccine-like nature of isolates within 60 days of paralysis onset (program target: >80% within 60 days). However, this target was not achieved in all WHO regions during the 18-month period.

Detection of WPV Serotypes

Indigenous WPV type 2 circulation appears to have been eradicated and was last detected in western Uttar Pradesh, India, in October 1999 (Table 2) (4,5). Wild polioviruses were confirmed in 22 countries during January 2004–June 2005.

TABLE 1. Number of specimens and poliovirus (PV) isolates, percentage of specimens with nonpolio enterovirus (NPEV) isolated, and timing of results, by World Health Organization (WHO) region and year, January 2004–June 2005

WHO region	January–December 2004					January–June 2005						
	No. of specimens	No. of PV isolates		% specimens with NPEV isolated	% results within 28 days	% ITD* results within 60 days	No. of specimens	No. of PV isolates		% specimens with NPEV isolated	% results within 28 days	% ITD results within 60 days
		Wild	Sabin					Wild	Sabin			
Africa	20,173	1,767	1,238	13	96	61	10,275	565	707	12	97	72
Americas	2,138	0	55	14	91	96	774	0	17	10	87	94
Eastern Mediterranean	13,191	534	529	18	99	94	7,242	768	345	16	100	98
Europe	2,773	0	77	5	92	84	1,496	0	32	3	97	75
South-East Asia	31,509	234	1,507	21	98	90	26,952	417	1,458	24	97	92
Western Pacific	12,694	0	444	9	98	67	5,638	0	145	7	95	83
Total	82,478	2,535	3,850	16	97	80	52,377	1,750	2,704	18	97	88

* Intratypic differentiation.

Viruses of only serotype 1 were detected in 14 countries (Angola, Benin, Botswana, Burkina Faso, Central African Republic, Côte d'Ivoire, Egypt, Eritrea, Ethiopia, Guinea, Indonesia, Mali, Saudi Arabia, and Yemen). Polioviruses of both serotypes 1 and 3 were detected in Afghanistan, Cameroon, Chad, India, Niger, Nigeria, Pakistan, and Sudan.

Detection of WPV Genotypes

The Global Polio Laboratory Network routinely generates VP1 sequences of 1) all WPVs and 2) all isolates that give inconclusive results on ITD tests. Sequences are analyzed to identify virus genotypes and investigate transmission links among viruses from diverse locations. Seven WPV genotypes were detected during January 2004–June 2005, including three type 1 genotypes (NEAF, WEAFF-B, and SOAS) and four type 3 genotypes (WEAF-B, SOAS, CEAF, and EAAF). The NEAF genotype was detected only in Egypt. The SOAS genotypes were detected in Afghanistan, Angola (type 1 only), Pakistan, and India. The type 1 WEAFF-B genotype was detected in 10 countries in west and central Africa as well as Botswana, Eritrea, Ethiopia, Indonesia, Saudi Arabia, Sudan, and Yemen. The type 3 WEAFF-B genotype was detected in Cameroon, Niger, and Nigeria. In 2004, the type 3 EAAF and CEAF genotypes were detected in Sudan and Chad, having previously been detected during 1999 and 1996, respectively.

Indigenous WPVs were detected in Afghanistan, Egypt, India, Pakistan, Niger, and Nigeria in 2004 and 2005. Indigenous type 3 viruses were detected in Chad and Sudan in 2004, although these were isolated from only 2% and 9%, respectively, of all reported cases from those countries (the remainder were from reestablished transmission of imported type 1 viruses). The type 1 virus detected in Angola in 2005 was an importation from northern India. Type 1 viruses in countries of east, west, and central Africa, Botswana, Indonesia, Saudi Arabia, and Yemen were linked, often through intermediate countries, to indigenous viruses of northern Nigeria.

Detection of Vaccine Viruses

Vaccine viruses isolated from stool specimens or environmental samples are characterized as Sabin-like (SL) vaccine viruses or as VDPVs; during January 2004–June 2005, a total

TABLE 2. Number of detected wild poliovirus (WPV) isolates from persons with acute flaccid paralysis (AFP),* by World Health Organization (WHO) region/country, January 2004–June 2005

WHO region/ Country	January–December 2004				January–June 2005			
	No. of WPV isolates	Serotype†			No. of WPV isolates	Serotype		
		P1	P2	P3		P1	P2	P3
Africa	1,767	1,409	0	358	565	355	0	210
Angola§	0	0	0	0	7	7	0	0
Benin¶	16	16	0	0	0	0	0	0
Botswana¶	2	2	0	0	0	0	0	0
Burkina Faso¶	22	22	0	0	0	0	0	0
Cameroon¶	23	21	0	2	2	2	0	0
Central African Republic¶	52	52	0	0	0	0	0	0
Chad¶	43	39	0	4	2	2	0	0
Côte d'Ivoire¶	40	40	0	0	0	0	0	0
Ethiopia¶	1	1	0	0	23	23	0	0
Eritrea¶	0	0	0	0	2	2	0	0
Guinea¶	13	13	0	0	0	0	0	0
Mali¶	33	33	0	0	8	8	0	0
Nigeria	1,474	1,134	0	340	517	307	0	210
Niger	48	36	0	12	4	4	0	0
Americas	0	0	0	0	0	0	0	0
Eastern Mediterranean	534	513	0	21	768	760	0	8
Afghanistan	8	4	0	4	8	0	0	8
Egypt	2	2	0	0	0	0	0	0
Saudi Arabia¶	7	7	0	0	0	0	0	0
Pakistan	97	84	0	13	22	22	0	0
Sudan¶	420	404	0	16	70	70	0	0
Yemen¶	0	0	0	0	668	668	0	0
Europe	0	0	0	0	0	0	0	0
South-East Asia	234	224	0	10	417	412	0	5
India	234	224	0	10	43	38	0	5
Indonesia¶	0	0	0	0	374	374	0	0
Western Pacific	0	0	0	0	0	0	0	0
Total	2,535	2,146	0	389	1,750	1,527	0	223

* Includes multiple isolates from the same AFP case-patient.

† P1 = poliovirus type 1; P2 = poliovirus type 2; P3 = poliovirus type 3.

§ P1 virus linked to WPVs that originated in northern India.

¶ P1 virus linked to WPVs that originated in Nigeria. Virus spread eastward from Nigeria to Cameroon, Central African Republic, and Chad; from Chad to Sudan; from Sudan to Eritrea, Ethiopia, Saudi Arabia, and Yemen; and from Saudi Arabia to Indonesia. Ultimately, virus spread westward from Burkina Faso to Côte d'Ivoire and Guinea; from Niger to Mali; to Benin; and to Mali (by a separate importation). Virus was apparently imported directly into Botswana from Nigeria in 2004.

of 6,577 of 6,594 (99.7%) vaccine viruses were SL (Table 3). AFP cases with isolation of SL vaccine viruses are evaluated through detailed epidemiologic investigation and by National Expert Review Committees for the possibility of vaccine-associated paralytic poliomyelitis. VDPVs are defined as viruses with $\geq 1\%$ sequence difference compared with Sabin vaccine virus of the same serotype. VDPVs are further categorized as 1) circulating VDPVs (cVDPVs) when evidence exists of person-to-person transmission, 2) immunodeficiency-associated VDPVs (iVDPVs) when isolated from immuno-

TABLE 3. Number of vaccine virus isolates* from persons with acute flaccid paralysis, by World Health Organization (WHO) region, January 2004–June 2005

WHO region	Sabin-like [§]	VDPV [†]			Total
		cVDPV [¶] isolates	iVDPV ^{**} isolates	aVDPV ^{††} isolates	
Africa	1,945	4	0	2	1,951
Americas	72	0	0	0	72
Eastern Mediterranean	874	0	0	1	875
Europe	132	0	2	0	134
South-East Asia	2,965	4	0	0	2,969
Western Pacific	589	3	0	1	593
Total	6,577	11	2	4	6,594

* Poliovirus isolates with one or two intratypic differentiation (ITD) results indicating vaccine virus.

† Vaccine-derived poliovirus: a poliovirus with $\geq 1\%$ sequence difference compared with Sabin vaccine virus.

§ Either concordant Sabin-like results in ITD tests or $< 1\%$ sequence difference compared with Sabin vaccine virus.

¶ Circulating VDPV.

** VDPV associated with an immunodeficient person.

†† Ambiguous VDPV with no known association with an outbreak or an immunodeficient person, or an environmental isolate not linked to a specific patient.

deficient persons (usually without secondary spread), and 3) ambiguous VDPVs (aVDPVs) when insufficient evidence exists of circulation or connection to an immunodeficient patient or the virus is from a source (e.g., environmental sample) that is not from a specific patient. Circulating VDPVs have been detected previously in Egypt, Hispaniola, the Philippines, and Madagascar (6–9). Type 1 cVDPV outbreaks were detected in 2004 in China, where isolates were obtained from two AFP patients and three contacts from Guizhou Province, and in 2005 in Indonesia, where two cases with paralysis onset before June 30 were confirmed and an additional 10 cases with later onset have been confirmed through ongoing investigations. Type 2 VDPVs were also isolated from single AFP cases in Lao People's Democratic Republic in 2004 and in Hong Kong and Saudi Arabia in 2005. Type 2 VDPV and type 3 cVDPV outbreaks are being investigated in Madagascar; type 3 cVDPVs have been confirmed in one AFP case and eight contacts in Madagascar in 2005.

VDPVs from non-AFP sources also have been reported by network laboratories. Type 2 VDPVs are detected most frequently and have been isolated intermittently from sewage waters in Slovakia (during October 2003–February 2005), Egypt (from a single sewage sample in 2005), and Israel (intermittently during 2004–2005) (10). Follow-up investigations in Slovakia and Israel have not revealed paralytic cases nor identified the source of the VDPVs. A type 2 VDPV was isolated from a healthy child as part of a stool-specimen survey in Japan in 2004. Type 3 VDPVs were isolated in 2005 in Japan from a paralyzed adult and from a child vaccinated in the same household. The VDPVs from Slovakia and Israel are highly divergent from Sabin 2 (i.e., $> 10\%$ VP1 differences), whereas the VDPVs from Egypt and Japan are much less

divergent (i.e., $< 2\%$ VP1 differences from the parental Sabin strain), consistent with less than 2 years of replication.

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Editorial Note: The Global Polio Laboratory Network provides support to the PEI by 1) monitoring the extent of WPV circulation in endemic areas, 2) identifying reservoir communities sustaining WPV endemicity, 3) identifying the source of imported WPVs, 4) monitoring for the presence of WPVs and VDPVs in the environment, 5) identifying gaps in AFP

surveillance from the extent of genetic divergence among the most closely related isolate pairs, and 6) characterizing VDPVs and investigating the factors contributing to their emergence.

