



# MMWR™

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### Healthy Vision Month — May 2005

May is Healthy Vision Month. In the United States, an estimated 80 million persons have potentially blinding eye diseases, one million are blind, and 3 million have low vision (1). The leading causes of blindness and uncorrectable vision loss in the United States are age-related eye diseases, including macular degeneration, glaucoma, cataract, and diabetic retinopathy. The number of U.S. residents aged  $\geq 40$  years with age-related eye diseases is expected to increase by approximately 40% by 2020 (2).

Vision objectives are a new focus area in *Healthy People 2010*. Healthy Vision 2010 addresses the vision objectives that include visual impairment, regular eye examinations for children and adults, vision screening for preschool children, injury prevention, and vision rehabilitation (1). Healthy Vision 2010 materials designed to educate the public and health-care providers are available at <http://www.healthyvision2010.org>.

CDC collaborates with the National Eye Institute through *Healthy People 2010* and the National Eye Health Education Program. In addition, CDC has developed a program to increase public and professional awareness of efforts to reduce visual impairment and eye diseases. CDC also engages in applied public health research to enhance eye health.

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### Visual Impairment and Use of Eye-Care Services and Protective Eyewear Among Children — United States, 2002

Visual impairment is an important cause of developmental disability among children (1). Ocular conditions, if undetected or untreated, can have substantial long-term implications for the quality of life of the child and the family and can place a burden on public health resources (2). For these reasons, the national health objectives for 2010 now include three vision objectives for children: 1) reducing visual impairment and blindness, 2) increasing the proportion of preschool children who receive vision screening, and 3) increasing the use of protective eyewear in recreational activities and hazardous situations around the home (objective nos. 28-2, 28-4, and 28-9a) (3). When these objectives were published in November 2000, baseline data were available for only one objective, that of reducing visual impairment and blindness among children. To address all three childhood vision objectives, CDC analyzed data from the 2002 National Health Interview Survey (NHIS). This report summarizes the results of that analysis, which indicated that the prevalence of visual impairment and the use of eye-care services were significantly\* higher among children aged  $>6$  years, compared with younger children, and

\*  $p < 0.05$ .

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#### Notifiable Disease Morbidity and 122 Cities Mortality Data

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\* Proposed.

varied by race/ethnicity and family income. As a result of that analysis, national baselines are now available for all three objectives. Collaborative efforts of all relevant agencies, health professionals, educators, and the public are needed to achieve the national childhood vision objectives for 2010.

NHIS is a stratified, multistage probability sample survey of the U.S. civilian, noninstitutionalized population (4). In 2002, the response rate for the child sample (i.e., persons aged <18 years) was 81.3%. Information was collected regarding 12,524 children from a parent or other knowledgeable adult in the family. Children were classified as having visual impairment if the respondents answered "yes" to the question: "Does [name of child] have any trouble seeing, even when wearing glasses or contact lenses?"<sup>†</sup> This question also included blind children.

Use of eye-care services during the preceding year was based on response to the question, "During the past 12 months, has anyone in the family seen or talked to an optometrist, ophthalmologist, or eye doctor (someone who prescribes glasses) about [name of child's] health?" This question included all children in this sample. Information on vision testing was determined for children aged <6 years by asking, "Has [name of child] ever had [his/her] vision tested by a doctor or other health professional?" Information on participation in sports, hobbies, or other activities that can cause eye injury was obtained for children aged 6–17 years: "Does [name of child] participate in sports, hobbies, or other activities that can cause eye injury? This includes activities such as baseball, basketball, soccer, and mowing the lawn." Parents of children who participated in these activities received an additional question on use of protective eyewear: "When doing these activities, on average, does [name of child] wear eye protection always, most of the time, some of the time, or none of the time?" (4).

The prevalences of visual impairment and use of eye-care services and protective eyewear for children were determined by sex, age, race/ethnicity, and family income. All data were weighted to reflect the demographic distribution of the U.S. civilian, noninstitutionalized population aged <18 years, and analyses were conducted by using statistical software. Statistical tests performed to assess significance of differences in the estimates were two-tailed, with the critical value 1.96 at the 0.05 level of significance. Multiple imputation was used to account for the 32% of family income data that were unavailable (5).

In 2002, the prevalence of reported visual impairment and blindness among children aged <18 years was 2.5% (Table 1). The prevalence was significantly lower for children aged <6 years (1.0%) than for children aged 6–17 years (3.3%). Hispanic

<sup>†</sup> The latter half of this question was asked only for children aged ≥2 years.

**TABLE 1. Prevalence of visual impairment and blindness among children aged <18 years, by selected characteristics — National Health Interview Survey, United States, 2002**

Characteristic	Girls		Boys		Total	
	%	(95% CI)*	%	(95% CI)	%	(95% CI)
<b>Age group (yrs)</b>						
<6	0.8	(0.3–1.2)	1.2	(0.6–1.8)	<b>1.0</b>	<b>(0.6–1.3)</b>
6–17	3.0	(2.4–3.5)	3.5	(2.9–4.2)	<b>3.3</b>	<b>(2.8–3.7)</b>
6–11	2.8	(2.0–3.5)	3.7	(2.7–4.6)	<b>3.2</b>	<b>(2.6–3.8)</b>
12–14	4.0	(2.7–5.3)	3.3	(2.0–4.6)	<b>3.6</b>	<b>(2.7–4.6)</b>
15–17	2.5	(1.5–3.4)	3.6	(2.4–4.9)	<b>3.1</b>	<b>(2.3–3.9)</b>
<b>Race/Ethnicity</b>						
Black, non-Hispanic	2.1	(1.3–3.0)	3.1	(1.7–4.4)	<b>2.6</b>	<b>(1.8–3.4)</b>
White, non-Hispanic	2.0	(1.5–2.5)	2.6	(1.9–3.2)	<b>2.3</b>	<b>(1.9–2.7)</b>
Hispanic†	3.6	(2.5–4.7)	3.6	(2.5–4.8)	<b>3.6</b>	<b>(2.8–4.4)</b>
Asian	2.2§	(0.0–4.5)	0.6§	(0.0–1.6)	<b>1.4§</b>	<b>(0.2–2.5)</b>
AI/AN¶	1.5§	(0.0–4.5)	1.4§	(0.0–4.2)	<b>1.4§</b>	<b>(0.0–3.5)</b>
Multiple race	1.4§	(0.0–2.9)	4.9§	(1.3–8.5)	<b>3.3§</b>	<b>(1.2–5.3)</b>
<b>Family income</b>						
Below FPL**	2.8	(1.8–3.8)	4.2	(2.7–5.7)	<b>3.5</b>	<b>(2.6–4.4)</b>
100%–199% of FPL	2.9	(1.9–3.8)	3.6	(2.4–4.8)	<b>3.2</b>	<b>(2.5–4.0)</b>
≥200% of FPL	1.9	(1.4–2.4)	2.1	(1.6–2.6)	<b>2.0</b>	<b>(1.6–2.4)</b>
<b>Total</b>	<b>2.3</b>	<b>(1.9–2.7)</b>	<b>2.8</b>	<b>(2.3–3.3)</b>	<b>2.5</b>	<b>(2.2–2.8)</b>

\* Confidence interval.

† Might be of any race.

§ Data are unreliable because relative standard error is &gt;30%.

¶ American Indian/Alaska Native.

\*\* Federal poverty level.

children had a significantly higher prevalence of reported visual impairment and blindness (3.6%) than non-Hispanic white children (2.3%). Children whose families were below the federal poverty level were nearly twice as likely to be visually impaired as children from families whose income was ≥200% of the poverty level.

Among children aged <6 years, 36.3% were reported to have ever had their vision tested, and 7.4% had visited an eye-care provider during the preceding year (Table 2). Among all children aged <18 years, 20.7% had visited an eye-care provider during the preceding year. Asian, non-Hispanic black, and Hispanic children (15.0%, 19.1%, and 15.5%, respectively) were significantly less likely to have visited an eye-care provider during the preceding 12 months than non-Hispanic white children (22.8%). The proportion of teenagers with a reported visit to an eye-care provider during the preceding year was significantly higher than the proportion in the youngest age group: 30.6% of adolescents aged 15–17 years and 30.1% of those aged 12–14 years, compared with 7.4% in children aged <6 years. Children from families with incomes ≥200% of the federal poverty level were more likely to see an eye-care provider during the preceding 12 months than children from families with incomes below poverty level (22.7% versus 17.0%).

**TABLE 2. Percentage of children aged <6 years who have ever had their vision tested and percentage of children aged <18 years who visited an eye-care provider during the preceding 12 months, by selected characteristics — National Health Interview Survey, United States, 2002**

Characteristic	Ever had a vision test (children aged <6 years)						Had a visit to an eye-care provider during the preceding 12 months (children aged <18 years)					
	Girls		Boys		Total		Girls		Boys		Total	
	%	(95% CI)*	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
<b>Age group (yrs)</b>												
<6	35.1	(32.6–37.6)	37.6	(35.0–40.1)	<b>36.3</b>	<b>(34.6–38.1)</b>	7.0	(5.6–8.4)	7.8	(6.4–9.3)	<b>7.4</b>	<b>(6.4–8.4)</b>
6–17	—†	—	—	—	—	—	29.4	(27.7–31.1)	25.0	(23.5–26.5)	<b>27.2</b>	<b>(26.0–28.3)</b>
6–11	—	—	—	—	—	—	25.3	(23.0–27.7)	22.7	(20.6–24.9)	<b>24.0</b>	<b>(22.4–25.6)</b>
12–14	—	—	—	—	—	—	33.7	(30.2–37.2)	26.8	(23.8–29.7)	<b>30.1</b>	<b>(27.9–32.4)</b>
15–17	—	—	—	—	—	—	33.6	(30.2–36.9)	27.9	(24.8–30.9)	<b>30.6</b>	<b>(28.4–32.9)</b>
<b>Race/Ethnicity</b>												
Black, non-Hispanic	42.8	(36.2–49.3)	43.3	(36.3–50.3)	<b>43.1</b>	<b>(38.3–47.8)</b>	21.2	(18.0–24.5)	17.0	(14.3–19.8)	<b>19.1</b>	<b>(16.9–21.2)</b>
White, non-Hispanic	33.9	(30.5–37.4)	37.3	(33.9–40.7)	<b>35.7</b>	<b>(33.2–38.1)</b>	24.4	(22.7–26.1)	21.3	(19.7–23.0)	<b>22.8</b>	<b>(21.6–24.0)</b>
Hispanic§	31.9	(27.2–36.7)	33.3	(28.8–37.8)	<b>32.6</b>	<b>(29.3–35.9)</b>	15.3	(13.1–17.4)	15.7	(13.6–17.8)	<b>15.5</b>	<b>(14.0–17.1)</b>
Asian	28.9	(16.6–41.3)	33.4	(19.8–47.0)	<b>31.2</b>	<b>(22.0–40.4)</b>	16.9	(10.9–22.9)	13.4	(8.7–18.0)	<b>15.0</b>	<b>(11.2–18.8)</b>
AI/AN¶	36.5**	(3.5–69.4)	13.9**	(0.0–28.0)	<b>20.9**</b>	<b>(6.9–34.8)</b>	27.2	(13.0–41.5)	10.9**	(1.5–20.3)	<b>18.7</b>	<b>(10.0–27.4)</b>
Multiple race	45.4	(32.3–58.5)	49.9	(37.5–62.4)	<b>47.8</b>	<b>(38.7–57.0)</b>	25.4	(17.0–33.8)	20.0	(13.5–26.4)	<b>22.5</b>	<b>(17.1–27.9)</b>
<b>Family income</b>												
Below FPL††	37.2	(31.1–43.3)	33.3	(27.5–39.2)	<b>35.2</b>	<b>(31.0–39.5)</b>	18.2	(15.3–21.2)	15.7	(13.0–18.4)	<b>17.0</b>	<b>(14.8–19.1)</b>
100%–199% of FPL	35.6	(29.9–41.3)	40.9	(34.9–46.9)	<b>38.4</b>	<b>(34.3–42.5)</b>	19.8	(17.1–22.4)	17.1	(14.7–19.5)	<b>18.4</b>	<b>(16.6–20.1)</b>
≥200% of FPL	34.2	(30.8–37.5)	37.6	(34.2–41.0)	<b>35.9</b>	<b>(33.6–38.3)</b>	24.1	(22.4–25.9)	21.3	(19.8–22.8)	<b>22.7</b>	<b>(21.5–23.8)</b>
<b>Total</b>	<b>35.1</b>	<b>(32.6–37.6)</b>	<b>37.6</b>	<b>(35.0–40.1)</b>	<b>36.3</b>	<b>(34.6–38.1)</b>	<b>22.1</b>	<b>(20.9–23.4)</b>	<b>19.4</b>	<b>(18.2–20.6)</b>	<b>20.7</b>	<b>(19.9–21.6)</b>

\* Confidence interval.