During 2004–2005, the number of countries with circulating WPVs increased because of the eastward spread of WPV type 1 from Nigeria to Cameroon, the Central African Republic, Chad, Sudan, Saudi Arabia, Yemen, Ethiopia, Eritrea, and Indonesia, and the importation of WPV type 1 from India (Uttar Pradesh) to Angola. In 2005, the number of cases caused by reestablished transmission of imported viruses exceeded for the first time the number of cases in remaining countries where WPVs are endemic.

The larger outbreaks associated with this spread and intensified surveillance activities have increased the workload within the laboratory network. PEI responded to this challenge by providing increased logistical support and redistributing the workload, increasing the number of laboratories that perform both virus isolation and ITD in the same facility. Network laboratories with the most increased workloads have responded by implementing double work shifts and 7-day work weeks, streamlining procedures, and incorporating new rapid technologies (e.g., diagnostic polymerase chain reaction and hybridization in key National Laboratories and implementation of genomic sequencing in key Regional Reference Laboratories). Prominent in their effective responses to the increasing workloads are the National Laboratories in Nigeria (Ibadan and Maiduguri), Sudan, Oman, Indonesia (Bandung), and India (Lucknow); the Regional Reference Laboratories in South Africa, Pakistan, and Egypt; and the Global Specialized Reference Laboratory in India (Mumbai). Other network laboratories have continued to improve their performance.

Studies in network laboratories in Madagascar and France, Slovakia and Finland, Indonesia and India, China, Egypt, Japan, Israel, and the United Kingdom have detected VDPVs. Of greatest concern are the detection of two independent cVDPV outbreaks (one type 2 and the other type 3) in Madagascar and the outbreak of type 1 cVDPV in Indonesia. The recent detections of type 3 VDPVs represent the first reports of VDPVs from this serotype in more than 30 years. Nonetheless, despite intensive surveillance, the incidence of VDPVs is currently much lower than that of WPVs. The genetic and antigenic characterization of the recent VDPV isolates will contribute to the refinement of laboratory methods for the detection of VDPVs.

In this final stage of the PEI, the time between onset of an AFP case, identification of an association with poliovirus, and implementation of an effective immunization response must be as short as possible. A high priority for the laboratory network in coming months will be evaluating technologies and procedures that have the potential to substantially reduce the time for poliovirus identification. Maintenance and necessary enhancement of network performance will require continued commitment and support from WHO and its partners.[†]

References

1. CDC. Laboratory surveillance for wild and vaccine-derived polioviruses, January 2003–June 2004. *MMWR* 2004;53:990–3.
2. CDC. Developing and expanding contributions of the global laboratory network for poliomyelitis eradication, 1997–1999. *MMWR* 2000;49:156–60.
3. CDC. Status of the global laboratory network for poliomyelitis eradication, 1994–1996. *MMWR* 1997;46:692–4.
4. CDC. Apparent global interruption of wild poliovirus 2 transmission. *MMWR* 2001;50:222–4.
5. CDC. Progress toward interruption of wild poliovirus transmission—worldwide, January 2004–March 2005. *MMWR* 2005;54:408–12.
6. Yang CF, Naguib T, Yang SJ, et al. Circulation of endemic type 2 vaccine-derived poliovirus in Egypt from 1983 to 1993. *J Virol* 2003;77:8366–77.
7. Kew O, Morris-Glasgow V, Landaverde M, et al. Outbreak of poliomyelitis in Hispaniola associated with circulating type 1 vaccine-derived poliovirus. *Science* 2002;296:356–9.
8. Shimizu H, Thorley B, Paladin FJ, et al. Circulation of type 1 vaccine-derived poliovirus in the Philippines in 2001. *J Virol* 2004;78:13512–21.
9. Rousset D, Rakoto-Andrianarivelo M, Razafindratsimandresy R, et al. Recombinant vaccine-derived poliovirus in Madagascar. *Emerg Infect Dis* 2003;9:885–7.
10. Cernakova B, Sobotova Z, Rovny I, et al. Isolation of vaccine derived polioviruses in the Slovak Republic. *Eur J Clin Microbiol Infect Dis* 2005;24:438–9.

[†] Major contributors to the PEI include Rotary International, Department for International Development of the United Kingdom, U.S. Agency for International Development (USAID), European Commission, Canadian International Development Agency, World Bank, Bill and Melinda Gates Foundation, United Nations Foundation, Sanofi-Pasteur, International Federation of Pharmaceutical Manufacturers and Associations, national governments of Australia, Denmark, France, Germany, Italy, Japan, the Netherlands, Norway, the Russian Federation, and Sweden, and CDC.

Infectious Disease and Dermatologic Conditions in Evacuees and Rescue Workers After Hurricane Katrina — Multiple States, August–September, 2005

On September 26, this report was posted as an MMWR Dispatch on the MMWR website (<http://www.cdc.gov/mmwr>).

On August 29, 2005, Hurricane Katrina struck states along the Gulf Coast of the United States. In the days after the hurricane struck, approximately 750 evacuation centers were established in at least 18 states to accommodate more than 200,000 evacuees (1). State and local health departments, with assistance from CDC, initiated enhanced infectious disease surveillance and outbreak response activities, implemented by teams of public health and rescue workers, including military personnel. Outbreak monitoring included direct reporting of conditions of public health significance to public health agencies; daily contact between CDC and local public health officials; canvassing of reports from CDC, public health departments, and news media for potential infectious disease outbreaks; and investigation of reports of infectious disease with outbreak potential. This report summarizes infectious disease and dermatologic conditions reported during the first 3 weeks after the hurricane, before effective local surveillance was fully implemented. One outbreak of norovirus was reported among evacuees in Texas; no other outbreaks requiring unusual mobilization of public health resources were reported among evacuees or rescue workers.

Dermatologic Conditions

Among hurricane evacuees from the New Orleans area, a cluster of infections with methicillin-resistant *Staphylococcus aureus* (MRSA) was reported in approximately 30 pediatric and adult patients at an evacuee facility in Dallas, Texas. Three of the MRSA infections were confirmed by culture (Figure

FIGURE. Methicillin-resistant *Staphylococcus aureus* in the leg of an evacuee from Hurricane Katrina — Dallas, Texas, September 2005



Photo/P Hicks, Children's Medical Center of Dallas

and Table). In addition, 24 cases of hurricane-associated *Vibrio vulnificus* and *V. parahaemolyticus* wound infections (2) were reported, with six deaths.

Among rescue workers, CDC received reports of the following two types of skin lesions with infectious etiology: tinea corporis among military personnel from two locations working in the wet environment of early evacuation efforts, and an erythematous, papular, and pustular rash consistent with folliculitis among military personnel working in Mississippi. In addition, the following three rashes subsequently determined to be noninfectious were reported in rescue workers: 1) prickly heat (miliaria crystalline, rubra, and pustulosa); 2) two clusters of nonpruritic erythematous papular, nonfollicular lesions in exposed skin of 97 military rescue workers in Louisiana presumed to have been caused by arthropod (likely mite) bites; and 3) circumferential lesions, appearing as bands of macerated skin at the waist, attributed to excessive chafing.

Diarrheal Disease

CDC received reports of clusters of diarrheal disease among persons in evacuation centers in Louisiana, Mississippi, Tennessee, and Texas. In Louisiana, approximately 20 clusters of diarrheal illness in evacuation centers were reported and investigated. In Memphis, Tennessee, gastrointestinal illness was the most common acute disease complaint among evacuees. Approximately 1,000 cases of diarrhea and vomiting were

reported among adult and child evacuees in Mississippi and Texas; tests detected norovirus in stool specimens from patients in Texas. Sporadic nontyphoidal *Salmonella*, nontoxigenic *V. cholerae* O1, and other infections were identified. No confirmed cases of *Shigella* dysentery, typhoid fever, or infection by toxigenic *V. cholerae* O1 were reported in evacuees from Hurricane Katrina. Three weeks after the initial displacement caused by Katrina, few cases of diarrheal disease were being reported.

Respiratory Disease

Upper respiratory infections and pneumonias were reported among evacuees, including a case of pertussis in an infant aged 2 months who was rescued from a rooftop in New Orleans and evacuated to Tennessee. Appropriate antimicrobial prophylaxis was provided, and contact tracing identified no additional cases.

Control of tuberculosis (TB) among evacuees has consisted both of detecting new cases and providing treatment continuity for previously known cases. A homeless person without a previous diagnosis of TB who was evacuated from New Orleans to Philadelphia was identified by entry screening with symptoms consistent with pulmonary TB. The patient was promptly isolated and began treatment for TB disease; a subsequent culture confirmed TB. At least eight other evacuees initially identified as potentially having TB were subsequently

TABLE. Number of cases of selected diseases and conditions reported in evacuees and rescue workers during the 3 weeks immediately after Hurricane Katrina made landfall — multiple states, August–September 2005

Disease/Condition*	No. of cases	States reporting	Population
Dermatologic conditions			
<i>Infectious</i>			
Methicillin-resistant <i>Staphylococcus aureus</i> infections	30 (3 confirmed)	Texas	Evacuees
<i>Vibrio vulnificus</i> and <i>V. parahaemolyticus</i> wound infections	24 (6 deaths)	Arkansas, Arizona, Georgia, Louisiana, Mississippi, Oklahoma, Texas	Evacuees
Tinea corporis	17	Mississippi	Rescue workers
<i>Noninfectious</i>			
Arthropod bites (likely mite)	97	Louisiana	Rescue workers
Diarrheal disease			
Acute gastroenteritis, some attributed to norovirus	Approximately 1,000	Louisiana, Mississippi, Tennessee, Texas	Evacuees
Nontoxigenic <i>V. cholerae</i> O1	6	Arizona, Georgia, Mississippi, Oklahoma, Tennessee	Evacuees
Nontyphoidal <i>Salmonella</i>	1	Mississippi	Evacuee
Respiratory disease			
Pertussis	1	Tennessee	Evacuee
Respiratory syncytial virus	1	Texas	Evacuee
Streptococcal pharyngitis	1	Texas	Evacuee
Tuberculosis	1	Pennsylvania	Evacuee
Other condition			
Presumed viral conjunctivitis	Approximately 200	Louisiana	Evacuees

* Other diseases and conditions, for which the number of cases was unknown, included scabies; circumferential lesions at waist; contact dermatitis; erythematous, papular, pustular rash consistent with folliculitis; immersion foot; prickly heat; influenza-like illness and upper respiratory infections; and head lice.

determined to have other conditions (e.g., lung cancer and infection with nontuberculous mycobacteria).

Treatment of TB requires a multidrug regimen for at least 6 months administered under directly observed therapy (3). A total of 195 persons in the most directly affected regions (eight counties in Alabama, six parishes in Louisiana, and 11 counties in Mississippi) were known by the local public health authorities to be undergoing treatment for TB disease when Hurricane Katrina struck on August 29. Immediately after the hurricane struck, TB program staff sought out known TB patients to check their status and assure that therapy continued. As of September 23, all 27 currently known TB patients who resided in Alabama, all 21 in Mississippi, and 105 (71%) of 147 in Louisiana had been located through a coordinated local, state, and federal public health response. Of the 42 TB patients from Louisiana not yet located, 41 were considered noncontagious at the time the hurricane made landfall on the basis of disease site, treatment duration, or smear status. However, treatment needs to be completed to prevent recurrence of disease and potential for emergence of drug resistance. Intense efforts continue to locate the remaining patients.

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Editorial Note: Environmental conditions after natural disasters increase the risk for infectious disease. The experience of the public health community with diarrheal disease after natural disasters suggests that evacuation centers should be prepared for considerable demands on clinic staff, janitorial services, and maintenance of personal hygiene. Access to functioning flush toilets and potable water are often impaired. Extensive flooding, such as that which followed Katrina, can increase risk for exposure to waterborne agents and vectors such as mosquitoes (4). Hurricane survivors can suffer wound

injuries that can become infected. Persons unable to evacuate affected areas because of underlying illnesses might be more susceptible to infectious disease. Finally, once evacuees have relocated to evacuation centers, crowding and unsanitary conditions can amplify transmission of infectious disease. However, despite the massive migration of evacuees and their subsequent placement in evacuation centers, only one known outbreak of communicable disease (norovirus) requiring unusual mobilization of public health resources had been reported as of September 23.

Observations from previous natural disasters, such as the 2004 Asian tsunami (5), suggest that skin, diarrheal, and respiratory infections are the most common infectious diseases in survivors. Infectious disease outbreaks, however, are rare following natural disasters, especially in developed countries (6,7), and specific etiologies are usually predictable, reflecting infectious diseases endemic to the affected region before the disaster. Injury and soft tissue infections are expected during the first few days after a disaster. In contrast, airborne, waterborne, and foodborne diseases are expected to occur for up to 1 month after a disaster. Because norovirus is a common cause of diarrheal illness that is easily spread in densely populated communities (e.g., classrooms and cruise ships), outbreaks can be anticipated after a natural disaster. Conversely, the rarity of toxigenic *V. cholerae*, dengue, and malaria in the Gulf Coast states before Hurricane Katrina suggested that they were unlikely to pose public health challenges after the hurricane. Another consequence of natural disasters is the potential exposure to dead bodies, both human and animal. No evidence exists that exposure to bodies after a disaster leads to infectious disease epidemics; however, persons handling human corpses and animal carcasses might be exposed to infectious pathogens and should use appropriate protective equipment (8).

Hurricane Katrina affected an area of approximately 90,000 square miles and resulted in the displacement of approximately 1 million persons. The local and state public health infrastructure for communicable disease surveillance and control was disrupted, shifting initial emphasis toward nonstandardized mechanisms for disease reporting. These mechanisms included direct reporting to public health agencies, which resulted in timely recognition of suspected instances of infectious disease while effective local surveillance was being established. The main offices of the Louisiana Office of Public Health were affected by the hurricane, and all operations were temporarily relocated from New Orleans to Baton Rouge. Because of the compromised capacity of the Louisiana State Public Health Laboratory, laboratory confirmation of causative agents was relocated to regional public health laboratories. Effective surveillance is now under way in all of the affected states.

Guidance for health-care professionals for preventing and responding to potential infectious disease outbreaks after a hurricane is available at <http://www.bt.cdc.gov/disasters/hurricanes/hcp.asp>. In addition to routine vaccinations, evacuees living in crowded groups should consider vaccinations for influenza, varicella, measles-mumps-rubella (MMR), and hepatitis A (available at <http://www.bt.cdc.gov/disasters/hurricanes/immunizations.asp>). However, immunocompromised persons (e.g., persons infected with human immunodeficiency virus, pregnant women, and persons on systemic steroids) should not receive the live viral vaccines, varicella and MMR. Screening should be performed by self-report.

Methods by TB outreach workers to locate persons with previous TB infections include 1) asking known contacts whether they have heard from patients since the hurricane, 2) visiting locations known to be frequented by patients before the hurricane, 3) calling all known phone numbers for each patient, 4) checking public registries (e.g., American Red Cross Family Linking at <http://www.katrinSAFE.org>) for updated news on patient whereabouts, and 5) seeking access to mortality records and other registries for cross-matching. A Katrina Help Desk was established on September 2 at the CDC Division of Tuberculosis Elimination to facilitate communication between the National TB Controllers Association and state TB programs as patients were relocated to other states. Health-care providers should immediately contact their state TB controllers (available at <http://www.cdc.gov/nchstp/tb/katrina/tbcontrollers.htm>) if an evacuee has TB symptoms (i.e., cough of ≥ 3 weeks duration, fever, chills, night sweats, or recent weight loss) or was under treatment for TB disease. The Louisiana TB Control Program (telephone 337-262-5616) will provide information about treatment regimens previously administered to relocated patients. If providers are unable to reach a local or state TB controller, they may contact the CDC Division of Tuberculosis Elimination at telephone 404-639-8336 for assistance.

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References

1. CDC. Update on CDC's response to Hurricane Katrina: from the CDC Director's Emergency Operations Center, p.m. update, September 6, 2005. Available at <http://www.cdc.gov/od/katrina/09-06-05.htm>.

2. CDC. *Vibrio* illnesses after Hurricane Katrina—multiple states, August–September 2005. MMWR 2005;54:928–31.
3. CDC. Treatment of tuberculosis: American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11).
4. CDC. Tropical Storm Allison rapid needs assessment—Houston, Texas, June 2001. MMWR 2002;51:365–9.
5. Lim JH, Yoon D, Jung G, Joo Kim W, Lee HC. Medical needs of tsunami disaster refugee camps. Fam Med 2005;37:422–8.
6. Shultz JM, Russell J, Espinel Z. Epidemiology of tropical cyclones: the dynamics of disaster, disease, and development. Epidemiol Rev 2005;27:21–35.
7. Blake PA. Communicable disease control [Chapter 3]. In: The public health consequences of disasters, 1989. MB Gregg, ed. Atlanta, GA: US Department of Health and Human Services, CDC; 1989.
8. Morgan O. Infectious disease risks from dead bodies following natural disasters. Rev Panam Salud Publica 2004;15:307–12.

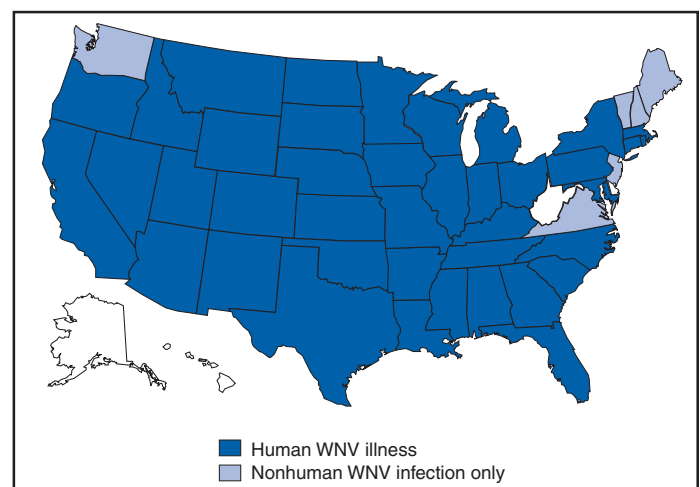
Update: West Nile Virus Activity — United States, 2005

This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET as of 3 a.m. Mountain Daylight Time, September 27, 2005.

Forty states have reported 1,804 cases of human WNV illness in 2005 (Figure and Table 1). By comparison, in 2004, a total of 1,784 WNV cases had been reported as of September 28, 2004 (Table 2). A total of 935 (56%) of the 1,669 cases for which such data were available occurred in males; the median age of patients was 50 years (range: 3 months–98 years). Date of illness onset ranged from January 2 to September 22; a total of 52 cases were fatal.

A total of 321 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET during 2005. Of these, 86 were reported from California; 52 from Nebraska;

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2005*



* As of September 27, 2005.

TABLE 1. Number of human cases of West Nile virus (WNV) illness reported, by state — United States, 2005*

State	Neuroinvasive disease [†]	West Nile fever [§]	Other clinical/ unspecified [¶]	Total**	Deaths
Alabama	4	2	0	6	1
Arizona	16	22	12	50	2
Arkansas	3	8	0	11	0
California	220	396	65	681	15
Colorado	14	61	0	75	1
Connecticut	2	0	0	2	0
Florida	5	12	1	18	0
Georgia	1	1	3	5	0
Idaho	2	6	4	12	0
Illinois	96	59	17	172	3
Indiana	5	0	4	9	1
Iowa	5	8	3	16	2
Kansas	5	2	0	7	0
Kentucky	3	0	0	3	0
Louisiana	58	23	0	81	6
Maryland	2	0	0	2	0
Massachusetts	2	2	0	4	0
Michigan	13	3	4	20	3
Minnesota	11	17	0	28	1
Mississippi	23	21	0	44	4
Missouri	6	7	1	14	1
Montana	7	13	0	20	0
Nebraska	19	49	0	68	1
Nevada	8	13	0	21	0
New Mexico	14	10	0	24	1
New York	3	2	0	5	0
North Carolina	1	1	0	2	0
North Dakota	2	14	0	16	0
Ohio	31	5	0	36	0
Oklahoma	1	2	0	3	0
Oregon	0	5	0	5	0
Pennsylvania	11	8	0	19	0
Rhode Island	1	0	0	1	0
South Carolina	1	0	0	1	1
South Dakota	32	175	1	208	1
Tennessee	8	1	0	9	1
Texas	41	21	0	62	5
Utah	16	20	0	36	1
Wisconsin	5	2	0	5	1
Wyoming	3	2	0	3	0
Total	696	993	115	1,804	52

* As of September 27, 2005.

† Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).

§ Cases with no evidence of neuroinvasion.

¶ Illnesses for which sufficient clinical information was not provided.

** Total number of human cases of WNV illness reported to ArboNET by state and local health departments.

TABLE 2. Comparison of human cases and deaths from West Nile virus — United States, 2002–2005

Year	Human cases	Deaths
2002*	2,125	95
2003†	4,827	93
2004§	1,784	56
2005¶	1,804	52

* Data through September 18, 2002.

† Data through September 17, 2003.

§ Data through September 28, 2004.

¶ Data through September 27, 2005.

48 from Texas; 22 from Louisiana; 19 from Kansas; 16 from South Dakota; 13 from Arizona; 11 from Iowa; 10 from Minnesota; eight from Illinois; five from New Mexico; four each from Alabama, Pennsylvania, and Utah; three each from Michigan and Oklahoma; two each from Colorado and Mississippi; and one each from Idaho, Montana, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, and Wisconsin. Of the 321 PVDs, three persons aged 53, 56, and 72 years subsequently had neuroinvasive illness; six persons (median age: 33 years) subsequently had other illnesses; and 71 persons (median age: 46 years [range: 17–78 years]) subsequently had West Nile fever.