† Not applicable.

§ Might be of any race.

¶ American Indian/Alaska Native.

\*\* Data are unreliable because relative standard error is &gt;30%.

†† Federal poverty level.

Approximately half (50.9%) of children aged 6–17 years were reported to participate in sports, hobbies, or other activities that can cause eye injury (Table 3). Boys were more involved in activities that can cause eye injury than girls (60.8% versus 40.6%). In addition, as family income increased, participation in these types of activities also increased. Of children engaged in these activities, 14.6% were reported to use protective eyewear all or most of the time. Among those engaged in activities that can cause eye injuries, boys were more likely than girls to use protective eyewear (16.9% versus 11.1%). Use of protective eyewear did not vary significantly by race/ethnicity, income, or age group.

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**Editorial Note:** The findings in this report indicate that the national health objective for 2010 to reduce the number of children with visual impairment and blindness to 20 per 1,000 children has not yet been achieved. In 2002, the prevalence of visual impairment and blindness (25 per 1,000 children) remained nearly the same as in the baseline year 1997 (24 per 1,000 children) (3). The prevalence of visual impairment and blindness was higher among children aged 6–17 years than among younger children. However, the percentage of children aged <6 years who had received a vision test (36.3%) was below the national health objective target of 52% (3), suggesting that the difference by age is less substantial because

of lack of screening; many parents or caretakers might not be aware of their children's visual difficulties until they begin school. Children from poorer families were more likely to have visual impairment and less likely to visit an eye-care provider than their higher-income counterparts.

Visual cues are important to how a child learns to understand and function in the world. Impaired vision can affect a child's cognitive, emotional, neurologic, and physical development by potentially limiting the range of experiences and the kinds of information to which the child is exposed (6). Children with visual impairment might have additional disabilities; nearly three quarters of visually impaired children aged 3–10 years in a metropolitan Atlanta developmental disabilities surveillance study also had one or more other developmental disabilities, such as mental retardation, cerebral palsy, hearing loss, or epilepsy (1). A substantial percentage of visually impaired children can have their vision improved with eyeglasses or surgery if their conditions are diagnosed in a timely manner.

The findings in this report are subject to at least three limitations. First, proxy-reported visual impairment might differ from measured visual impairment. Second, the interviewed parent or family member might not have complete information on the nature and extent of a child's condition. Finally, because of low prevalence of these conditions and small sample sizes, data for certain racial/ethnic populations might be unreliable.

Reducing visual impairment and increasing use of eye-care services and protective eyewear are public health priorities for

**TABLE 3. Percentage of children aged 6–17 years who participated in activities that can cause an eye injury and who used protective eyewear always or most of the time, by selected characteristics — National Health Interview Survey, United States, 2002**

Characteristic	Participation in activities that can cause an eye injury*						Use of protective eyewear (always or most of the time) among those engaged in activities					
	Girls		Boys		Total		Girls		Boys		Total	
	%	(95% CI) <sup>†</sup>	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
<b>Age group (yrs)</b>												
6–11	39.6	(36.9–42.3)	60.5	(57.9–63.0)	50.2	(48.2–52.2)	9.1	(6.7–11.6)	14.3	(11.6–16.9)	12.3	(10.4–14.1)
12–14	50.5	(46.7–54.4)	62.5	(59.0–66.0)	56.7	(54.1–59.3)	12.1	(8.4–15.8)	20.6	(17.0–24.2)	16.9	(14.3–19.5)
15–17	32.9	(29.5–36.3)	59.9	(56.5–63.4)	46.7	(44.2–49.3)	14.3	(9.6–19.0)	18.4	(15.1–21.7)	17.0	(14.3–19.7)
<b>Race/Ethnicity</b>												
Black, non-Hispanic	24.1	(20.2–28.1)	55.8	(51.2–60.4)	40.0	(36.6–43.4)	12.9	(7.4–18.4)	12.4	(8.2–16.7)	12.6	(9.2–16.0)
White, non-Hispanic	49.0	(46.5–51.6)	67.1	(64.9–69.3)	58.3	(56.5–60.0)	10.9	(8.6–13.2)	17.0	(14.6–19.4)	14.5	(12.9–16.1)
Hispanic <sup>§</sup>	23.4	(20.2–26.6)	42.4	(38.9–46.0)	33.2	(30.7–35.6)	12.5	(7.3–17.8)	22.6	(17.9–27.3)	19.1	(15.5–22.8)
Asian	28.3	(18.3–38.4)	47.7	(38.0–57.4)	39.1	(31.9–46.2)	5.7 <sup>¶</sup>	(0.0–13.9)	13.5 <sup>¶</sup>	(2.3–24.7)	10.9 <sup>¶</sup>	(2.8–19.1)
AI/AN <sup>**</sup>	29.4 <sup>¶</sup>	(8.8–50.0)	81.4	(66.6–96.2)	52.2	(37.2–67.2)	21.4 <sup>¶</sup>	(0.0–50.6)	15.6 <sup>¶</sup>	(0.0–34.2)	17.5 <sup>¶</sup>	(3.0–31.9)
Multiple race	60.3	(48.6–72.1)	62.9	(52.5–73.2)	61.7	(54.0–69.4)	5.6 <sup>¶</sup>	(0.0–12.0)	11.8 <sup>¶</sup>	(3.3–20.4)	9.0 <sup>¶</sup>	(3.4–14.6)
<b>Family income</b>												
Below FPL <sup>††</sup>	25.4	(21.1–29.8)	42.6	(38.0–47.3)	33.9	(30.6–37.2)	13.9	(7.1–20.7)	17.1	(11.3–22.9)	15.9	(11.6–20.2)
100%–199% of FPL	29.1	(25.0–33.3)	54.5	(50.5–58.5)	42.4	(39.2–45.7)	11.4	(6.8–16.0)	13.5	(9.7–17.3)	12.8	(9.8–15.8)
≥200% of FPL	48.7	(46.2–51.2)	67.8	(65.6–70.0)	58.4	(56.7–60.2)	10.6	(8.4–12.8)	17.8	(15.4–20.2)	14.9	(13.2–16.5)
<b>Total</b>	<b>40.6</b>	<b>(38.7–42.6)</b>	<b>60.8</b>	<b>(59.0–62.6)</b>	<b>50.9</b>	<b>(49.6–52.3)</b>	<b>11.1</b>	<b>(9.1–13.0)</b>	<b>16.9</b>	<b>(15.0–18.7)</b>	<b>14.6</b>	<b>(13.3–15.9)</b>

\* Activities such as baseball, basketball, soccer, and mowing the lawn.

† Confidence interval.

§ Might be of any race.

¶ Data are unreliable because relative standard error is >30%.

\*\* American Indian/Alaska Native.

†† Federal poverty level.

U.S. residents of all ages. Nearly all eye injuries can be prevented with the proper selection and use of protective eyewear (7). A strategy aimed at teaching children from an early age to use protective eyewear, including sunglasses, might have a life-long impact on their ocular health (8). In 2002, approximately 50% of children were involved in sports and other activities that can cause eye injury, and less than 15% of them used protective eyewear always or most of the time. A national health objective for 2010 aims to increase the use of protective eyewear in recreational activities and hazardous situations around the home to 20%; in 2002, the proportion of children using protective eyewear was below this target. The American Academy of Ophthalmology and the American Academy of Pediatrics provide a list of recommended eye protection for specific sports and activities (7), enabling parents to choose eyewear depending on their child's activities. Public health surveillance programs on vision should continue to use NHIS data to help design and implement effective strategies to improve the nation's visual health.

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## Outbreak of Multidrug-Resistant *Salmonella* Typhimurium Associated with Rodents Purchased at Retail Pet Stores — United States, December 2003–October 2004

During 2004, the Minnesota Department of Health (MDH) Public Health Laboratory notified CDC about the isolation of multidrug-resistant *Salmonella* enterica serotype Typhimurium from ill hamsters from a Minnesota pet distributor. This report describes two of the first identified human cases associated with this outbreak, summarizes the multistate investigation of human *S. Typhimurium* infections associated with exposure to rodents (e.g., hamsters, mice, and rats) purchased at pet stores, and highlights methods for reducing *Salmonella* transmission from pet rodents to their owners. This is the first documented salmonellosis outbreak associated with pet rodents. Findings demonstrate that the handling of pet rodents is a potential health risk, especially for children. Public health practitioners should consider pet rodents a potential source of salmonellosis.

### Case Reports

**South Carolina.** During June 2004, a boy aged 4 years was hospitalized for 5 days with fever (105°F [40.6°C]), watery diarrhea, and abdominal cramping. A stool culture yielded *S. Typhimurium*. Nine days before the boy's illness, his family had purchased a hamster from a retail pet store supplied by an Arkansas distributor; the hamster was found dead 2 days after purchase.

**Minnesota.** During August 2004, a boy aged 5 years had diarrhea of 14 days' duration (initially bloody), abdominal cramps, vomiting, and fever (103°F [39.4°C]). A stool culture yielded *S. Typhimurium*. Four days before the boy became ill, his family had purchased a mouse from a retail pet store supplied by a Minnesota distributor. The mouse became lethargic and had diarrhea immediately after purchase. Even though the mouse was ill, the boy frequently handled and kissed the mouse. One week after purchase, the mouse died; the mouse was frozen and later submitted for testing at MDH. Cultures of the mouse's lungs, pooled liver and spleen, and intestines yielded growth of *S. Typhimurium*, with a pulsed-field gel electrophoresis (PFGE) pattern indistinguishable from the boy's isolate.

## Hamster Salmonellosis

On August 30, a veterinarian for the Minnesota pet distributor called MDH about isolation of *Salmonella* from two ill hamsters submitted to the University of Minnesota Veterinary Diagnostic Laboratory (UMVDL). The hamsters were part of a shipment of 780 received on August 15 from an Iowa pet distributor (Figure). A total of 243 hamsters from this shipment were subsequently sent from the Minnesota distributor to 15 retail pet stores in four midwestern states. Distribution of rodents from the Minnesota distributor ceased on August 23 after numerous hamster deaths. Diarrhea was present in the majority of ill hamsters. By August 29, approximately 320 (60%) of the remaining 537 hamsters at the Minnesota distributor had died; the other hamsters were euthanized.

UMVDL cultured *S. Typhimurium* from the internal organs of seven hamsters submitted for necropsy from the affected shipment. Isolates from these hamsters were submitted to MDH for testing; they were indistinguishable by PFGE from each other and from the Minnesota patient isolate that was submitted to MDH through routine surveillance. A subsequent MDH query of the PulseNet National *Salmonella* Database revealed that these *S. Typhimurium* isolates were indistinguishable by PFGE from a Kentucky patient's isolate and from the South Carolina patient isolate. Historical data from the database confirmed that this PFGE pattern was uncommon, representing 23 of 17,737 isolates in the *S. Typhimurium* database since 1998, providing additional evidence that this cluster potentially represented a common source outbreak.

## Epidemiologic Investigation

Based on recognition of the Minnesota and South Carolina human cases, CDC and MDH conducted a national search for additional human cases associated with exposure to rodents. A review of isolates submitted to the PulseNet National *Salmonella* Database in 2004 revealed 28 matching human case-isolates of *S. Typhimurium* from 19 states; patient illness onset dates ranged from December 2003 to October 2004. Of 22 patients interviewed, 13 (59%) had been exposed to rodents purchased from retail pet stores (Figure); all exposures occurred during the 8 days before illness onset. Two (9%) patients acquired salmonellosis through secondary exposure. Seven (32%) of the 22 patients had no identified rodent exposure. Four patients remained under investigation, and two were lost to follow-up.

The 15 patients with primary or secondary rodent exposure were from Illinois, Kentucky, Missouri, Pennsylvania, and South Carolina (two cases each), Georgia, Michigan, Minne-

sota, New Jersey, and North Carolina (one case each) (Figure). Dates of illness onset ranged from December 23, 2003, to September 28, 2004. The median age of patients was 16 years (range: 0–43 years), and seven (47%) were aged <7 years. Symptoms reported by patients with confirmed rodent exposure included abdominal cramping (77%), fever (67%), vomiting (53%), and bloody diarrhea (20%). Six (40%) patients were hospitalized; no deaths occurred. Rodent exposures of primary patients included mice/rats purchased to feed snakes (seven cases), pet mice/rats (four), and pet hamsters (two). Human and animal *S. Typhimurium* isolates were uniformly resistant to ampicillin, chloramphenicol, streptomycin, sulfizoxazole, and tetracycline (R-type ACSSuT). Phage typing was performed on three human isolates at CDC; all were determined to be definitive phage type (DT) 120.