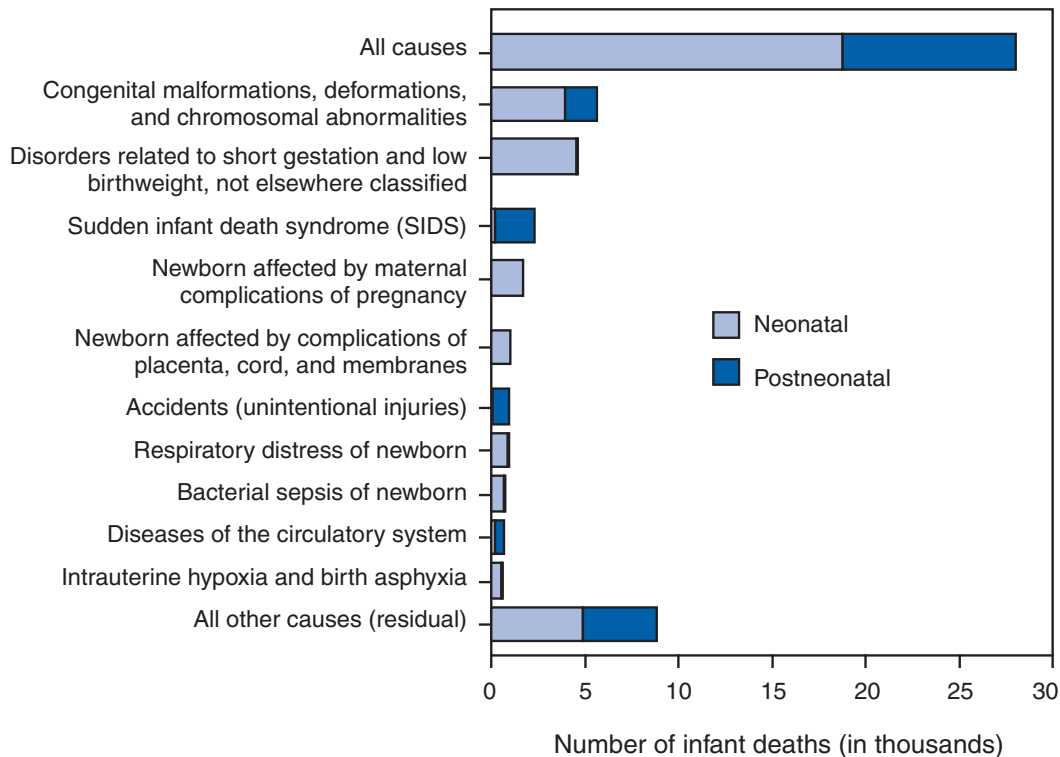
In addition, 3,470 dead corvids and 739 other dead birds with WNV infection have been reported from 42 states. WNV infections have been reported in horses from 30 states; four dogs from Idaho, Minnesota, and Nebraska; four squirrels from Arizona; and three unidentified animal species in two states (Arizona and Illinois). WNV seroconversions have been reported in 980 sentinel chicken flocks from 13 states. Eight seropositive sentinel birds have been reported from Michigan. One seropositive sentinel horse was reported from Minnesota. A total of 9,934 WNV-positive mosquito pools have been reported from 39 states (Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wisconsin) and the District of Columbia.

Additional information about national WNV activity is available from CDC at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> and at <http://westnilemaps.usgs.gov>.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

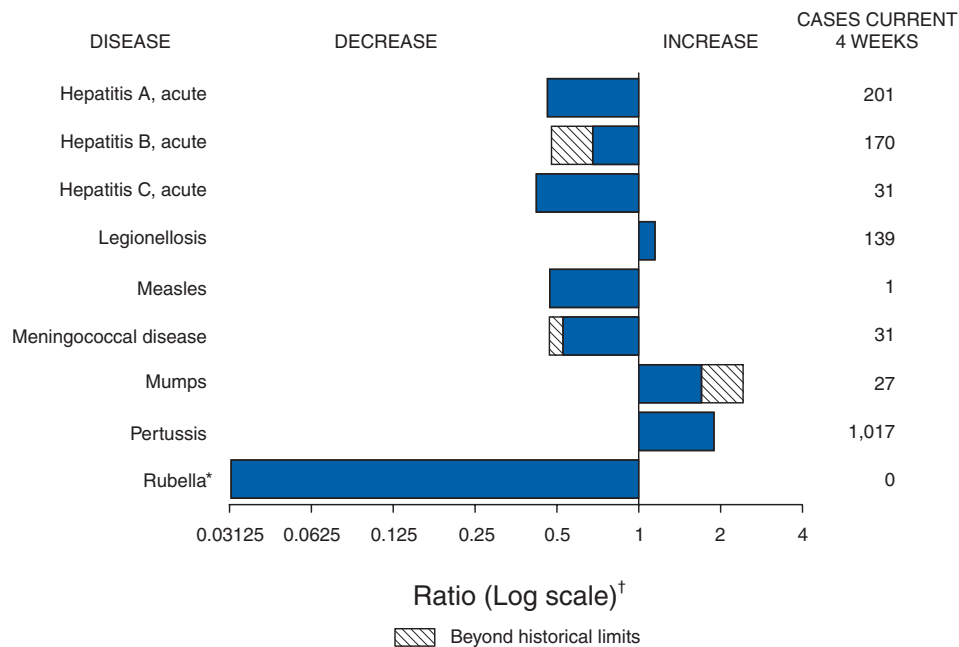
Leading Causes of Neonatal and Postneonatal Deaths — United States, 2002



Infant deaths include neonatal deaths, which occur <28 days after birth, and postneonatal deaths, which occur from 28 days to 11 months after birth. Substantial differences were observed in the leading causes of death during the neonatal versus postneonatal periods. Congenital malformations, although ranked first for infant mortality overall, ranks second for both neonates and postneonates. Disorders related to short gestation and low birthweight not elsewhere classified were the leading cause of neonatal death. In contrast, SIDS was the leading cause of death during the postneonatal period.

SOURCES: National Vital Statistics System. Available at <http://www.cdc.gov/nchs/deaths.htm>; Anderson RN, Smith B. Deaths: leading causes for 2002. National Vital Statistics Reports 53(17).

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 24, 2005, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 38 of zero (0).
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending September 24, 2005 (38th Week)*

Disease	Cum. 2005	Cum. 2004	Disease	Cum. 2005	Cum. 2004
Anthrax	—	—	Hemolytic uremic syndrome, postdiarrheal†	121	127
Botulism:			HIV infection, pediatric†¶	181	287
foodborne	9	6	Influenza-associated pediatric mortality†**	44	—
infant	56	61	Measles	59††	25§§
other (wound & unspecified)	21	11	Mumps	205	150
Brucellosis	74	70	Plague	3	1
Chancroid	17	19	Poliomyelitis, paralytic	—	—
Cholera	4	4	Psittacosis†	15	10
Cyclosporiasis†	677	194	Q fever†	89	49
Diphtheria	—	—	Rabies, human	1	4
Domestic arboviral diseases			Rubella	9	9
(neuroinvasive & non-neuroinvasive):			Rubella, congenital syndrome	1	—
California serogroup†§	21	103	SARS†**	—	—
eastern equine†§	12	3	Smallpox†	—	—
Powassan†§	—	1	<i>Staphylococcus aureus</i> :		
St. Louis†§	4	12	Vancomycin-intermediate (VISA)†	—	—
western equine†§	—	—	Vancomycin-resistant (VRSA)†	—	1
Ehrlichiosis:			Streptococcal toxic-shock syndrome†	92	106
human granulocytic (HGE)†	381	302	Tetanus	16	15
human monocytic (HME)†	298	223	Toxic-shock syndrome	74	68
human, other and unspecified †	58	56	Trichinellosis¶¶	14	1
Hansen disease†	55	71	Tularemia†	104	82
Hantavirus pulmonary syndrome†	17	18	Yellow fever	—	—

—: No reported cases.
 * Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).
 † Not notifiable in all states.
 § Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
 ¶ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update June 26, 2005.
 ** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases.
 †† Of 59 cases reported, 49 were indigenous and 10 were imported from another country.
 §§ Of 25 cases reported, eight were indigenous and 17 were imported from another country.
 ¶¶ Formerly Trichinosis.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	AIDS		Chlamydia [†]		Coccidioidomycosis		Cryptosporidiosis	
	Cum. 2005 [§]	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	20,405	28,179	661,587	670,626	3,253	4,232	4,366	2,618
NEW ENGLAND	778	962	23,645	22,047	—	—	199	140
Maine	11	20	1,588	1,482	N	N	15	17
N.H.	20	36	1,364	1,250	—	—	22	25
Vt. [¶]	4	14	691	833	—	—	28	21
Mass.	368	336	10,558	9,725	—	—	73	52
R.I.	68	98	2,416	2,506	—	—	7	4
Conn.	307	458	7,028	6,251	N	N	54	21
MID. ATLANTIC	4,352	6,423	83,531	82,269	—	—	1,947	377
Upstate N.Y.	800	731	16,416	16,572	N	N	1,663	87
N.Y. City	2,327	3,648	26,766	25,259	—	—	77	97
N.J.	574	1,091	13,521	13,053	N	N	35	39
Pa.	651	953	26,828	27,385	N	N	172	154
E.N. CENTRAL	1,938	2,416	103,245	119,076	7	11	824	823
Ohio	312	465	24,978	29,727	N	N	482	182
Ind.	236	264	14,717	13,412	N	N	47	64
Ill.	983	1,107	31,759	34,844	—	—	52	132
Mich.	322	459	18,226	27,360	7	11	71	120
Wis.	85	121	13,565	13,733	N	N	172	325
W.N. CENTRAL	463	601	41,348	41,110	5	6	434	301
Minn.	123	148	7,885	8,595	3	N	94	103
Iowa	50	47	5,131	5,027	N	N	83	62
Mo.	198	255	16,360	15,106	1	3	204	57
N. Dak.	5	15	837	1,328	N	N	—	9
S. Dak.	10	7	2,050	1,819	—	—	16	23
Nebr. ^{¶¶}	18	35	4,019	3,742	1	3	6	24
Kans.	59	94	5,066	5,493	N	N	31	23
S. ATLANTIC	6,473	8,664	129,163	126,481	1	—	455	386
Del.	100	116	2,423	2,092	N	N	—	—
Md.	812	988	13,582	13,980	1	—	27	15
D.C.	467	523	2,839	2,582	—	—	9	13
Va. [¶]	307	503	15,380	16,244	—	—	39	42
W. Va.	36	63	1,938	2,070	N	N	11	5
N.C.	531	422	23,831	21,309	N	N	57	57
S.C. [¶]	386	533	15,632	13,935	—	—	12	17
Ga.	1,103	1,162	22,102	23,715	—	—	87	138
Fla.	2,731	4,354	31,436	30,554	N	N	213	99
E.S. CENTRAL	1,093	1,419	49,646	43,374	—	5	129	109
Ky.	135	157	6,657	4,107	N	N	83	31
Tenn. [¶]	434	584	17,600	16,395	N	N	28	31
Ala. [¶]	295	348	10,516	9,974	—	—	16	21
Miss.	229	330	14,873	12,898	—	5	2	26
W.S. CENTRAL	2,206	3,424	78,562	82,622	1	3	61	81
Ark.	72	136	6,306	5,857	—	1	4	13
La.**	436	639	12,572	16,585	1	2	3	3
Okla.	167	130	8,100	8,177	N	N	34	17
Tex. [¶]	1,531	2,519	51,584	52,003	N	N	20	48
MOUNTAIN	789	1,007	38,839	40,662	2,261	2,641	99	138
Mont.	4	4	1,468	1,801	N	N	16	34
Idaho [¶]	9	16	1,826	2,066	N	N	9	19
Wyo.	2	13	813	775	3	2	2	3
Colo.	163	225	9,543	10,414	N	N	35	48
N. Mex.	72	148	4,171	6,543	9	18	3	13
Ariz.	329	357	13,156	11,759	2,213	2,560	10	15
Utah	33	51	3,140	2,717	5	16	15	4
Nev. [¶]	177	193	4,722	4,587	31	45	9	2
PACIFIC	2,313	3,263	113,608	112,985	978	1,566	218	263
Wash.	229	289	13,525	12,882	N	N	34	33
Oreg. [¶]	136	216	5,913	5,960	—	—	56	28
Calif.	1,874	2,659	88,570	87,333	978	1,566	126	200
Alaska	14	32	2,891	2,788	—	—	1	—
Hawaii	60	67	2,709	4,022	—	—	1	2
Guam	1	1	—	799	—	—	—	—
P.R.	537	396	2,639	2,569	N	N	N	N
V.I.	10	10	119	269	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	—	U	—	U	—	U

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

[†] Chlamydia refers to genital infections caused by *C. trachomatis*.

[§] Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update June 26, 2005.

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

** Because of Hurricane Katrina, weekly reporting has been disrupted.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	<i>Escherichia coli</i> , Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped		Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004				
UNITED STATES	1,532	1,809	208	193	217	135	12,107	13,772	226,874	236,316
NEW ENGLAND	116	118	42	38	22	12	1,143	1,279	4,356	5,104
Maine	13	11	8	—	—	—	152	106	99	163
N.H.	11	14	2	5	—	—	40	27	124	93
Vt.	12	11	3	—	—	—	131	125	39	68
Mass.	39	52	6	13	22	12	472	564	1,904	2,289
R.I.	5	6	—	1	—	—	86	91	323	624
Conn.	36	24	23	19	—	—	262	366	1,867	1,867
MID. ATLANTIC	200	209	22	29	30	31	2,235	2,935	23,991	26,552
Upstate N.Y.	89	92	13	12	8	15	821	985	4,816	5,336
N.Y. City	11	33	—	—	—	—	559	815	7,155	8,157
N.J.	30	37	3	5	6	6	260	378	4,091	5,019
Pa.	70	47	6	12	16	10	595	757	7,929	8,040
E.N. CENTRAL	308	357	18	42	10	23	1,903	2,167	41,543	49,874
Ohio	94	76	4	8	5	14	562	581	11,620	15,448
Ind.	42	41	—	—	—	—	N	N	5,896	4,858
Ill.	45	80	1	7	1	6	357	613	12,758	15,158
Mich.	62	63	1	9	4	3	547	503	7,436	10,867
Wis.	65	97	12	18	—	—	437	470	3,833	3,543
W.N. CENTRAL	256	384	22	28	37	20	1,398	1,508	13,306	12,429
Minn.	68	90	7	10	21	4	613	546	2,238	2,149
Iowa	56	104	—	—	—	—	188	217	1,149	896
Mo.	60	65	9	15	8	6	321	416	6,850	6,475
N. Dak.	5	11	—	—	—	6	10	18	55	86
S. Dak.	18	27	3	—	—	—	65	42	263	203
Nebr.	21	59	3	3	4	—	75	109	928	768
Kans.	28	28	—	—	4	4	126	160	1,823	1,852
S. ATLANTIC	141	125	52	22	88	31	1,772	2,126	56,112	57,287
Del.	3	2	N	N	N	N	31	37	619	652
Md.	26	20	19	3	10	3	134	91	5,135	5,974
D.C.	—	1	—	—	—	—	40	52	1,588	1,915
Va.	24	25	20	10	20	—	375	366	5,586	6,481
W. Va.	1	2	—	—	1	—	32	29	526	669
N.C.	—	—	—	—	43	21	N	N	11,429	11,232
S.C.	5	10	—	—	1	—	76	88	6,829	6,887
Ga.	23	15	9	6	—	—	385	651	10,112	10,442
Fla.	59	50	4	3	13	7	699	812	14,288	13,035
E.S. CENTRAL	101	81	2	3	18	14	298	296	19,587	18,999
Ky.	32	21	—	1	13	8	N	N	2,248	1,828
Tenn.	40	35	2	—	5	6	157	166	6,424	6,099
Ala.	24	15	—	—	—	—	141	130	6,101	6,045
Miss.	5	10	—	2	—	—	—	—	4,814	5,027
W.S. CENTRAL	38	65	4	3	5	4	208	238	31,798	31,861
Ark.	6	11	—	—	—	—	62	95	3,306	3,068
La.	3	3	3	1	2	—	27	37	6,950	7,711
Okla.	19	15	—	—	1	—	119	106	3,264	3,467
Tex.	10	36	1	2	2	4	N	N	18,278	17,615
MOUNTAIN	133	177	40	27	7	—	972	1,111	8,357	8,527
Mont.	14	12	—	—	—	—	54	51	80	61
Idaho	15	38	8	7	4	—	61	128	76	63
Wyo.	5	7	2	1	—	—	18	18	54	45
Colo.	31	43	1	1	1	—	377	390	2,168	2,220
N. Mex.	6	10	5	5	—	—	46	57	791	879
Ariz.	25	18	N	N	N	N	98	134	2,889	2,747
Utah	27	34	22	12	—	—	272	242	486	420
Nev.	10	15	2	1	2	—	46	91	1,813	2,092
PACIFIC	239	293	6	1	—	—	2,178	2,112	27,824	25,683
Wash.	69	103	—	—	—	—	256	244	2,665	1,942
Oreg.	56	52	6	1	—	—	279	334	1,030	843
Calif.	92	130	—	—	—	—	1,526	1,412	23,236	21,515
Alaska	12	1	—	—	—	—	70	60	399	443
Hawaii	10	7	—	—	—	—	47	62	494	940
Guam	N	N	—	—	—	—	—	2	—	124
P.R.	1	1	—	—	—	—	113	191	248	186
V.I.	—	—	—	—	—	—	—	—	35	79
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	<i>Haemophilus influenzae</i> , invasive							
	All ages		Age <5 years					
	All serotypes		Serotype b		Non-serotype b		Unknown serotype	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	1,555	1,474	4	9	85	83	158	139
NEW ENGLAND	124	135	—	1	10	8	5	1
Maine	6	12	—	—	—	—	1	—
N.H.	6	15	—	—	—	2	—	—
Vt.	7	6	—	—	—	—	2	1
Mass.	59	63	—	1	3	3	1	—
R.I.	7	3	—	—	2	—	—	—
Conn.	39	36	—	—	5	3	1	—
MID. ATLANTIC	314	299	—	1	—	4	37	32
Upstate N.Y.	94	102	—	1	—	4	8	5
N.Y. City	56	66	—	—	—	—	10	12
N.J.	61	56	—	—	—	—	9	2
Pa.	103	75	—	—	—	—	10	13
E.N. CENTRAL	221	281	1	—	4	8	16	42
Ohio	94	80	—	—	—	2	10	14
Ind.	54	39	—	—	4	4	—	1
Ill.	35	99	—	—	—	—	3	20
Mich.	17	18	1	—	—	2	2	4
Wis.	21	45	—	—	—	—	1	3
W.N. CENTRAL	83	83	—	2	3	3	9	8
Minn.	37	37	—	1	3	3	2	—
Iowa	1	1	—	1	—	—	—	—
Mo.	29	32	—	—	—	—	5	6
N. Dak.	1	3	—	—	—	—	1	—
S. Dak.	—	—	—	—	—	—	—	—
Nebr.	7	4	—	—	—	—	1	1
Kans.	8	6	—	—	—	—	—	1
S. ATLANTIC	370	333	1	—	22	22	22	24
Del.	—	—	—	—	—	—	—	—
Md.	54	52	—	—	5	5	—	—
D.C.	—	2	—	—	—	—	—	1
Va.	37	31	—	—	—	—	2	4
W. Va.	23	15	—	—	1	4	4	—
N.C.	65	44	1	—	7	5	—	1
S.C.	21	10	—	—	—	—	2	1
Ga.	71	91	—	—	—	—	10	16
Fla.	99	88	—	—	9	8	4	1
E.S. CENTRAL	90	58	—	1	1	—	17	7
Ky.	8	5	—	—	1	—	2	—
Tenn.	64	39	—	—	—	—	11	5
Ala.	18	12	—	1	—	—	4	2
Miss.	—	2	—	—	—	—	—	—
W.S. CENTRAL	85	59	1	1	7	6	6	1
Ark.	4	1	—	—	1	—	—	—
La.	28	12	1	—	2	—	6	1
Okla.	51	45	—	—	4	6	—	—
Tex.	2	1	—	1	—	—	—	—
MOUNTAIN	178	153	—	3	13	22	36	18
Mont.	—	—	—	—	—	—	—	—
Idaho	3	5	—	—	—	—	1	2
Wyo.	4	1	—	—	—	1	1	—
Colo.	34	39	—	—	—	—	9	5
N. Mex.	16	32	—	—	4	7	2	6
Ariz.	95	53	—	—	7	9	15	2
Utah	13	12	—	2	—	2	6	2
Nev.	13	11	—	1	2	3	2	1
PACIFIC	90	73	1	—	25	10	10	6
Wash.	3	1	—	—	—	—	2	1
Oreg.	29	34	—	—	—	—	5	2
Calif.	45	25	1	—	25	10	2	1
Alaska	5	5	—	—	—	—	1	1
Hawaii	8	8	—	—	—	—	—	1
Guam	—	—	—	—	—	—	—	—
P.R.	3	2	—	—	—	—	1	2
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Hepatitis (viral, acute), by type					
	A		B		C	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	2,809	4,354	3,907	4,246	577	554
NEW ENGLAND	383	742	201	264	12	12
Maine	2	11	12	1	—	—
N.H.	69	16	16	26	—	—
Vt.	5	8	3	5	9	4
Mass.	256	626	141	142	—	7
R.I.	10	19	1	5	—	—
Conn.	41	62	28	85	3	1
MID. ATLANTIC	487	565	788	562	78	89
Upstate N.Y.	80	68	65	56	13	6
N.Y. City	217	237	83	115	—	—
N.J.	110	136	484	163	—	—
Pa.	80	124	156	228	65	83
E.N. CENTRAL	257	362	341	409	98	81
Ohio	39	38	101	88	4	4
Ind.	39	48	32	34	22	7
Ill.	57	117	84	63	—	13
Mich.	105	116	124	193	72	57
Wis.	17	43	—	31	—	—
W.N. CENTRAL	67	120	207	253	29	18
Minn.	3	28	27	37	5	15
Iowa	16	35	21	14	—	—
Mo.	30	25	117	156	22	3
N. Dak.	—	1	—	4	1	—
S. Dak.	—	3	3	1	—	—
Nebr.	4	10	20	28	1	—
Kans.	14	18	19	13	—	—
S. ATLANTIC	506	797	999	1,330	177	135
Del.	4	6	38	35	82	13
Md.	49	85	109	120	19	3
D.C.	2	5	10	15	—	2
Va.	58	89	103	185	10	13
W. Va.	4	3	27	28	13	18
N.C.	64	74	118	138	13	10
S.C.	26	39	106	107	2	14
Ga.	85	276	124	343	7	12
Fla.	214	220	364	359	31	50
E. S. CENTRAL	209	129	253	365	67	72
Ky.	22	29	45	46	8	23
Tenn.	136	80	102	174	14	25
Ala.	34	7	57	59	10	4
Miss.	17	13	49	86	35	20
W.S. CENTRAL	141	527	286	257	51	74
Ark.	7	59	28	90	—	2
La.	44	39	31	45	9	3
Okla.	4	19	25	55	3	3
Tex.	86	410	202	67	39	66
MOUNTAIN	247	335	404	322	34	36
Mont.	7	5	3	1	1	2
Idaho	15	16	8	10	1	1
Wyo.	—	4	1	7	—	2
Colo.	35	40	36	46	17	10
N. Mex.	18	20	6	16	—	U
Ariz.	144	203	289	158	—	5
Utah	18	33	34	27	7	4
Nev.	10	14	27	57	8	12
PACIFIC	512	777	428	484	31	37
Wash.	32	44	54	39	U	U
Oreg.	34	54	77	86	13	14
Calif.	423	654	286	341	18	22
Alaska	4	4	7	10	—	—
Hawaii	19	21	4	8	—	1
Guam	—	1	—	12	—	9
P.R.	52	32	33	61	—	—
V.I.	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Legionellosis		Listeriosis		Lyme disease		Malaria	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	1,300	1,449	517	516	14,965	13,650	876	1,065
NEW ENGLAND	77	66	39	34	1,595	2,352	51	77
Maine	3	1	1	5	105	29	5	6
N.H.	6	7	5	2	138	158	5	5
Vt.	5	3	2	1	29	41	1	4
Mass.	25	32	10	12	758	1,302	26	46
R.I.	16	8	6	1	27	170	2	3
Conn.	22	15	15	13	538	652	12	13
MID. ATLANTIC	455	393	137	128	10,327	8,472	243	284
Upstate N.Y.	123	74	41	36	2,824	2,736	38	34
N.Y. City	57	55	24	22	—	303	121	150
N.J.	81	63	31	26	3,430	2,215	57	60
Pa.	194	201	41	44	4,073	3,218	27	40
E.N. CENTRAL	241	362	54	92	815	1,137	67	99
Ohio	129	166	24	34	59	43	17	25
Ind.	13	35	4	16	20	20	1	12
Ill.	15	36	1	19	—	81	25	33
Mich.	71	107	19	21	38	18	18	17
Wis.	13	18	6	2	698	975	6	12
W.N. CENTRAL	58	46	26	10	593	341	38	51
Minn.	16	7	7	2	499	266	11	18
Iowa	3	4	8	1	67	40	7	3
Mo.	24	22	4	4	19	23	15	17
N. Dak.	2	2	3	—	—	—	—	3
S. Dak.	10	3	—	—	—	1	—	1
Nebr.	1	3	1	3	1	8	1	2
Kans.	2	5	3	—	7	3	4	7
S. ATLANTIC	276	289	103	82	1,458	1,184	212	252
Del.	12	11	N	N	406	201	3	6
Md.	80	60	15	10	770	679	81	55
D.C.	8	10	—	3	8	9	8	11
Va.	33	37	8	14	146	116	20	35
W. Va.	13	7	3	3	10	21	1	1
N.C.	23	28	19	16	42	92	23	17
S.C.	10	8	6	5	15	17	6	10
Ga.	18	35	18	14	4	12	32	50
Fla.	79	93	34	17	57	37	38	67
E.S. CENTRAL	53	72	26	20	27	36	21	28
Ky.	17	26	4	4	4	14	6	4
Tenn.	23	31	11	10	23	18	11	8
Ala.	10	12	8	4	—	4	4	11
Miss.	3	3	3	2	—	—	—	5
W.S. CENTRAL	27	107	25	33	49	48	59	110
Ark.	4	—	1	3	4	8	4	7