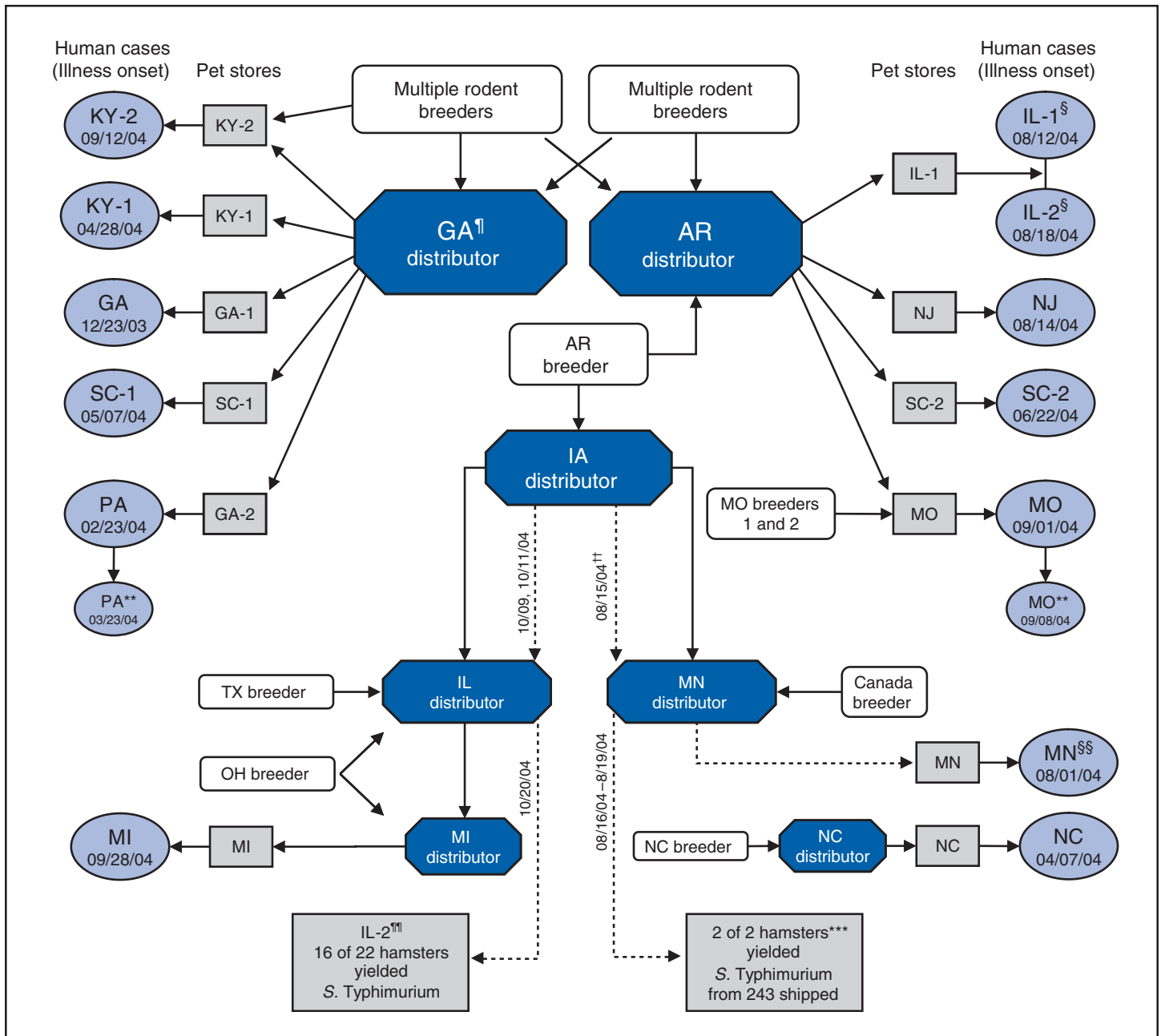
## Animal Traceback Investigations and Environmental Testing

CDC, state and local health departments, and the U.S. Department of Agriculture Animal Care conducted traceback investigations of rodents from patients with confirmed rodent exposure and identified retail pet stores, rodent distributors, and breeders (Figure). Rodents purchased at retail pet stores were most frequently traced to a pet distributor in Georgia or Arkansas. In October 2004, a retail pet store in Illinois identified ill hamsters traced back to shipments originating from the Iowa distributor; *S. Typhimurium* was isolated from 16 of 22 necropsied hamsters. Seven isolates were submitted to the Illinois Department of Public Health Division of Laboratories for PFGE testing; all were indistinguishable from previous *S. Typhimurium* isolates obtained from hamsters received in Minnesota from the Iowa distributor (Figure).

In November 2004, *S. Typhimurium* was isolated at the Georgia distributor from environmental cultures of rodent transport cages, rat bins, mice pellets/bedding, and rat pellets. Three of the four isolates were indistinguishable from each other by PFGE and closely related to the outbreak PFGE pattern. The Georgia Public Health Laboratory performed susceptibility testing of isolates from the Georgia distributor; tests indicated multidrug-resistance (R-type ACSSuT). Systematic environmental cultures were not obtained at the implicated Arkansas and Iowa pet distributors or other breeders.

Information on use of antimicrobials (e.g., spectinomycin, leptomycin, tetracycline, and nitrofurazone) was obtained from five rodent breeders/distributors. Routine use of antimicrobials was documented in four facilities that use them for prevention of nonspecific rodent enteritis. Delivery of antimicrobial agents

**FIGURE. Traceback results for pet rodents associated with an outbreak of multidrug-resistant *Salmonella* serotype Typhimurium — 10 states\*, December 2003–October 2004†**



**Note:** Dotted line denotes movement of rodents with culture-confirmed *S. Typhimurium*.

\* Georgia (GA), Illinois (IL), Kentucky (KY), Michigan (MI), Minnesota (MN), Missouri (MO), New Jersey (NJ), North Carolina (NC), Pennsylvania (PA), and South Carolina (SC). Identified pet stores, distributors, and breeders in Arkansas (AR), GA, IL, Iowa (IA), MI, MN, MO, NC, Ohio (OH), Texas (TX), and Canada.

† As of December 28, 2004.

§ Mother-daughter with exposure to single purchased rodent.

¶ *S. Typhimurium* isolated from pooled cultures of mice transport cages, rat bins, mice feces/bedding, and rat feces; three isolates were closely related to the outbreak pulsed-field gel electrophoresis (PFGE) patterns (two band difference).

\*\* Secondary human cases.

†† A total of 780 ill hamsters received at MN Distributor from IA Distributor. *S. Typhimurium* isolated from internal organs of five necropsied hamsters.

§§ *S. Typhimurium* isolated from both MN patient and necropsied pet mouse.

¶¶ *S. Typhimurium* isolated from 16 of 22 necropsied hamsters; seven isolates were submitted for subtyping by PFGE, and all matched the outbreak pattern. Hamsters at IL pet store traced to shipments originating from IA Distributor.

\*\*\* A total of 243 (of 780) hamsters shipped to 15 pet stores in four midwestern states. *S. Typhimurium* isolated from hamsters returned by an MN and an IA pet store; hamsters were submitted for necropsy.

in drinking water occurred at the time of rodent weaning, before transport, and/or on arrival at the pet distributor. One pet distributor used rodent feed containing tetracycline for all rodent feedings.

No common link was identified among the three main implicated pet distributors (Arkansas, Georgia, and Iowa); the source of infected rodents for this multistate outbreak is unknown. A systematic review of shipping and commercial records was not possible at many of the potentially involved rodent breeders and distributors.

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**Editorial Note:** Each year, an estimated 1.4 million persons in the United States have salmonellosis, leading to approximately 14,800 hospitalizations and 415 deaths (1,2). *Salmonella* is found in the intestinal tract of animals and is transmitted by ingestion of feces, which might occur from eating contaminated foods or through contact with animals or their environments. Exposure to animals with higher frequency of *Salmonella* shedding in their feces increases the risk for acquiring salmonellosis; among pets, these include reptiles, young animals, and animals with diarrhea (3,4). In addition to reptiles, salmonellosis outbreaks have been reported after handling of pet chicks, ducklings, kittens, and hedgehogs (5–7).

Cases described in this outbreak were dispersed temporally and geographically, and rodent purchases occurred through multiple retail pet store chains and pet distributors; these factors might reflect the geographic spread of *S. Typhimurium* from a common source of infection occurring earlier in the chain of pet distributors or breeders. The recovery of *S. Typhimurium* from reusable transport containers, cages, and bins contaminated with rodent droppings offers a potential mechanism for both the environmental persistence and geographic spread of *Salmonella*. Rodents subsequently transported or housed in contaminated containers might have been exposed to *Salmonella* and become infected without direct contact with infected rodents.

Phage typing of the *S. Typhimurium* isolates indicated DT120. *S. Typhimurium* DT120 is known to be multidrug-resistant, possessing antibiotic-resistance gene cassettes found also in *S. Typhimurium* DT104 (8). Thus, identifying pet rodents as an additional reservoir of multidrug-resistant *S. Typhimurium* is of public health importance. Antimicrobial agents are ineffective at preventing *Salmonella* shedding and likely prolong such shedding. The dissemination of

multidrug-resistant *Salmonella* in pet rodents might have been facilitated by the use of prophylactic antimicrobials within the pocket-pet (e.g., hamsters, mice, and rats) animal industry. This use might have contributed to disease in colonized animals and increased shedding of *Salmonella*, thus facilitating increased transmission among animals and from animals to their human caretakers.

Public health practitioners should consider pet rodents a potential source of salmonellosis and, when indicated, should obtain cultures from pet rodents during an investigation. Veterinarians, animal breeders, and distributors should consider submitting specimens to clinical laboratories for *Salmonella* isolation if substantial diarrhea-associated morbidity or mortality occurs among pet rodents intended for sale. Heightened infection-control practices by pet stores and distributors, including routine sanitizing of animal transport containers and cages, might reduce transmission. Preventive strategies (e.g., appropriate animal husbandry and hygiene practices) could reduce the need for nontherapeutic antimicrobials to prevent disease in rodents (9).

Consumers and animal workers should be aware that rodents, like reptiles, can shed *Salmonella*; therefore, they should expect rodent feces to be potentially infectious. *Salmonella* transmission to humans can be reduced by thoroughly washing hands with soap and water after handling rodents or their cages or bedding. Young children who are unable to reliably wash their hands should avoid contact with rodent feces. Additional public health recommendations for preventing salmonellosis from reptiles might also be appropriate for preventing salmonellosis from pet rodents (3).

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## Social Support and Health-Related Quality of Life Among Older Adults — Missouri, 2000

Overall health can be influenced by multiple factors, including a person's psychological, behavioral, and social well-being. Studies have demonstrated an association between increased levels of social support and reduced risk for physical disease, mental illness, and mortality (1,2). Social support includes real or perceived resources provided by others that enable a person to feel cared for, valued, and part of a network of communication and mutual obligation (2). Social support can be critical for those older adults who rely on family, friends, or organizations to assist them with daily activities, provide companionship, and care for their well-being. The 1965 Older Americans Act recognized the need for social support by requiring that agencies on aging provide in-home services and group meals to foster social interactions (3). To examine how social support is related to health-related quality of life (HRQOL), CDC analyzed data from the 2000 Missouri Older Adults Needs Assessment Survey (MOANAS) of adults aged  $\geq 60$  years. This report describes the results of that analysis, which indicated that visits with friends or relatives, having close friends for emotional support, and the perception of help being available if sick or disabled were associated with better HRQOL and particularly with better mental health among older adults. Implementing effective prevention programs for older adults and encouraging interventions by agencies on aging can help improve HRQOL among older adults who have little social support.

In 2000, the Missouri Department of Health and Senior Services conducted MOANAS, a statewide, stratified, random-digit-dialed telephone survey designed to collect health, social service, and needs assessment data on Missouri adults aged  $\geq 60$  years; blacks were oversampled. The CASRO response rate was 64%. MOANAS was approved by the Institutional Review Board at the state health department. Perceived levels of social support for respondents were determined by answers to questions regarding 1) the number of persons sharing their household, 2) how often they visited or were visited by friends or relatives during the preceding month, 3) the number of close friends who might provide emotional support, and 4) the availability of help if they became sick or disabled.

HRQOL was assessed by answers to questions validated for such surveillance (4), beginning with, "How many days in the preceding 30 days," and ending with 1) "was your physical health, which includes physical illness or injury, not good?" 2) "was your mental health, which includes stress, depression, and problems with emotions, not good?" 3) "did you feel sad, blue, or depressed?" 4) "did you feel worried, tense, or anxious?" and 5) "did you feel very healthy and full of energy?" Activity limitation was assessed by asking, "Are you limited in any way in any activities because of any impairment or health problem?" To examine how different levels of social support were associated with differences in HRQOL, unadjusted and multivariable-adjusted mean days (i.e., adjusted for sex, age, race/ethnicity, marital status, annual household income, and activity limitation) were calculated. Unadjusted and adjusted mean days and their 95% confidence intervals (CIs) were calculated by using statistical software cross-tabulation and multivariate linear regression analyses to account for the complex survey design. Calculations were weighted to reflect age, sex, and race/ethnicity characteristics of the Missouri population.

The final sample included 3,112 respondents. HRQOL varied significantly ( $p < 0.05$ ) by sex, age, marital status, education, annual household income, self-rated health, and activity limitation (Table 1). On average, when compared with men, women reported more mentally unhealthy days during the preceding 30 days (2.6 days versus 1.6 days); sad, blue, or depressed days (3.1 versus 1.9); and worried, tense, or anxious days (3.9 versus 2.0). When compared with those with college degrees, participants with less than a high school education reported more physically unhealthy days (9.5 days versus 2.7 days); sad, blue, or depressed days (4.3 versus 1.2); and worried, tense, or anxious days (4.6 versus 1.9). Persons with annual household income of  $< \$15,000$ , when compared with those with annual household income of  $\geq \$50,000$ , reported more physically unhealthy days (9.8 versus 2.7); sad,

**TABLE 1. Health-related quality of life indicators during the preceding 30 days among persons aged ≥60 years, by demographic characteristic, self-rated health status, and activity limitation status — Missouri Older Adults Needs Assessment Survey, 2000**

Characteristic	Respondents*		Physically unhealthy days		Mentally unhealthy days		Sad/blue/depressed days		Worried/tense/anxious days		Vitality days	
	No.	(%)	Mean	(95% CI)†	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)
<b>Sex</b>												
Men	1,088	(40.1)	5.5	(4.8–6.2)	1.6	(1.2–2.0)	1.9	(1.5–2.3)	2.0	(1.6–2.4)	20.2	(19.3–21.1)
Women	2,024	(59.9)	6.0	(5.4–6.6)	2.6	(2.2–3.0)	3.1	(2.7–3.5)	3.9	(3.4–4.4)	18.8	(18.1–19.5)
<b>Age group (yrs)</b>												
60–74	1,976	(66.2)	5.2	(4.7–5.7)	2.3	(1.9–2.7)	2.7	(2.3–3.1)	3.2	(2.8–3.6)	20.3	(19.6–21.0)
75–84	905	(28.0)	7.0	(6.0–8.0)	2.0	(1.4–2.6)	2.5	(2.0–3.0)	2.9	(2.3–3.5)	17.8	(16.7–18.9)
≥85	217	(5.8)	6.6	(4.8–8.4)	1.5	(0.6–2.4)	2.5	(1.5–3.5)	3.4	(1.9–4.9)	15.4	(13.0–17.8)
<b>Race/Ethnicity</b>												
White, non-Hispanic	2,652	(88.9)	5.5	(5.0–6.0)	2.1	(1.8–2.4)	2.5	(2.2–2.8)	3.1	(2.8–3.4)	19.5	(18.9–20.1)
Black, non-Hispanic	351	(9.4)	7.4	(5.8–9.0)	2.3	(1.3–3.3)	2.7	(1.8–3.6)	2.8	(1.8–3.8)	19.2	(17.6–20.8)
Other	77	(1.8)	9.1	(5.0–13.2)	5.8	(1.3–10.3)	9.2	(2.2–16.2)	7.1	(2.7–11.5)	16.3	(11.1–21.5)
<b>Marital status</b>												
Married/Unmarried couple	1,456	(59.5)	5.1	(4.5–5.6)	1.9	(1.5–2.3)	2.1	(1.7–2.6)	2.7	(2.2–3.1)	20.5	(19.8–21.2)
Divorced/Separated	374	(9.6)	7.8	(6.2–9.5)	3.1	(2.2–3.9)	3.8	(2.6–5.0)	4.2	(3.1–5.3)	18.3	(16.6–20.0)
Widowed	1,165	(27.5)	7.0	(6.2–7.7)	2.5	(2.0–3.1)	3.3	(2.8–3.8)	3.7	(3.1–4.2)	17.2	(16.3–18.2)
Never married	112	(3.5)	3.3	(1.4–5.1)	1.6	(0.0–3.2)	2.3	(0.5–4.0)	3.8	(1.1–6.4)	20.4	(17.5–23.3)
<b>Education</b>												
Less than high school	793	(23.0)	9.5	(8.4–10.6)	3.2	(2.5–3.9)	4.3	(3.5–5.1)	4.6	(3.8–5.4)	15.8	(14.6–17.0)
High school	1,214	(39.2)	5.4	(4.7–6.1)	2.0	(1.5–2.5)	2.4	(1.8–3.0)	2.8	(2.3–3.3)	19.7	(18.8–20.6)
Some college	609	(20.4)	5.1	(4.0–6.2)	2.3	(1.6–3.0)	2.3	(1.7–2.9)	3.3	(2.5–4.1)	19.9	(18.6–21.2)
College	484	(17.4)	2.7	(2.0–3.4)	1.1	(0.6–1.6)	1.2	(0.8–1.6)	1.9	(1.3–2.5)	22.6	(21.5–23.7)
<b>Annual household income</b>												
<\$15,000	876	(31.1)	9.8	(8.8–10.8)	3.4	(2.7–4.1)	4.3	(3.6–5.0)	5.2	(4.4–6.0)	15.2	(14.1–16.3)
\$15,000–\$24,999	578	(26.2)	6.0	(5.1–6.9)	2.8	(2.0–3.6)	2.7	(1.7–3.7)	3.3	(2.5–4.1)	19.1	(17.8–20.4)
\$25,000–\$49,999	588	(28.2)	3.2	(2.4–4.0)	1.7	(1.0–2.4)	1.7	(1.2–2.2)	2.1	(1.5–2.7)	21.2	(20.1–22.3)
≥\$50,000	298	(14.5)	2.7	(1.8–3.6)	0.7	(0.4–1.0)	1.1	(0.6–1.6)	1.9	(1.1–2.7)	24.3	(23.0–25.6)
<b>Self-rated health</b>												
Excellent–Good	2,053	(68.4)	2.0	(1.7–2.3)	1.3	(1.0–1.6)	1.6	(1.3–1.9)	2.0	(1.7–2.3)	23.3	(22.8–23.8)
Fair–Poor	1,049	(31.6)	14.4	(13.4–15.4)	4.2	(3.5–4.9)	5.0	(4.2–5.8)	5.6	(4.9–6.3)	10.6	(9.7–11.5)
<b>Activity limitation</b>												
Yes	1,016	(32.3)	12.3	(11.3–13.3)	3.8	(3.2–4.4)	4.3	(3.5–5.1)	5.3	(4.5–6.1)	11.5	(10.5–12.5)
No	2,090	(67.7)	2.8	(2.4–3.2)	1.4	(1.2–1.6)	1.8	(1.4–2.2)	2.1	(1.7–2.5)	23.1	(22.5–23.7)
<b>Overall</b>	<b>3,112</b>	<b>(100.0)</b>	<b>5.8</b>	<b>(5.3–6.3)</b>	<b>2.2</b>	<b>(1.9–2.5)</b>	<b>2.6</b>	<b>(2.3–2.9)</b>	<b>3.1</b>	<b>(2.8–3.4)</b>	<b>19.4</b>	<b>(18.8–20.0)</b>

\* Sample size includes all respondents within each demographic category.

† Confidence interval.

blue, or depressed days (4.3 versus 1.1); and fewer days with vitality (15.2 versus 24.3). Persons with activity limitations, when compared with those without activity limitations, reported more physically unhealthy days (12.3 versus 2.8); sad, blue, or depressed days (4.3 versus 1.8); worried, tense, or anxious days (5.3 versus 2.1); and fewer days with vitality (11.5 versus 23.1).

Persons who lived alone reported similar HRQOL as those who lived with one or more persons (e.g., 2.5 mentally unhealthy days versus 2.1 days for those living with one person and 3.5 for those living with two or more persons) (Table 2). However, HRQOL varied significantly ( $p < 0.05$ ) by other social support characteristics. Older adults who almost never visited friends or relatives during the preceding 30 days reported more mentally unhealthy days (5.1 versus

1.9); sad, blue, or depressed days (5.7 versus 2.1); worried, tense, or anxious days (5.7 versus 2.6); and fewer vitality days (15.8 versus 20.2) than those who visited friends or relatives at least several times a week. Persons who reported having no close friends for emotional support reported more physically unhealthy days (8.1 versus 5.5 for those with three or more friends), mentally unhealthy days (4.8 versus 1.9), days with depressive symptoms (5.3 versus 2.0), days with symptoms of anxiety (6.6 versus 2.7), and significantly fewer days with vitality (16.2 versus 20.1) than those with three or more friends (Table 2). In addition, those who perceived that help was available, although only for a short time, had fewer physically unhealthy days (5.3 versus 8.3); sad, blue, or depressed days (2.2 versus 6.2); or worried, tense, or anxious days (3.4 versus 6.9) than those who perceived no help available.

**TABLE 2. Health-related quality of life indicators during the preceding 30 days among persons aged ≥60 years\*, by social support characteristic — Missouri Older Adults Needs Assessment Survey, 2000**

Characteristic	No.†	Physically unhealthy days		Mentally unhealthy days		Sad/blue/depressed days		Worried/tense/anxious days		Vitality days	
		Mean	(95% CI)§	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)	Mean	(95% CI)
<b>Number of persons sharing household</b>											
None	941	6.0	(4.7–7.3)	2.5	(1.5–3.5)	3.4	(2.6–4.2)	4.1	(3.2–5.0)	19.6	(18.3–20.9)
One	1,023	5.8	(5.1–6.5)	2.1	(1.5–2.7)	2.3	(1.8–2.8)	2.8	(2.3–3.3)	19.3	(18.4–20.2)
Two or more	211	5.8	(4.3–7.3)	3.5	(2.1–4.9)	2.3	(1.3–3.3)	3.6	(2.5–4.7)	18.5	(16.8–20.2)
<b>Visit friends or relatives during preceding month</b>											
At least several times a week	1,317	5.4	(4.9–5.9)	1.9	(1.5–2.3)	2.1	(1.7–2.5)	2.6	(2.2–3.0)	20.2	(19.6–20.8)
Once a week	472	6.8	(5.8–7.8)	2.6	(1.9–3.3)	3.1	(2.4–3.8)	3.9	(3.1–4.7)	18.3	(17.1–19.5)
Less than once a week	230	5.4	(3.9–6.9)	3.2	(2.0–4.4)	3.3	(2.0–4.6)	4.6	(3.2–6.0)	18.8	(16.9–20.7)
Almost never	128	7.4	(5.0–9.8)	5.1	(2.7–7.5)	5.7	(3.3–8.1)	5.7	(3.5–7.9)	15.8	(13.2–18.4)
<b>Number of close friends for emotional support</b>											
Three or more	1,432	5.5	(5.0–6.0)	1.9	(1.5–2.3)	2.0	(1.7–2.3)	2.7	(2.3–3.1)	20.1	(19.4–20.8)
Two	285	5.5	(4.1–6.9)	2.6	(1.7–3.5)	2.9	(1.9–3.9)	3.1	(2.3–3.9)	18.4	(16.9–19.9)
One	130	7.0	(5.2–8.8)	5.5	(3.4–7.6)	5.3	(3.1–7.5)	6.0	(4.0–8.0)	16.0	(14.0–18.0)
None	159	8.1	(6.2–10.0)	4.8	(3.0–6.6)	5.3	(3.2–7.4)	6.6	(4.7–8.5)	16.2	(14.0–18.4)
<b>Available help and perceived length of time help is available if sick or disabled¶</b>											
As long as needed	1,201	5.6	(5.0–6.2)	1.9	(1.5–2.3)	2.0	(1.7–2.3)	2.3	(1.9–2.7)	20.5	(19.8–21.2)
Only for a short time	284	5.3	(4.2–6.4)	2.7	(1.7–3.7)	2.2	(1.5–2.9)	3.4	(2.6–4.2)	18.3	(17.0–19.6)
Only now and again	99	5.3	(2.8–7.8)	2.0	(0.8–3.2)	3.4	(1.7–5.1)	3.8	(1.6–6.0)	18.5	(16.0–21.0)
Unknown duration	184	5.9	(4.1–7.7)	2.0	(0.9–3.1)	3.0	(1.5–4.5)	3.1	(1.7–4.5)	19.3	(17.0–21.6)
No help available	261	8.3	(6.5–10.1)	4.6	(3.1–6.1)	6.2	(4.5–7.9)	6.9	(5.2–8.6)	15.7	(13.7–17.7)

\* Adjusted for sex, age, race/ethnicity, marital status, annual household income, and activity limitation.

† Sample size reflects minimum number of respondents among all observations in the multivariate models.

§ Confidence interval.

¶ Combined responses to “Is there someone who could care for you if you were sick or disabled?” and “Would this person be able to take care of you as long as needed, only for a short time, or only now and then?”