La.	4	7	7	3	4	2	2	5
Okla.	6	3	3	—	—	—	8	7
Tex.	13	97	14	27	41	38	45	91
MOUNTAIN	66	66	13	19	21	17	40	39
Mont.	5	1	—	—	—	—	—	—
Idaho	3	7	—	1	2	6	—	1
Wyo.	3	5	—	—	3	3	2	—
Colo.	17	17	4	8	4	—	18	15
N. Mex.	2	4	4	1	1	1	2	2
Ariz.	17	11	—	—	7	6	10	10
Utah	11	17	3	1	2	1	6	6
Nev.	8	4	2	8	2	—	2	5
PACIFIC	47	48	94	98	80	63	145	125
Wash.	—	8	7	8	7	9	11	13
Oreg.	N	N	7	5	15	22	7	15
Calif.	45	40	79	81	55	30	109	94
Alaska	—	—	—	—	3	2	5	—
Hawaii	2	—	1	4	N	N	13	3
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	N	N	2	—
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Meningococcal disease									
	All serogroups		Serogroup A, C, Y, and W-135		Serogroup B		Other serogroup		Serogroup unknown	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	892	915	71	72	45	36	—	1	776	806
NEW ENGLAND	60	52	1	5	—	6	—	1	59	40
Maine	2	9	—	—	—	1	—	—	2	8
N.H.	10	4	—	—	—	—	—	—	10	4
Vt.	6	2	—	—	—	—	—	—	6	2
Mass.	28	30	—	5	—	5	—	—	28	20
R.I.	2	1	—	—	—	—	—	—	2	1
Conn.	12	6	1	—	—	—	—	1	11	5
MID. ATLANTIC	118	128	33	35	6	5	—	—	79	88
Upstate N.Y.	29	34	4	5	3	3	—	—	22	26
N.Y. City	17	22	—	—	—	—	—	—	17	22
N.J.	30	28	—	—	—	—	—	—	30	28
Pa.	42	44	29	30	3	2	—	—	10	12
E.N. CENTRAL	92	102	23	23	9	6	—	—	60	73
Ohio	31	51	—	3	5	5	—	—	26	43
Ind.	16	16	—	1	4	1	—	—	12	14
Ill.	12	1	—	—	—	—	—	—	12	1
Mich.	23	19	23	19	—	—	—	—	—	—
Wis.	10	15	—	—	—	—	—	—	10	15
W.N. CENTRAL	59	64	3	—	1	4	—	—	55	60
Minn.	11	21	1	—	—	—	—	—	10	21
Iowa	15	13	—	—	1	2	—	—	14	11
Mo.	19	17	1	—	—	1	—	—	18	16
N. Dak.	—	2	—	—	—	—	—	—	—	2
S. Dak.	3	2	1	—	—	1	—	—	2	1
Nebr.	4	4	—	—	—	—	—	—	4	4
Kans.	7	5	—	—	—	—	—	—	7	5
S. ATLANTIC	172	177	4	2	9	2	—	—	159	173
Del.	3	4	—	—	—	—	—	—	3	4
Md.	18	10	2	—	2	—	—	—	14	10
D.C.	—	5	—	2	—	—	—	—	—	3
Va.	21	14	—	—	—	—	—	—	21	14
W. Va.	6	5	1	—	—	—	—	—	5	5
N.C.	28	26	1	—	7	2	—	—	20	24
S.C.	14	14	—	—	—	—	—	—	14	14
Ga.	15	12	—	—	—	—	—	—	15	12
Fla.	67	87	—	—	—	—	—	—	67	87
E.S. CENTRAL	43	48	1	1	3	1	—	—	39	46
Ky.	14	8	—	1	3	1	—	—	11	6
Tenn.	19	15	—	—	—	—	—	—	19	15
Ala.	6	13	1	—	—	—	—	—	5	13
Miss.	4	12	—	—	—	—	—	—	4	12
W.S. CENTRAL	74	51	1	2	5	1	—	—	68	48
Ark.	12	13	—	—	—	—	—	—	12	13
La.	25	27	—	1	2	—	—	—	23	26
Okla.	13	8	1	1	3	1	—	—	9	6
Tex.	24	3	—	—	—	—	—	—	24	3
MOUNTAIN	72	53	4	1	5	5	—	—	63	47
Mont.	—	3	—	—	—	—	—	—	—	3
Idaho	2	6	—	—	—	—	—	—	2	6
Wyo.	—	4	—	—	—	—	—	—	—	4
Colo.	16	12	3	—	—	—	—	—	13	12
N. Mex.	2	6	—	1	—	3	—	—	2	2
Ariz.	37	11	—	—	2	1	—	—	35	10
Utah	9	4	1	—	2	—	—	—	6	4
Nev.	6	7	—	—	1	1	—	—	5	6
PACIFIC	202	240	1	3	7	6	—	—	194	231
Wash.	40	22	1	3	4	6	—	—	35	13
Oreg.	28	47	—	—	—	—	—	—	28	47
Calif.	122	161	—	—	—	—	—	—	122	161
Alaska	1	4	—	—	—	—	—	—	1	4
Hawaii	11	6	—	—	3	—	—	—	8	6
Guam	—	1	—	—	—	—	—	—	—	1
P.R.	6	13	—	—	—	—	—	—	6	13
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	1	1	—	—	—	—	—	—	1	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Pertussis		Rabies, animal		Rocky Mountain spotted fever		Salmonellosis		Shigellosis	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	14,189	13,270	4,065	4,951	1,198	1,115	28,339	30,315	8,965	9,584
NEW ENGLAND	810	1,311	540	488	3	14	1,632	1,608	232	228
Maine	20	6	41	43	N	N	110	83	8	5
N.H.	43	49	11	23	1	—	130	110	7	6
Vt.	74	61	44	21	—	—	84	42	16	2
Mass.	612	1,125	277	204	1	12	863	926	144	150
R.I.	29	22	17	33	1	1	81	91	14	13
Conn.	32	48	150	164	—	1	364	356	43	52
MID. ATLANTIC	1,001	2,113	703	731	75	61	3,518	4,452	892	932
Upstate N.Y.	383	1,492	408	395	3	1	910	924	207	359
N.Y. City	71	147	20	11	4	20	755	1,015	281	307
N.J.	175	145	N	N	25	12	609	851	224	184
Pa.	372	329	275	325	43	28	1,244	1,662	180	82
E.N. CENTRAL	2,604	4,669	171	155	31	32	3,749	3,957	611	876
Ohio	857	418	64	61	24	9	1,012	951	80	126
Ind.	225	98	10	10	2	5	452	381	115	169
Ill.	505	922	41	40	1	14	1,002	1,278	135	326
Mich.	189	172	33	38	4	2	665	642	168	87
Wis.	828	3,059	23	6	—	2	618	705	113	168
W.N. CENTRAL	2,217	1,383	353	495	143	105	1,803	1,802	1,102	324
Minn.	887	231	59	65	2	—	423	453	68	51
Iowa	431	126	94	84	4	1	274	354	62	59
Mo.	320	275	64	46	119	87	588	489	733	127
N. Dak.	81	640	24	50	—	—	27	31	2	3
S. Dak.	54	22	48	83	5	4	119	75	26	9
Nebr.	160	21	—	83	4	13	107	119	52	19
Kans.	284	68	64	84	9	—	265	281	159	56
S. ATLANTIC	948	511	1,230	1,743	587	554	8,020	7,956	1,462	2,223
Del.	5	—	—	9	2	5	56	86	8	6
Md.	125	91	229	249	65	51	611	649	64	113
D.C.	7	7	—	—	2	—	43	46	9	30
Va.	251	135	399	371	50	22	785	865	86	116
W. Va.	37	18	41	51	5	4	121	178	1	5
N.C.	64	62	372	474	356	332	1,116	1,109	149	242
S.C.	273	89	5	125	40	52	896	778	66	461
Ga.	27	17	181	259	53	73	1,182	1,435	335	479
Fla.	159	92	3	205	14	15	3,210	2,810	744	771
E.S. CENTRAL	388	235	109	112	212	162	1,999	1,944	958	610
Ky.	106	55	11	20	2	2	353	263	238	53
Tenn.	175	139	36	36	156	87	557	534	461	316
Ala.	69	27	60	47	50	47	535	483	193	195
Miss.	38	14	2	9	4	26	554	664	66	46
W.S. CENTRAL	1,129	582	649	892	110	164	2,343	2,920	1,806	2,509
Ark.	209	54	26	43	85	85	541	413	49	56
La.	30	13	—	2	5	5	458	669	83	229
Okla.	—	33	64	90	7	70	297	300	505	354
Tex.	890	482	559	757	13	4	1,047	1,538	1,169	1,870
MOUNTAIN	2,985	1,054	189	178	29	19	1,682	1,753	559	596
Mont.	516	36	13	21	1	3	68	164	5	4
Idaho	113	29	—	7	3	3	78	123	5	11
Wyo.	34	25	14	4	2	4	69	43	3	4
Colo.	973	532	14	44	5	4	467	429	100	123
N. Mex.	110	126	7	4	1	2	171	205	68	102
Ariz.	791	160	115	89	13	2	488	494	315	287
Utah	416	133	13	6	4	1	258	168	35	30
Nev.	32	13	13	3	—	—	83	127	28	35
PACIFIC	2,107	1,412	121	157	8	4	3,593	3,923	1,343	1,286
Wash.	594	501	U	U	—	—	391	371	84	80
Oreg.	532	340	5	6	1	2	283	347	96	59
Calif.	798	542	115	140	7	2	2,655	2,895	1,130	1,098
Alaska	75	11	1	11	—	—	43	42	7	6
Hawaii	108	18	—	—	—	—	221	268	26	43
Guam	—	—	—	—	—	—	—	49	—	41
P.R.	5	3	52	44	N	N	341	306	2	23
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
 * Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Streptococcal disease, invasive, group A		Streptococcus pneumoniae, invasive disease				Syphilis			
			Drug resistant, all ages		Age <5 years		Primary & secondary		Congenital	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	3,270	3,448	1,658	1,647	631	571	5,633	5,657	184	294
NEW ENGLAND	127	230	87	107	47	78	151	146	1	4
Maine	9	10	N	N	—	4	1	2	—	—
N.H.	13	16	—	—	4	N	13	3	—	3
Vt.	9	8	10	6	4	1	1	—	—	—
Mass.	87	105	61	29	38	43	98	91	—	—
R.I.	9	17	16	14	1	6	8	19	—	1
Conn.	U	74	U	58	U	24	30	31	1	—
MID. ATLANTIC	723	585	157	116	110	82	725	721	24	28
Upstate N.Y.	212	191	62	49	49	57	64	70	8	2
N.Y. City	132	95	U	U	20	U	450	437	5	12
N.J.	163	124	N	N	19	7	98	117	11	13
Pa.	216	175	95	67	22	18	113	97	—	1
E.N. CENTRAL	639	793	447	369	161	130	575	659	26	44
Ohio	159	186	280	257	62	60	154	172	1	2
Ind.	82	82	156	112	44	26	45	45	1	2
Ill.	116	212	11	—	48	1	290	275	10	13
Mich.	253	241	—	N	—	N	62	140	12	27
Wis.	29	72	N	N	7	43	24	27	2	—
W.N. CENTRAL	211	249	35	17	67	78	173	125	3	4
Minn.	82	122	—	—	41	50	48	18	1	1
Iowa	N	N	N	N	—	N	2	5	—	—
Mo.	53	54	29	12	7	12	102	76	2	2
N. Dak.	9	10	1	—	2	2	—	—	—	—
S. Dak.	19	12	3	5	—	—	1	—	—	—
Nebr.	14	17	2	—	6	6	4	6	—	—
Kans.	34	34	N	N	11	8	16	20	—	1
S. ATLANTIC	679	687	657	851	65	42	1,414	1,401	33	46
Del.	1	3	1	4	—	N	9	7	—	1
Md.	150	106	—	—	43	30	238	267	12	7
D.C.	7	8	15	8	2	4	78	43	—	1
Va.	63	60	N	N	—	N	99	73	3	2
W. Va.	22	20	96	90	20	8	3	3	—	—
N.C.	100	100	N	N	U	U	200	137	8	8
S.C.	25	50	—	81	—	N	47	94	4	10
Ga.	132	165	112	207	—	N	223	250	1	3
Fla.	179	175	433	461	—	N	517	527	5	14
E.S. CENTRAL	130	175	130	114	8	12	324	304	17	20
Ky.	27	51	23	23	N	N	33	33	—	1
Tenn.	103	124	107	89	—	N	160	97	12	8
Ala.	—	—	—	—	—	N	102	133	4	9
Miss.	—	—	—	2	8	12	29	41	1	2
W.S. CENTRAL	203	272	94	49	125	118	906	884	51	58
Ark.	14	16	12	6	14	8	38	41	—	3
La.	6	2	82	43	22	26	176	217	6	4
Okla.	90	53	N	N	20	35	30	19	1	2
Tex.	93	201	N	N	69	49	662	607	44	49
MOUNTAIN	483	375	51	23	39	31	288	300	15	38
Mont.	—	—	—	—	—	—	5	1	—	—
Idaho	1	8	N	N	—	N	20	15	1	2
Wyo.	3	7	21	9	—	—	—	1	—	—
Colo.	179	78	N	N	38	31	31	50	—	—
N. Mex.	37	80	—	N	—	—	38	69	2	2
Ariz.	198	167	N	N	—	N	114	127	12	33
Utah	64	33	28	12	1	—	6	8	—	1
Nev.	1	2	2	2	—	—	74	29	—	—
PACIFIC	75	82	—	1	9	—	1,077	1,117	14	52
Wash.	N	N	N	N	N	N	107	97	—	—
Oreg.	N	N	N	N	6	N	21	24	—	—
Calif.	—	—	N	N	N	N	939	991	14	52
Alaska	—	—	—	—	—	N	6	—	—	—
Hawaii	75	82	—	1	3	—	4	5	—	—
Guam	—	—	—	—	—	—	—	1	—	—
P.R.	N	N	N	N	—	N	144	97	8	5
V.I.	—	—	—	—	—	—	—	4	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 24, 2005, and September 25, 2004 (38th Week)*