**Reported by:** CL Keyes, PhD, Rollins School of Public Health; B Michalec, MA, Dept of Sociology, Emory Univ, Atlanta, Georgia. R Kobau, MPH, H Zahran, MD, MM Zack, MD, EJ Simoes, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

**Editorial Note:** The findings in this report suggest an association between perceived social support and HRQOL among older, community-dwelling, adults. Increased levels of perceived social support generally corresponded to fewer reported mentally unhealthy days and more vitality days. Differences by demographic subgroups were consistent with findings from previous studies and indicated that older adults with less education or lower annual household income are particularly vulnerable to impaired HRQOL (4,5).

The existence and amount of social support are different from its quality and type. Social support can include perceived emotional support, instrumental support (e.g., direct assistance such as transportation), and informational support (e.g., sharing knowledge about resources). The measures of social support used in this study included emotional and instrumental support. However, additional study is needed to fur-

ther examine how perceptions of support and different types of support affect HRQOL.

Living alone was not associated with worse HRQOL, suggesting that household size might not be an adequate measure of social isolation. These findings extend research demonstrating that living alone is not necessarily detrimental to mental health (6). Having three or more close friends was associated with better HRQOL, compared with having one or two friends. A greater number of friends might offer a broader range of support and balance in terms of benefits and costs of social exchange (7).

The findings in this report are subject to at least six limitations. First, MOANAS excluded persons without telephones or with mobile phones only and those in institutions (e.g., hospitals or nursing homes). Second, MOANAS might have excluded the severely impaired because time and functional capacity are required to participate. Third, the cross-sectional design of the survey precludes determining whether perceived social support affects HRQOL or vice versa; no causation can be inferred from the data in this report. Fourth, the study did not assess the quality of social support; more social support

might not lead to better HRQOL if negative interactions (e.g., arguing) occur (1,2). Fifth, these findings are based on participants' self-assessments of physical, mental, and emotional health and perceptions of social support and might be subject to bias. Finally, social support variables are related to both health status and activity limitation; controlling for activity limitation alone might not adequately control for health status.

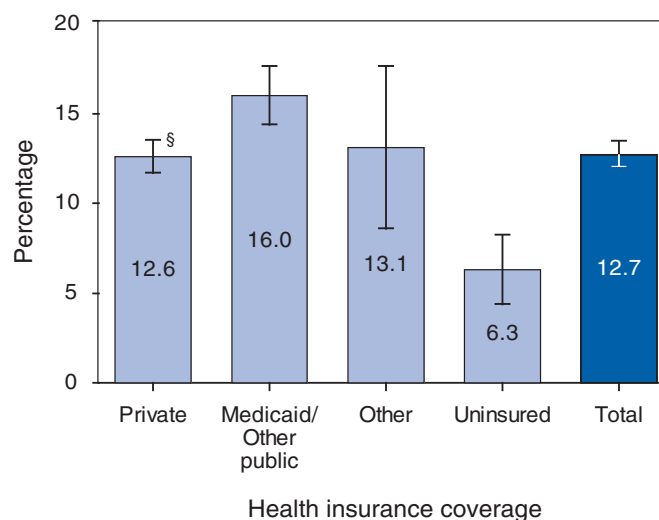
Social support can promote health by providing persons with positive experiences, socially rewarding roles, or improved ability to cope with stressful events (1,2). Social support is

critical for older adults who are at increased risk for disability associated with chronic disease or social isolation after the loss of a partner. Certain programs might help older adults who have little social support and who report worse HRQOL. For example, the Program to Encourage Active, Rewarding Lives for Seniors (operated by the University of Washington Health Promotion Research Center) was determined to reduce depressive symptoms and improve health status among community-dwelling older adults with minor depression (8). The Senior Wellness Project, a health promotion and disease man-

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Percentage of Children Aged <18 Years Who Regularly\* Took Prescription Medication, by Health Insurance Coverage Status — United States, 2003†



\* For at least 3 months.

† Estimates are age-adjusted to the 2000 U.S. standard population for age groups 0–4 years, 5–11 years, and 12–17 years.

§ 95% confidence interval.

In 2003, approximately one in eight children had a condition for which they regularly took prescription medication. Children with private or public health insurance coverage were at least twice as likely as children with no health insurance coverage to have been on regular medication.

**SOURCE:** Dey AN, Bloom B. Summary health statistics for U.S. children: National Health Interview Survey, 2003. US Department of Health and Human Services, CDC, National Center for Health Statistics; 2005. Vital Health Stat 2005;10(223). Available at [http://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_223.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_223.pdf).

agement program, uses peer mentors to provide participants with social interaction, encouragement, and support in attaining their health goals (9). Finally, state and area agencies on aging have programs designed to reduce social isolation and improve HRQOL (3).

### Acknowledgments

This report is based, in part, on data contributed by the Div of Chronic Disease Prevention and Health Promotion, Missouri Dept of Health and Senior Svcs. This study was supported under a cooperative agreement from CDC through the Association of Teachers of Preventive Medicine, Atlanta, Georgia.

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### Notice to Readers

#### Fourth Annual Conference on Public Health Law — June 13–15, 2005

The CDC Public Health Law Program and the American Society of Law, Medicine and Ethics, along with collaborating organizations, are sponsoring the fourth annual conference on “The Public’s Health and the Law in the 21st Century,” June 13–15, 2005, at the Sheraton Midtown Atlanta Hotel at Colony Square in Atlanta, Georgia. The conference will focus on innovative legal tools for improved public health, with emphasis on information participants can use in day-to-day practice.

Participants and faculty include public health practitioners and medical professionals, attorneys, judges, elected officials, emergency management and law enforcement professionals, and researchers. Speakers and faculty will include representatives from The Robert Wood Johnson Foundation, World Health Organization, American Medical Association, Public Health Service, Association of State and Territorial Health Officials, Georgetown University Law Center, Center for Genetics and Health Policy at Vanderbilt University, and Cable News Network.

Sessions will cover legal and policy issues, including the following: public health emergencies, hospital infection control, quarantine, migration, obesity and cardiovascular disease, domestic violence and sexual victimization of youth, alcohol-related child motor-vehicle injury, newborn screening, vaccine safety, use of drugs in school settings, and use of international trade agreements for public health purposes. Continuing education credits will be offered.

Final day for early registration is May 10. Additional information is available at [http://www.phppo.cdc.gov/od/phlp/conference/con2005\\_overview.asp](http://www.phppo.cdc.gov/od/phlp/conference/con2005_overview.asp) or by e-mail from [KMcCarthy2@cdc.gov](mailto:KMcCarthy2@cdc.gov).

*Notice to Readers***National Nursing Home Week —  
May 8–14, 2005**

National Nursing Home Week, established by the American Health Care Association, honors those who promote quality of care at nursing home facilities, including residents, family members, volunteers, community, and staff. A Nursing Home Survey conducted by CDC indicated that approximately 18,000 nursing homes in the United States provide care for 1.6 million residents; 1.4 million (90%) of these residents are aged  $\geq 65$  years (1,2). By 2030, approximately 70 million U.S. residents will be aged  $\geq 65$  years, and the number of persons residing in nursing homes will increase to 3 million persons (3).

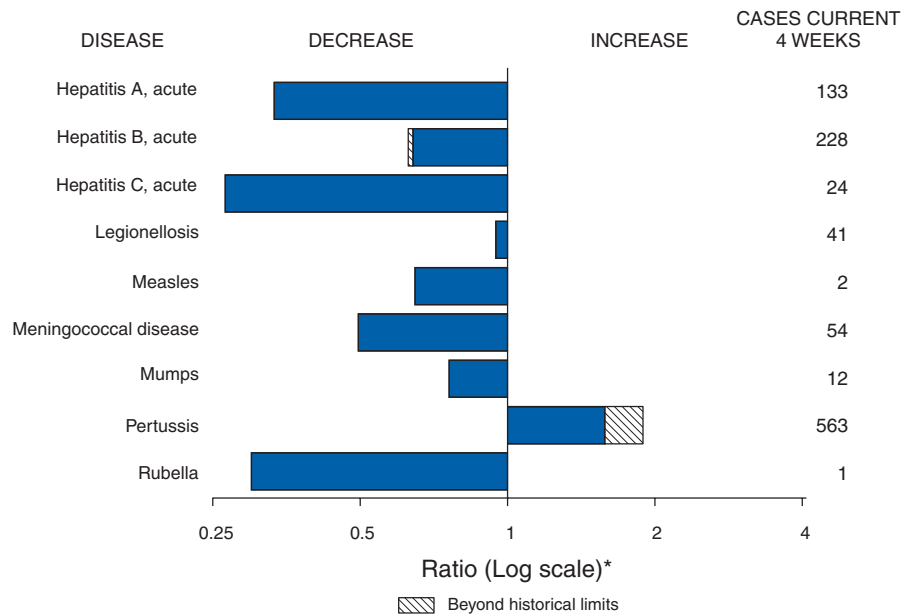
Infections, particularly respiratory and urinary tract infections, are a major cause of morbidity, mortality, and excess health-care costs among nursing home residents (4,5). To address the burden of infections among nursing homes residents, CDC launched a national educational campaign targeting clinicians who provide care to persons in long-term-care

facilities. The campaign promotes 12 evidence-based practices that can reduce infections and antimicrobial resistance in nursing homes. Additional information about infections in nursing homes and the CDC 12-Step Campaign for Long-Term Care is available at <http://www.cdc.gov/drugresistance/healthcare/ltc.htm>. Information about National Nursing Home Week is available at <http://www.nnhw.org>.

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**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 30, 2005, with historical data**



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

**TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 30, 2005 (17th Week)\***

Disease	Cum. 2005	Cum. 2004	Disease	Cum. 2005	Cum. 2004
Anthrax	—	—	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	39	18
Botulism:			HIV infection, pediatric <sup>¶¶</sup>	104	117
foodborne	4	3	Influenza-associated pediatric mortality <sup>†**</sup>	31	—
infant	16	25	Measles	11 <sup>††</sup>	13 <sup>§§</sup>
other (wound & unspecified)	7	3	Mumps	80	64
Brucellosis	23	33	Plague	—	—
Chancroid	9	12	Poliomyelitis, paralytic	—	—
Cholera	—	2	Psittacosis <sup>†</sup>	6	2
Cyclosporiasis <sup>†</sup>	38	100	Q fever <sup>†</sup>	21	17
Diphtheria	1	—	Rabies, human	1	—
Domestic arboviral diseases			Rubella	5	7
(neuroinvasive & non-neuroinvasive):			Rubella, congenital syndrome	1	—
California serogroup <sup>†§</sup>	—	6	SARS <sup>†**</sup>	—	—
eastern equine <sup>†§</sup>	—	—	Smallpox <sup>†</sup>	—	—
Powassan <sup>†§</sup>	—	—	<i>Staphylococcus aureus</i> :		
St. Louis <sup>†§</sup>	—	—	Vancomycin-intermediate (VISA) <sup>†</sup>	—	—
western equine <sup>†§</sup>	—	—	Vancomycin-resistant (VRSA) <sup>†</sup>	—	—
Ehrlichiosis:			Streptococcal toxic-shock syndrome <sup>†</sup>	40	54
human granulocytic (HGE) <sup>†</sup>	27	27	Tetanus	2	3
human monocytic (HME) <sup>†</sup>	24	17	Toxic-shock syndrome	32	34
human, other and unspecified <sup>†</sup>	6	1	Trichinellosis <sup>¶¶¶</sup>	5	—
Hansen disease <sup>†</sup>	13	30	Tularemia <sup>†</sup>	4	8
Hantavirus pulmonary syndrome <sup>†</sup>	4	3	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 March 27, 2005.

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

†† Of 11 cases reported, six were indigenous and five were imported from another country.

§§ Of 13 cases reported, five were indigenous and eight were imported from another country.