Reporting area	Tuberculosis		Typhoid fever		Varicella (chickenpox)		West Nile virus disease [†]		
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Neuroinvasive		Non-neuroinvasive [§]
							Cum. 2005	Cum. 2004	Cum. 2005
UNITED STATES	7,709	9,638	174	245	17,016	20,187	696	1,065	994
NEW ENGLAND	249	319	21	20	1,001	2,147	5	—	2
Maine	11	13	1	—	213	181	—	—	—
N.H.	5	12	—	—	204	—	—	—	—
Vt.	4	2	—	—	46	413	—	—	—
Mass.	156	184	12	14	538	223	2	—	2
R.I.	22	41	1	1	—	—	1	—	—
Conn.	51	67	7	5	U	1,330	2	—	—
MID. ATLANTIC	1,434	1,494	33	62	3,293	74	14	13	10
Upstate N.Y.	179	199	5	9	—	—	—	3	—
N.Y. City	687	747	10	23	—	—	3	2	2
N.J.	352	326	10	16	—	—	—	1	—
Pa.	216	222	8	14	3,293	74	11	7	8
E.N. CENTRAL	932	864	15	31	4,600	8,605	148	61	69
Ohio	174	149	1	6	1,026	1,056	31	10	5
Ind.	98	89	1	—	482	N	5	7	—
Ill.	449	378	3	14	65	4,370	96	27	59
Mich.	152	183	5	9	2,702	2,672	13	13	3
Wis.	59	65	5	2	325	507	3	4	2
W.N. CENTRAL	310	335	3	7	321	138	80	84	273
Minn.	132	129	3	3	—	—	11	13	17
Iowa	32	27	—	—	N	N	5	11	8
Mo.	70	87	—	2	227	5	6	27	7
N. Dak.	2	3	—	—	16	77	2	2	14
S. Dak.	11	8	—	—	78	56	32	6	175
Nebr.	23	26	—	2	—	—	19	7	49
Kans.	40	55	—	—	—	—	5	18	3
S. ATLANTIC	1,775	2,017	30	35	1,459	1,837	10	60	14
Del.	7	17	—	—	21	4	—	—	—
Md.	201	201	9	11	—	—	2	8	—
D.C.	38	69	—	—	24	20	—	1	—
Va.	226	167	7	5	300	462	—	4	—
W. Va.	19	16	—	—	740	1,025	—	—	N
N.C.	196	240	3	6	—	N	1	3	1
S.C.	155	140	—	—	374	326	1	—	—
Ga.	281	424	2	4	—	—	1	12	1
Fla.	652	743	9	9	—	—	5	32	12
E. S. CENTRAL	372	447	5	8	—	37	38	57	24
Ky.	75	77	2	3	N	N	3	1	—
Tenn.	161	146	—	5	—	—	8	12	1
Ala.	136	138	1	—	—	37	4	15	2
Miss.	—	86	2	—	—	—	23	29	21
W.S. CENTRAL	790	1,425	9	20	4,461	5,636	103	195	54
Ark.	77	84	—	—	—	—	3	13	8
La.	—	—	—	—	107	48	58	64	23
Okla.	99	119	—	1	—	—	1	14	2
Tex.	614	1,222	9	19	4,354	5,588	41	104	21
MOUNTAIN	275	380	9	7	1,881	1,713	78	316	147
Mont.	8	4	—	—	—	—	7	1	13
Idaho	—	3	—	—	—	—	2	1	6
Wyo.	—	2	—	—	46	27	1	2	2
Colo.	46	93	4	2	1,336	1,360	14	41	61
N. Mex.	14	22	—	—	124	U	14	29	10
Ariz.	166	157	3	2	—	—	16	212	22
Utah	23	29	1	1	375	326	16	5	20
Nev.	18	70	1	2	—	—	8	25	13
PACIFIC	1,572	2,357	49	55	—	—	220	279	401
Wash.	181	162	5	4	N	N	—	—	—
Oreg.	54	75	3	1	—	—	—	—	5
Calif.	1,227	2,003	33	44	—	—	220	279	396
Alaska	24	27	—	—	—	—	—	—	—
Hawaii	86	90	8	6	—	—	—	—	—
Guam	—	44	—	—	—	122	—	—	—
P.R.	—	83	—	—	512	304	—	—	—
V.I.	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	—
C.N.M.I.	—	U	—	U	—	U	—	U	—

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

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

§ Not previously notifiable.

TABLE III. Deaths in 122 U.S. cities,* week ending September 24, 2005 (38th Week)

Reporting Area	All causes, by age (years)							P&I [†] Total	Reporting Area	All causes, by age (years)							P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	434	303	91	23	6	11	33	S. ATLANTIC	1,317	805	339	97	46	30	71		
Boston, Mass.	131	72	40	6	4	9	14	Atlanta, Ga.	146	75	45	14	10	2	6		
Bridgeport, Conn.	30	22	4	4	—	—	—	Baltimore, Md.	164	82	60	18	4	—	12		
Cambridge, Mass.	13	11	2	—	—	—	1	Charlotte, N.C.	95	59	25	3	2	6	5		
Fall River, Mass.	21	19	2	—	—	—	4	Jacksonville, Fla.	159	97	40	13	6	3	8		
Hartford, Conn.	44	28	10	5	—	1	5	Miami, Fla.	197	129	42	14	9	3	9		
Lowell, Mass.	23	18	4	1	—	—	2	Norfolk, Va.	60	32	19	5	2	2	3		
Lynn, Mass.	6	5	1	—	—	—	—	Richmond, Va.	45	27	10	5	2	1	1		
New Bedford, Mass.	31	25	3	2	1	—	—	Savannah, Ga.	38	26	8	4	—	—	3		
New Haven, Conn.	U	U	U	U	U	U	U	St. Petersburg, Fla.	53	33	12	5	2	1	5		
Providence, R.I.	U	U	U	U	U	U	U	Tampa, Fla.	235	164	46	12	5	8	15		
Somerville, Mass.	4	3	1	—	—	—	—	Washington, D.C.	100	64	24	4	4	4	1		
Springfield, Mass.	32	22	8	2	—	—	1	Wilmington, Del.	25	17	8	—	—	—	3		
Waterbury, Conn.	39	33	5	1	—	—	2	E.S. CENTRAL	851	580	180	60	20	11	40		
Worcester, Mass.	60	45	11	2	1	1	4	Birmingham, Ala.	148	102	27	10	7	2	10		
MID. ATLANTIC	2,029	1,414	423	127	37	25	102	Chattanooga, Tenn.	93	63	23	3	2	2	4		
Albany, N.Y.	30	20	9	—	—	1	—	Knoxville, Tenn.	86	63	15	7	—	1	3		
Allentown, Pa.	18	14	4	—	—	—	—	Lexington, Ky.	74	52	16	4	2	—	2		
Buffalo, N.Y.	65	44	13	3	2	3	6	Memphis, Tenn.	194	123	49	15	4	3	9		
Camden, N.J.	15	10	3	1	1	—	2	Mobile, Ala.	100	73	16	8	2	1	6		
Elizabeth, N.J.	16	10	4	2	—	—	4	Montgomery, Ala.	38	29	7	2	—	—	3		
Erie, Pa.	50	41	7	2	—	—	2	Nashville, Tenn.	118	75	27	11	3	2	3		
Jersey City, N.J.	34	26	6	1	1	—	—	W.S. CENTRAL	1,057	675	253	79	32	18	58		
New York City, N.Y.	1,043	708	236	70	17	9	46	Austin, Tex.	79	48	22	7	1	1	1		
Newark, N.J.	45	24	11	7	—	3	3	Baton Rouge, La.	40	30	10	—	—	—	—		
Paterson, N.J.	15	12	3	—	—	—	—	Corpus Christi, Tex.	25	18	5	1	1	—	1		
Philadelphia, Pa.	284	198	53	19	11	3	12	Dallas, Tex.	187	105	53	16	9	4	14		
Pittsburgh, Pa. [§]	28	22	5	—	—	1	2	El Paso, Tex.	62	42	11	4	3	2	4		
Reading, Pa.	24	19	3	1	—	1	2	Ft. Worth, Tex.	109	73	26	5	1	4	1		
Rochester, N.Y.	134	103	21	9	1	—	12	Houston, Tex.	187	109	56	11	6	5	14		
Schenectady, N.Y.	28	19	4	2	2	1	—	Little Rock, Ark.	63	41	14	6	2	—	2		
Scranton, Pa.	19	17	2	—	—	—	1	New Orleans, La. [¶]	U	U	U	U	U	U	U		
Syracuse, N.Y.	116	84	26	3	—	3	9	San Antonio, Tex.	200	140	39	13	7	1	15		
Trenton, N.J.	28	17	7	3	1	—	—	Shreveport, La.	23	17	3	2	—	1	2		
Utica, N.Y.	15	9	2	3	1	—	—	Tulsa, Okla.	82	52	14	14	2	—	4		
Yonkers, N.Y.	22	17	4	1	—	—	1	MOUNTAIN	846	581	169	46	31	18	48		
E.N. CENTRAL	1,880	1,235	420	132	55	37	97	Albuquerque, N.M.	92	68	17	6	1	—	5		
Akron, Ohio	45	27	15	1	1	1	—	Boise, Idaho	45	30	9	3	—	3	3		
Canton, Ohio	35	24	9	1	1	—	3	Colorado Springs, Colo.	73	54	12	5	2	—	7		
Chicago, Ill.	315	185	79	32	12	6	19	Denver, Colo.	64	41	12	2	3	6	3		
Cincinnati, Ohio	32	20	7	2	2	1	—	Las Vegas, Nev.	253	165	60	17	6	5	14		
Cleveland, Ohio	210	155	40	10	4	1	6	Ogden, Utah	21	15	1	2	2	1	1		
Columbus, Ohio	197	138	39	13	2	5	16	Phoenix, Ariz.	152	101	30	6	12	2	6		
Dayton, Ohio	109	72	22	7	2	6	0	Pueblo, Colo.	27	22	4	1	—	—	3		
Detroit, Mich.	170	89	57	14	6	4	14	Salt Lake City, Utah	119	85	24	4	5	1	6		
Evansville, Ind.	37	30	6	1	—	—	5	Tucson, Ariz.	U	U	U	U	U	U	U		
Fort Wayne, Ind.	51	45	5	1	—	—	5	PACIFIC	1,483	1,029	294	104	29	27	130		
Gary, Ind.	11	8	1	2	—	—	—	Berkeley, Calif.	15	12	3	—	—	—	1		
Grand Rapids, Mich.	50	31	11	4	3	1	—	Fresno, Calif.	118	72	36	9	—	1	6		
Indianapolis, Ind.	202	109	50	23	14	6	9	Glendale, Calif.	9	6	2	1	—	—	—		
Lansing, Mich.	40	29	10	1	—	—	3	Honolulu, Hawaii	64	43	14	3	1	3	1		
Milwaukee, Wis.	77	50	20	2	3	2	2	Long Beach, Calif.	67	50	15	1	1	—	12		
Peoria, Ill.	46	32	11	2	—	1	2	Los Angeles, Calif.	213	143	43	17	5	5	28		
Rockford, Ill.	62	49	6	6	1	—	4	Pasadena, Calif.	22	21	1	—	—	—	4		
South Bend, Ind.	50	39	7	1	2	1	2	Portland, Oreg.	92	72	12	5	1	2	9		
Toledo, Ohio	86	56	18	8	2	2	3	Sacramento, Calif.	198	135	41	15	4	3	14		
Youngstown, Ohio	55	47	7	1	—	—	4	San Diego, Calif.	145	90	32	13	4	6	16		
W.N. CENTRAL	583	377	131	35	21	19	28	San Francisco, Calif.	92	62	19	7	3	1	9		
Des Moines, Iowa	70	51	14	1	2	2	5	San Jose, Calif.	171	125	32	11	2	1	15		
Duluth, Minn.	23	17	6	—	—	—	2	Santa Cruz, Calif.	33	24	6	2	1	—	3		
Kansas City, Kans.	19	8	6	1	3	1	2	Seattle, Wash.	112	74	18	14	4	2	—		
Kansas City, Mo.	86	52	18	7	4	5	3	Spokane, Wash.	58	39	13	3	2	1	5		
Lincoln, Nebr.	36	25	5	2	1	3	—	Tacoma, Wash.	74	61	7	3	1	2	7		
Minneapolis, Minn.	72	51	10	8	—	3	4	TOTAL	10,480**	6,999	2,300	703	277	196	607		
Omaha, Nebr.	79	63	12	2	1	1	4										
St. Louis, Mo.	75	42	21	4	6	2	4										
St. Paul, Minn.	60	32	20	5	2	1	1										
Wichita, Kans.	63	36	19	5	2	1	3										

U: Unavailable. —: No reported cases.

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

†Pneumonia and influenza.

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

¶Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

**Total includes unknown ages.

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