¶¶¶ Formerly Trichinosis.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 30, 2005, and May 1, 2004 (17th 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	10,042	12,083	274,785	297,669	1,334	1,701	542	799
NEW ENGLAND	406	370	8,310	9,855	—	—	30	45
Maine	3	5	721	637	N	N	3	8
N.H.	2	19	548	554	—	—	4	12
Vt.¶	1	10	330	384	—	—	8	5
Mass.	211	119	4,769	4,453	—	—	10	13
R.I.	34	44	1,096	1,160	—	—	1	1
Conn.	155	173	846	2,667	N	N	4	6
MID. ATLANTIC	1,995	2,409	32,236	37,340	—	—	77	134
Upstate N.Y.	188	186	7,007	6,950	N	N	19	26
N.Y. City	1,137	1,134	9,830	11,976	—	—	19	42
N.J.	357	524	3,518	6,049	N	N	6	9
Pa.	313	565	11,881	12,365	N	N	33	57
E.N. CENTRAL	915	1,209	44,084	54,174	2	5	101	207
Ohio	136	231	12,026	13,792	N	N	40	48
Ind.	119	164	6,072	5,955	N	N	8	27
Ill.	482	605	12,378	15,507	—	—	—	32
Mich.	135	141	7,564	13,021	2	5	16	46
Wis.	43	68	6,044	5,899	N	N	37	54
W.N. CENTRAL	227	302	16,371	18,312	3	4	78	84
Minn.	69	67	2,610	3,676	3	N	20	36
Iowa	18	19	1,763	2,247	N	N	16	12
Mo.	99	125	7,255	6,821	—	3	28	15
N. Dak.	5	12	254	593	N	N	—	—
S. Dak.	5	5	931	843	—	—	5	9
Nebr.¶	2	20	1,459	1,716	—	1	1	3
Kans.	29	54	2,099	2,416	N	N	8	9
S. ATLANTIC	3,395	4,148	52,729	56,370	—	—	125	155
Del.	51	55	1,090	981	N	N	—	—
Md.	406	475	5,705	6,323	—	—	5	8
D.C.	176	149	1,283	1,202	—	—	1	3
Va.¶	177	208	6,979	7,398	—	—	10	19
W. Va.	19	29	744	937	N	N	4	2
N.C.	298	238	11,501	9,037	N	N	15	31
S.C.¶	133	268	6,964	6,066	—	—	7	7
Ga.	503	691	4,734	10,894	—	—	37	44
Fla.	1,632	2,035	13,729	13,532	N	N	46	41
E.S. CENTRAL	581	554	18,465	17,313	—	3	10	37
Ky.	70	68	3,957	1,836	N	N	3	9
Tenn.¶	232	207	6,939	7,442	N	N	2	12
Ala.¶	168	167	1,859	4,103	—	—	4	9
Miss.	111	112	5,710	3,932	—	3	1	7
W.S. CENTRAL	1,021	1,705	36,124	37,563	—	2	14	25
Ark.	69	88	2,836	2,669	—	1	—	7
La.	170	337	5,951	8,209	—	1	2	—
Okla.	72	68	3,447	3,430	N	N	7	7
Tex.¶	710	1,212	23,890	23,255	N	N	5	11
MOUNTAIN	398	486	17,049	16,297	859	1,112	32	33
Mont.	3	—	679	614	N	N	4	3
Idaho¶	3	3	731	1,009	N	N	1	4
Wyo.	—	5	368	357	—	—	2	2
Colo.	83	97	4,360	3,946	N	N	11	16
N. Mex.	42	51	748	2,715	2	9	2	1
Ariz.	166	198	6,926	5,078	828	1,074	3	5
Utah	20	29	1,351	1,054	2	10	4	1
Nev.¶	81	103	1,886	1,524	27	19	5	1
PACIFIC	1,104	900	49,417	50,445	470	575	75	79
Wash.	106	166	6,344	5,640	N	N	5	—
Oreg.¶	66	90	2,816	2,663	—	—	13	8
Calif.	897	593	37,442	38,898	470	575	57	70
Alaska	7	10	1,260	1,307	—	—	—	—
Hawaii	28	41	1,555	1,937	—	—	—	1
Guam	1	—	—	303	—	—	—	—
P.R.	259	208	1,342	753	N	N	N	N
V.I.	7	4	32	134	—	—	—	—
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 March 27, 2005.

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



**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 30, 2005, and May 1, 2004 (17th 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	321	325	44	54	57	37	4,681	5,131	91,961	103,214
NEW ENGLAND	21	15	9	14	9	3	422	449	1,526	2,312
Maine	2	—	2	—	—	—	44	43	44	92
N.H.	2	3	1	1	—	—	18	16	39	42
Vt.	1	—	—	—	—	—	50	28	12	29
Mass.	5	7	1	5	9	3	180	235	952	1,024
R.I.	1	2	—	—	—	—	21	33	172	319
Conn.	10	3	5	8	—	—	109	94	307	806
MID. ATLANTIC	35	28	3	5	4	9	831	1,145	9,251	12,115
Upstate N.Y.	14	8	3	1	1	3	268	328	2,117	2,346
N.Y. City	1	7	—	—	—	—	231	368	2,372	3,892
N.J.	11	3	—	2	—	3	114	140	1,302	2,254
Pa.	9	10	—	2	3	3	218	309	3,460	3,623
E.N. CENTRAL	63	74	7	12	3	4	667	781	17,375	22,040
Ohio	23	18	1	—	2	4	198	234	5,631	7,086
Ind.	7	14	—	—	—	—	N	N	2,315	2,051
Ill.	6	18	1	—	—	—	126	254	4,998	6,411
Mich.	13	10	—	2	1	—	191	176	2,791	5,056
Wis.	14	14	5	10	—	—	152	117	1,640	1,436
W.N. CENTRAL	45	52	8	8	9	9	604	577	5,308	5,431
Minn.	5	20	2	4	2	2	284	194	753	962
Iowa	10	9	—	—	—	—	69	72	378	405
Mo.	15	4	3	4	2	2	133	177	2,997	2,766
N. Dak.	1	2	—	—	—	3	1	10	15	47
S. Dak.	2	2	—	—	—	—	30	19	119	90
Nebr.	5	8	3	—	2	—	37	50	344	349
Kans.	7	7	—	—	3	2	50	55	702	812
S. ATLANTIC	60	37	8	6	25	7	788	799	22,469	24,908
Del.	—	—	N	N	N	N	4	16	258	327
Md.	5	4	2	—	—	2	47	28	2,166	2,652
D.C.	—	1	—	—	—	—	13	28	676	768
Va.	3	1	3	5	6	—	179	115	2,544	2,972
W. Va.	—	1	—	—	—	—	9	9	222	257
N.C.	—	—	—	—	13	4	N	N	5,602	4,905
S.C.	1	3	—	—	—	—	30	24	2,993	2,957
Ga.	7	10	1	—	—	—	245	242	2,083	4,565
Fla.	44	17	2	1	6	1	261	337	5,925	5,505
E.S. CENTRAL	17	12	—	1	4	4	111	95	6,776	7,703
Ky.	1	4	—	1	3	2	N	N	1,248	762
Tenn.	9	3	—	—	1	2	55	44	2,498	2,671
Ala.	7	1	—	—	—	—	56	51	1,322	2,328
Miss.	—	4	—	—	—	—	—	—	1,708	1,942
W.S. CENTRAL	5	26	1	3	2	1	68	88	14,053	13,909
Ark.	1	3	—	1	—	—	26	38	1,448	1,235
La.	—	1	1	—	2	—	8	15	3,180	3,735
Okla.	1	4	—	—	—	—	34	35	1,481	1,489
Tex.	3	18	—	2	—	1	N	N	7,944	7,450
MOUNTAIN	37	36	8	4	1	—	349	376	3,537	3,569
Mont.	2	3	—	—	—	—	9	11	37	19
Idaho	3	7	5	1	—	—	31	49	31	27
Wyo.	—	—	1	—	—	—	6	4	17	19
Colo.	10	6	1	1	—	—	124	122	921	949
N. Mex.	—	6	1	1	—	—	12	22	141	324
Ariz.	8	5	N	N	N	N	55	70	1,461	1,462
Utah	7	5	—	—	—	—	87	77	217	130
Nev.	7	4	—	1	1	—	25	21	712	639
PACIFIC	38	45	—	1	—	—	841	821	11,666	11,227
Wash.	9	9	—	—	—	—	61	73	1,126	865
Oreg.	2	7	—	1	—	—	67	131	523	328
Calif.	21	25	—	—	—	—	670	564	9,570	9,321
Alaska	3	1	—	—	—	—	21	23	160	240
Hawaii	3	3	—	—	—	—	22	30	287	473
Guam	N	N	—	—	—	—	—	—	—	58
P.R.	—	—	—	—	—	—	10	13	125	75
V.I.	—	—	—	—	—	—	—	—	2	47
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 April 30, 2005, and May 1, 2004 (17th 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	770	749	1	3	42	39	77	76
NEW ENGLAND	51	71	—	1	4	5	3	—
Maine	3	6	—	—	—	—	1	—
N.H.	—	11	—	—	—	2	—	—
Vt.	6	4	—	—	—	—	2	—
Mass.	19	37	—	1	—	2	—	—
R.I.	6	1	—	—	2	—	—	—
Conn.	17	12	—	—	2	1	—	—
MID. ATLANTIC	149	155	—	—	—	3	19	19
Upstate N.Y.	44	52	—	—	—	3	4	2
N.Y. City	25	30	—	—	—	—	6	6
N.J.	30	30	—	—	—	—	5	2
Pa.	50	43	—	—	—	—	4	9
E.N. CENTRAL	100	138	—	—	—	7	5	23
Ohio	54	51	—	—	—	2	4	9
Ind.	27	19	—	—	—	4	1	1
Ill.	4	37	—	—	—	—	—	9
Mich.	10	9	—	—	—	1	—	3
Wis.	5	22	—	—	—	—	—	1
W.N. CENTRAL	37	34	—	—	2	2	6	4
Minn.	16	13	—	—	2	2	—	—
Iowa	—	1	—	—	—	—	—	1
Mo.	16	12	—	—	—	—	4	3
N. Dak.	1	2	—	—	—	—	1	—
S. Dak.	—	—	—	—	—	—	—	—
Nebr.	3	4	—	—	—	—	1	—
Kans.	1	2	—	—	—	—	—	—
S. ATLANTIC	210	173	—	—	10	8	13	11
Del.	—	—	—	—	—	—	—	—
Md.	32	35	—	—	4	2	—	—
D.C.	—	—	—	—	—	—	—	—
Va.	18	12	—	—	—	—	—	—
W. Va.	13	8	—	—	1	3	2	—
N.C.	25	19	—	—	2	1	—	—
S.C.	10	4	—	—	—	—	1	—
Ga.	58	50	—	—	—	—	6	11
Fla.	54	45	—	—	3	2	4	—
E.S. CENTRAL	40	25	—	—	1	—	8	5
Ky.	4	—	—	—	1	—	1	—
Tenn.	29	17	—	—	—	—	5	4
Ala.	7	8	—	—	—	—	2	1
Miss.	—	—	—	—	—	—	—	—
W.S. CENTRAL	42	32	1	—	2	4	5	1
Ark.	—	—	—	—	—	—	—	—
La.	15	9	1	—	—	—	5	1
Okla.	27	23	—	—	2	4	—	—
Tex.	—	—	—	—	—	—	—	—
MOUNTAIN	105	86	—	2	14	8	15	10
Mont.	—	—	—	—	—	—	—	—
Idaho	3	2	—	—	—	—	1	1
Wyo.	1	—	—	—	—	—	—	—
Colo.	24	20	—	—	—	—	3	2
N. Mex.	10	20	—	—	4	3	—	4
Ariz.	47	36	—	—	8	5	3	1
Utah	10	6	—	2	—	—	6	1
Nev.	10	2	—	—	2	—	2	1
PACIFIC	36	35	—	—	9	2	3	3
Wash.	—	1	—	—	—	—	—	1
Oreg.	17	19	—	—	—	—	3	—
Calif.	15	9	—	—	9	2	—	1
Alaska	1	2	—	—	—	—	—	1
Hawaii	3	4	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	—	—	—	—
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 April 30, 2005, and May 1, 2004 (17th 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	1,217	1,974	1,830	1,886	203	261
NEW ENGLAND	178	291	99	129	6	4
Maine	—	7	4	1	—	—
N.H.	15	7	4	16	—	—
Vt.	—	5	1	1	6	1
Mass.	138	239	75	62	—	3
R.I.	5	6	—	1	—	—
Conn.	20	27	15	48	—	—
MID. ATLANTIC	179	238	416	253	32	39
Upstate N.Y.	31	28	42	27	8	2
N.Y. City	85	89	25	59	—	—
N.J.	27	50	280	64	—	—
Pa.	36	71	69	103	24	37
E.N. CENTRAL	121	178	126	158	40	21
Ohio	23	17	52	48	2	2
Ind.	15	13	7	9	7	1
Ill.	27	76	7	—	—	5
Mich.	46	53	60	83	31	13
Wis.	10	19	—	18	—	—
W.N. CENTRAL	41	48	93	118	13	1
Minn.	3	10	6	12	—	1
Iowa	7	12	8	5	—	—
Mo.	22	8	56	82	12	—
N. Dak.	—	1	—	1	1	—
S. Dak.	—	2	—	—	—	—
Nebr.	2	10	14	11	—	—
Kans.	7	5	9	7	—	—
S. ATLANTIC	186	344	550	591	47	63
Del.	—	3	21	13	—	2
Md.	15	55	59	52	13	2
D.C.	2	3	—	5	—	2
Va.	28	25	74	62	6	9
W. Va.	2	1	10	2	3	3
N.C.	26	22	53	57	7	5
S.C.	8	18	41	37	1	4
Ga.	37	139	105	185	1	7
Fla.	68	78	187	178	16	29
E.S. CENTRAL	68	57	108	154	21	31
Ky.	3	9	26	16	—	12
Tenn.	49	31	47	63	7	5
Ala.	7	5	21	21	6	1
Miss.	9	12	14	54	8	13
W.S. CENTRAL	78	284	93	86	23	74
Ark.	2	41	17	40	—	—
La.	19	10	13	27	4	42
Okla.	3	15	6	18	—	2
Tex.	54	218	57	1	19	30
MOUNTAIN	134	157	154	136	6	11
Mont.	6	3	—	—	—	2
Idaho	12	8	5	3	—	—
Wyo.	—	—	—	3	—	—
Colo.	14	13	10	19	—	—
N. Mex.	5	5	5	7	—	5
Ariz.	79	104	105	66	—	2
Utah	12	22	20	18	4	—
Nev.	6	2	9	20	2	2
PACIFIC	232	377	191	261	15	17
Wash.	16	20	17	22	3	2
Oreg.	12	30	32	38	7	7
Calif.	193	318	138	195	5	8
Alaska	3	2	3	4	—	—
Hawaii	8	7	1	2	—	—
Guam	—	1	—	4	—	—
P.R.	2	9	3	17	—	—
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.

\* 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 April 30, 2005, and May 1, 2004 (17th 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	328	341	146	142	1,647	2,339	307	351
NEW ENGLAND	16	6	3	9	88	257	15	28
Maine	1	—	—	1	2	12	—	1
N.H.	2	—	1	1	14	12	2	—
Vt.	—	—	—	—	1	10	—	1
Mass.	9	3	—	2	63	151	12	19
R.I.	1	1	—	1	2	18	1	2
Conn.	3	2	2	4	6	54	—	5
MID. ATLANTIC	96	71	27	32	1,161	1,676	78	86
Upstate N.Y.	28	15	7	8	184	591	17	13
N.Y. City	5	6	5	3	—	51	34	41
N.J.	21	11	7	11	500	372	18	17
Pa.	42	39	8	10	477	662	9	15
E.N. CENTRAL	64	84	18	19	33	74	15	24
Ohio	32	36	7	7	20	13	3	6
Ind.	1	9	1	2	2	1	—	3
Ill.	8	14	—	3	—	6	3	5
Mich.	19	23	5	5	3	—	7	4
Wis.	4	2	5	2	8	54	2	6
W.N. CENTRAL	11	8	11	3	45	27	15	21
Minn.	1	—	2	1	37	9	5	8
Iowa	—	2	4	1	4	5	2	1
Mo.	8	4	2	1	3	12	7	4
N. Dak.	1	1	2	—	—	—	—	2
S. Dak.	—	1	—	—	—	—	—	1
Nebr.	—	—	—	—	—	1	—	1
Kans.	1	—	1	—	1	—	1	4
S. ATLANTIC	73	81	36	21	273	248	74	97
Del.	1	2	N	N	62	33	—	2
Md.	17	11	4	5	139	145	22	23
D.C.	1	2	—	—	1	5	2	4
Va.	5	6	1	1	28	8	8	8
W. Va.	3	2	—	1	2	1	1	—
N.C.	8	8	9	4	15	33	9	5
S.C.	2	2	1	—	7	2	3	5
Ga.	6	8	8	4	—	5	13	16
Fla.	30	40	13	6	19	16	16	34
E.S. CENTRAL	7	15	7	8	6	9	9	9
Ky.	1	3	—	2	—	2	2	1
Tenn.	2	7	4	5	6	2	5	1
Ala.	4	5	3	—	—	—	2	5
Miss.	—	—	—	1	—	5	—	2
W.S. CENTRAL	9	31	3	16	10	18	22	28
Ark.	1	—	—	1	—	—	1	1
La.	3	2	1	1	—	1	—	2
Okla.	—	2	—	—	—	—	2	1
Tex.	5	27	2	14	10	17	19	24
MOUNTAIN	30	22	—	3	2	7	15	14
Mont.	1	—	—	—	—	—	—	—
Idaho	1	1	—	1	—	1	—	1
Wyo.	2	4	—	—	—	2	1	—
Colo.	7	3	—	1	—	—	8	5
N. Mex.	1	—	—	—	—	—	—	1
Ariz.	7	5	—	—	—	1	2	2
Utah	5	8	—	—	2	3	4	3
Nev.	6	1	—	1	—	—	—	2
PACIFIC	22	23	41	31	29	23	64	44
Wash.	—	3	2	5	—	2	3	1
Oreg.	N	N	2	4	2	10	1	7
Calif.	22	20	37	22	26	11	54	35
Alaska	—	—	—	—	1	—	2	—
Hawaii	—	—	—	—	N	N	4	1
Guam	—	—	—	—	—	—	—	—
P.R.	—	1	—	—	N	N	—	—
V.I.	U	—	U	—	—	—	—	—
Amer. Samoa	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 April 30, 2005, and May 1, 2004 (17th 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	443	566	34	36	26	18	1	—	382	512
NEW ENGLAND	30	27	1	4	—	—	—	—	29	23
Maine	1	7	—	—	—	—	—	—	1	7
N.H.	3	3	—	—	—	—	—	—	3	3
Vt.	3	1	—	—	—	—	—	—	3	1
Mass.	12	16	—	4	—	—	—	—	12	12
R.I.	2	—	—	—	—	—	—	—	2	—
Conn.	9	—	1	—	—	—	—	—	8	—
MID. ATLANTIC	60	78	16	21	4	5	—	—	40	52
Upstate N.Y.	16	24	1	3	3	3	—	—	12	18
N.Y. City	7	14	—	—	—	—	—	—	7	14
N.J.	16	13	—	—	—	—	—	—	16	13
Pa.	21	27	15	18	1	2	—	—	5	7
E.N. CENTRAL	39	53	10	8	4	4	—	—	25	41
Ohio	18	30	—	3	4	4	—	—	14	23
Ind.	6	9	—	—	—	—	—	—	6	9
Ill.	—	1	—	—	—	—	—	—	—	1
Mich.	10	5	10	5	—	—	—	—	—	—
Wis.	5	8	—	—	—	—	—	—	5	8
W.N. CENTRAL	28	30	2	—	1	1	—	—	25	29
Minn.	5	9	1	—	—	—	—	—	4	9
Iowa	9	5	—	—	1	—	—	—	8	5
Mo.	7	10	1	—	—	1	—	—	6	9
N. Dak.	—	—	—	—	—	—	—	—	—	—
S. Dak.	1	1	—	—	—	—	—	—	1	1
Nebr.	2	1	—	—	—	—	—	—	2	1
Kans.	4	4	—	—	—	—	—	—	4	4
S. ATLANTIC	80	106	2	2	4	2	—	—	74	102
Del.	—	1	—	—	—	—	—	—	—	1
Md.	7	5	1	—	2	—	—	—	4	5
D.C.	—	5	—	2	—	—	—	—	—	3
Va.	11	6	—	—	—	—	—	—	11	6
W. Va.	3	3	—	—	—	—	—	—	3	3
N.C.	7	15	1	—	2	2	—	—	4	13
S.C.	11	9	—	—	—	—	—	—	11	9
Ga.	8	6	—	—	—	—	—	—	8	6
Fla.	33	56	—	—	—	—	—	—	33	56
E.S. CENTRAL	25	25	—	—	2	—	—	—	23	25
Ky.	8	3	—	—	2	—	—	—	6	3
Tenn.	11	9	—	—	—	—	—	—	11	9
Ala.	2	6	—	—	—	—	—	—	2	6
Miss.	4	7	—	—	—	—	—	—	4	7
W.S. CENTRAL	35	63	1	1	3	1	—	—	31	61
Ark.	8	10	—	—	—	—	—	—	8	10
La.	13	17	—	1	2	—	—	—	11	16
Okla.	6	3	1	—	1	1	—	—	4	2
Tex.	8	33	—	—	—	—	—	—	8	33
MOUNTAIN	34	28	1	—	3	3	1	—	29	25
Mont.	—	1	—	—	—	—	—	—	—	1
Idaho	1	4	—	—	—	—	—	—	1	4
Wyo.	—	2	—	—	—	—	—	—	—	2
Colo.	10	9	1	—	—	—	1	—	8	9
N. Mex.	1	4	—	—	—	2	—	—	1	2
Ariz.	18	4	—	—	2	—	—	—	16	4
Utah	2	2	—	—	1	—	—	—	1	2
Nev.	2	2	—	—	—	1	—	—	2	1
PACIFIC	112	156	1	—	5	2	—	—	106	154
Wash.	20	9	1	—	4	2	—	—	15	7
Oreg.	21	32	—	—	—	—	—	—	21	32
Calif.	63	108	—	—	—	—	—	—	63	108
Alaska	2	2	—	—	—	—	—	—	2	2
Hawaii	6	5	—	—	1	—	—	—	5	5
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	—	3	—	—	—	—	—	—	—	3
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	—	—	—	—	—	—	—	—	—	—
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 April 30, 2005, and May 1, 2004 (17th 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	5,094	3,061	1,505	1,912	184	161	7,196	8,406	2,943	3,593
NEW ENGLAND	265	519	254	145	1	5	431	398	59	69
Maine	12	—	19	13	N	N	26	23	2	1
N.H.	—	20	2	6	—	—	24	26	4	3
Vt.	45	26	19	6	—	—	30	17	3	1
Mass.	189	450	160	57	—	5	234	221	33	46
R.I.	5	9	5	10	1	—	15	24	2	3
Conn.	14	14	49	53	—	—	102	87	15	15
MID. ATLANTIC	514	747	172	208	13	14	855	1,111	322	392
Upstate N.Y.	181	532	120	90	—	—	231	243	88	159
N.Y. City	18	54	9	2	1	6	236	336	133	116
N.J.	85	49	N	N	4	—	135	194	83	71
Pa.	230	112	43	116	8	8	253	338	18	46
E.N. CENTRAL	1,256	484	16	7	5	5	730	1,364	174	300
Ohio	586	139	4	3	4	2	250	290	21	53
Ind.	114	21	2	2	—	1	81	111	29	47
Ill.	72	16	5	1	—	1	36	515	6	135
Mich.	69	33	5	1	1	1	185	212	85	33
Wis.	415	275	—	—	—	—	178	236	33	32
W.N. CENTRAL	714	159	105	173	12	5	540	536	224	110
Minn.	99	29	20	17	—	—	141	134	18	16
Iowa	253	29	24	18	—	—	88	93	38	29
Mo.	146	79	13	3	12	5	161	156	129	30
N. Dak.	48	5	6	19	—	—	11	12	2	1
S. Dak.	1	7	12	32	—	—	37	23	8	6
Nebr.	67	—	—	47	—	—	44	44	20	7
Kans.	100	10	30	37	—	—	58	74	9	21
S. ATLANTIC	404	167	484	831	121	101	2,076	1,750	521	957
Del.	2	—	—	9	1	2	10	16	3	3
Md.	66	36	88	98	6	3	152	140	22	33
D.C.	3	5	—	—	—	—	13	13	4	18
Va.	63	42	183	140	4	—	208	183	27	30
W. Va.	20	2	8	23	1	—	29	35	—	—
N.C.	21	29	151	209	82	76	342	234	54	126
S.C.	161	25	5	46	6	8	161	103	35	152
Ga.	13	8	44	101	12	10	336	285	151	205
Fla.	55	20	5	205	9	2	825	741	225	390
E.S. CENTRAL	129	29	27	64	5	21	360	437	375	171
Ky.	32	6	3	7	—	—	57	79	33	26
Tenn.	57	15	5	36	4	9	137	137	226	69
Ala.	28	4	19	17	1	2	121	130	90	55
Miss.	12	4	—	4	—	10	45	91	26	21
W.S. CENTRAL	124	100	361	403	4	6	434	821	564	921
Ark.	59	11	11	19	—	—	85	80	15	14
La.	3	3	—	—	1	3	93	121	30	101
Okla.	—	10	36	38	3	3	72	69	211	118
Tex.	62	76	314	346	—	—	184	551	308	688
MOUNTAIN	1,175	333	56	32	20	1	526	626	189	242
Mont.	244	4	—	3	1	—	23	50	2	3
Idaho	36	14	—	—	—	—	26	46	—	5
Wyo.	7	3	9	—	1	—	10	19	—	1
Colo.	546	181	1	—	—	1	139	139	32	40
N. Mex.	46	52	—	—	—	—	36	66	24	43
Ariz.	146	56	46	29	15	—	189	208	93	120
Utah	133	22	—	—	3	—	57	67	13	13
Nev.	17	1	—	—	—	—	46	31	25	17
PACIFIC	513	523	30	49	3	3	1,244	1,363	515	431
Wash.	135	117	—	—	—	—	106	86	22	23
Oreg.	217	131	—	—	—	2	80	103	21	18
Calif.	115	259	29	39	3	1	973	1,059	457	372
Alaska	15	9	1	10	—	—	16	26	6	4
Hawaii	31	7	—	—	—	—	69	89	9	14
Guam	—	—	—	—	—	—	—	12	—	16
P.R.	—	1	26	16	N	N	28	57	—	1
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 April 30, 2005, and May 1, 2004 (17th 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	1,583	1,827	1,009	993	290	311	2,131	2,419	85	127
NEW ENGLAND	60	85	9	15	26	39	61	49	—	—
Maine	2	3	N	N	—	—	1	—	—	—
N.H.	4	9	—	—	1	N	4	1	—	—
Vt.	6	4	3	4	2	1	—	—	—	—
Mass.	42	64	—	5	23	35	50	31	—	—
R.I.	6	5	6	6	—	3	2	1	—	—
Conn.	—	—	—	—	U	U	4	16	—	—
MID. ATLANTIC	355	323	106	66	55	44	273	319	17	16
Upstate N.Y.	133	103	42	25	35	27	23	23	13	1
N.Y. City	48	58	U	U	U	U	183	191	3	7
N.J.	71	63	N	N	9	4	36	62	1	7
Pa.	103	99	64	41	11	13	31	43	—	1
E.N. CENTRAL	260	431	244	233	75	82	181	274	12	26
Ohio	88	118	166	175	35	39	72	81	2	1
Ind.	35	40	76	58	19	17	17	15	1	1
Ill.	2	119	2	—	17	—	56	111	1	6
Mich.	127	121	—	N	—	N	29	56	6	18
Wis.	8	33	N	N	4	26	7	11	2	—
W.N. CENTRAL	112	150	18	9	32	29	60	63	—	—
Minn.	41	68	—	—	15	17	7	10	—	—
Iowa	N	N	N	N	—	N	1	2	—	—
Mo.	35	36	16	8	1	6	44	34	—	—
N. Dak.	2	5	—	—	1	—	—	—	—	—
S. Dak.	9	8	2	1	—	—	—	—	—	—
Nebr.	8	10	—	—	3	4	2	5	—	—
Kans.	17	23	N	N	12	2	6	12	—	—
S. ATLANTIC	342	359	436	501	38	22	556	608	17	20
Del.	—	2	1	3	—	N	5	2	—	—
Md.	92	57	—	—	26	17	105	103	6	3
D.C.	3	3	12	6	2	4	39	19	—	1
Va.	27	23	N	N	—	N	30	16	3	1
W. Va.	8	12	37	46	10	1	2	3	—	—
N.C.	45	48	N	N	U	U	78	48	3	1
S.C.	11	33	—	45	—	N	25	45	—	5
Ga.	68	97	154	136	—	N	41	121	—	1
Fla.	88	84	232	265	—	N	231	251	5	8
E.S. CENTRAL	69	96	68	65	3	—	120	119	10	4
Ky.	17	33	11	16	N	N	9	17	—	—
Tenn.	52	63	57	49	—	N	51	48	8	1
Ala.	—	—	—	—	—	N	51	39	2	2
Miss.	—	—	—	—	3	—	9	15	—	1
W.S. CENTRAL	77	138	60	31	35	72	390	374	19	30
Ark.	7	4	6	5	6	4	15	16	—	3
La.	4	1	54	26	8	18	71	84	2	2
Okla.	55	24	N	N	14	23	12	7	1	2
Tex.	11	109	N	N	7	27	292	267	16	23
MOUNTAIN	272	209	37	16	26	23	104	131	10	6
Mont.	—	—	—	—	—	—	5	—	—	—
Idaho	1	4	N	N	—	N	9	8	—	—
Wyo.	1	5	15	4	—	—	—	1	—	—
Colo.	114	37	N	N	25	21	13	23	—	—
N. Mex.	18	46	—	5	—	—	7	35	1	2
Ariz.	102	101	N	N	—	N	45	57	9	4
Utah	35	16	21	5	1	2	2	2	—	—
Nev.	1	—	1	2	—	—	23	5	—	—
PACIFIC	36	36	31	57	—	—	386	482	—	25
Wash.	N	N	N	N	N	N	51	26	—	—
Oreg.	N	N	N	N	—	N	10	14	—	—
Calif.	—	—	N	N	N	N	320	439	—	25
Alaska	—	—	—	—	—	N	3	—	—	—
Hawaii	36	36	31	57	—	—	2	3	—	—
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	N	N	N	N	—	N	42	48	5	2
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 April 30, 2005, and May 1, 2004 (17th 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	2,589	3,753	55	80	7,755	8,303	—	2	—
NEW ENGLAND	76	127	5	9	123	318	—	—	—
Maine	6	8	—	—	101	43	—	—	—
N.H.	3	6	—	—	—	—	—	—	—
Vt.	—	—	—	—	21	263	—	—	—
Mass.	50	72	4	8	1	12	—	—	—
R.I.	3	15	—	1	—	—	—	—	—
Conn.	14	26	1	—	—	—	—	—	—
MID. ATLANTIC	614	573	14	22	1,636	22	—	—	—
Upstate N.Y.	68	65	3	2	—	—	—	—	—
N.Y. City	329	289	1	7	—	—	—	—	—
N.J.	135	125	3	9	—	—	—	—	—
Pa.	82	94	7	4	1,636	22	—	—	—
E.N. CENTRAL	385	333	3	4	2,586	2,833	—	—	—
Ohio	76	59	—	1	624	760	—	—	—
Ind.	42	45	—	—	N	N	—	—	—
Ill.	185	152	1	—	11	—	—	—	—
Mich.	58	54	1	3	1,770	1,783	—	—	—
Wis.	24	23	1	—	181	290	—	—	—
W.N. CENTRAL	136	116	1	2	69	110	—	—	—
Minn.	56	40	1	1	—	—	—	—	—
Iowa	11	13	—	—	N	N	—	—	—
Mo.	37	36	—	1	3	2	—	—	—
N. Dak.	2	2	—	—	10	68	—	—	—
S. Dak.	5	3	—	—	56	40	—	—	—
Nebr.	12	6	—	—	—	—	—	—	—
Kans.	13	16	—	—	—	—	—	—	N
S. ATLANTIC	548	803	8	8	733	988	—	—	—
Del.	—	7	—	—	2	3	—	—	—
Md.	63	65	1	2	—	—	—	—	—
D.C.	25	6	—	—	12	11	—	—	—
Va.	71	56	1	2	93	270	—	—	—
W. Va.	8	7	—	—	450	493	—	—	N
N.C.	54	69	1	2	—	N	—	—	—
S.C.	69	60	—	—	176	211	—	—	—
Ga.	32	220	2	—	—	—	—	—	—
Fla.	226	313	3	2	—	—	—	—	—
E. S. CENTRAL	147	158	1	2	—	—	—	—	—
Ky.	37	24	1	—	N	N	—	—	—
Tenn.	76	43	—	2	—	—	—	—	—
Ala.	34	58	—	—	—	—	—	—	—
Miss.	—	33	—	—	—	—	—	—	—
W.S. CENTRAL	66	606	3	7	1,326	2,902	—	—	—
Ark.	25	43	—	—	—	—	—	—	—
La.	—	—	—	—	83	34	—	—	—
Okla.	41	45	—	—	—	—	—	—	—
Tex.	—	518	3	7	1,243	2,868	—	—	—
MOUNTAIN	51	157	2	3	1,282	1,130	—	2	—
Mont.	—	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—	—
Wyo.	—	1	—	—	39	15	—	—	—
Colo.	8	42	—	1	909	872	—	—	—
N. Mex.	3	13	—	—	72	32	—	—	—
Ariz.	35	57	1	1	—	—	—	2	—
Utah	5	14	1	1	262	211	—	—	—
Nev.	—	30	—	—	—	—	—	—	—
PACIFIC	566	880	18	23	—	—	—	—	—
Wash.	73	66	1	1	N	N	—	—	—
Oreg.	34	28	2	—	—	—	—	—	—
Calif.	405	744	11	17	—	—	—	—	—
Alaska	11	9	—	—	—	—	—	—	—
Hawaii	43	33	4	5	—	—	—	—	—
Guam	—	14	—	—	—	29	—	—	—
P.R.	—	21	—	—	68	114	—	—	—
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 April 30, 2005 (17th Week)

Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total	Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	593	408	109	45	7	24	48	S. ATLANTIC	1,361	872	297	113	51	26	74		
Boston, Mass.	171	122	27	13	2	7	14	Atlanta, Ga.	186	110	50	13	7	6	7		
Bridgeport, Conn.	26	17	5	3	1	—	—	Baltimore, Md.	138	73	39	17	2	7	11		
Cambridge, Mass.	13	11	2	—	—	—	2	Charlotte, N.C.	119	76	25	8	8	2	14		
Fall River, Mass.	27	19	4	3	1	—	2	Jacksonville, Fla.	124	82	23	14	4	1	4		
Hartford, Conn.	73	50	14	6	1	2	11	Miami, Fla.	104	71	20	8	5	—	6		
Lowell, Mass.	24	20	2	2	—	—	2	Norfolk, Va.	44	34	8	1	—	1	2		
Lynn, Mass.	15	6	5	4	—	—	—	Richmond, Va.	57	36	12	6	3	—	3		
New Bedford, Mass.	25	18	6	1	—	—	1	Savannah, Ga.	58	39	9	7	2	1	5		
New Haven, Conn.	21	16	3	2	—	—	4	St. Petersburg, Fla.	78	55	17	3	1	2	6		
Providence, R.I.	72	44	15	7	1	5	5	Tampa, Fla.	238	159	50	18	5	4	9		
Somerville, Mass.	7	3	3	1	—	—	—	Washington, D.C.	198	124	42	16	14	2	6		
Springfield, Mass.	38	18	9	1	1	9	4	Wilmington, Del.	17	13	2	2	—	—	1		
Waterbury, Conn.	26	21	3	1	—	1	1	E.S. CENTRAL	949	642	207	71	12	17	61		
Worcester, Mass.	55	43	11	1	—	—	2	Birmingham, Ala.	170	113	41	8	2	6	11		
MID. ATLANTIC	2,178	1,551	460	110	36	21	140	Chattanooga, Tenn.	92	64	17	6	3	2	5		
Albany, N.Y.	47	31	14	2	—	—	—	Knoxville, Tenn.	93	61	20	9	3	—	7		
Allentown, Pa.	27	25	2	—	—	—	—	Lexington, Ky.	106	81	19	5	—	1	4		
Buffalo, N.Y.	93	63	22	7	—	1	8	Memphis, Tenn.	166	107	46	9	2	2	11		
Camden, N.J.	33	17	10	2	3	1	—	Mobile, Ala.	93	65	15	10	—	3	3		
Elizabeth, N.J.	28	22	4	2	—	—	2	Montgomery, Ala.	53	34	12	7	—	—	6		
Erie, Pa.	44	40	2	2	—	—	5	Nashville, Tenn.	176	117	37	17	2	3	14		
Jersey City, N.J.	40	26	10	1	1	2	—	W.S. CENTRAL	4,122	2,779	857	315	88	83	274		
New York City, N.Y.	1,014	720	222	47	14	11	56	Austin, Tex.	73	53	13	4	1	2	3		
Newark, N.J.	66	35	19	10	—	2	11	Baton Rouge, La.	20	12	3	2	3	—	—		
Paterson, N.J.	18	12	6	—	—	—	—	Corpus Christi, Tex.	64	43	14	4	1	2	10		
Philadelphia, Pa.	391	256	95	26	12	2	25	Dallas, Tex.	239	143	52	29	7	8	16		
Pittsburgh, Pa. <sup>§</sup>	34	26	7	1	—	—	1	El Paso, Tex.	95	70	16	7	—	2	4		
Reading, Pa.	30	25	4	1	—	—	2	Ft. Worth, Tex.	127	78	33	6	7	3	11		
Rochester, N.Y.	114	97	12	3	2	—	15	Houston, Tex.	315	170	91	38	7	9	23		
Schenectady, N.Y.	14	13	—	—	1	—	1	Little Rock, Ark.	88	43	28	7	6	4	—		
Scranton, Pa.	24	18	4	—	2	—	1	New Orleans, La.	2,632	1,847	508	185	47	45	181		
Syracuse, N.Y.	76	59	13	2	—	2	9	San Antonio, Tex.	228	164	43	15	5	1	15		
Trenton, N.J.	31	20	7	3	1	—	2	Shreveport, La.	96	57	25	8	3	3	4		
Utica, N.Y.	17	14	2	1	—	—	—	Tulsa, Okla.	145	99	31	10	1	4	7		
Yonkers, N.Y.	37	32	5	—	—	—	2	MOUNTAIN	1,250	829	256	107	36	22	84		
E.N. CENTRAL	2,184	1,487	470	138	51	38	173	Albuquerque, N.M.	102	75	13	11	2	1	8		
Akron, Ohio	72	55	12	1	3	1	17	Boise, Idaho	75	55	16	1	3	—	7		
Canton, Ohio	43	35	6	2	—	—	5	Colo. Springs, Colo.	78	52	11	9	3	3	2		
Chicago, Ill.	315	197	78	26	13	1	28	Denver, Colo.	105	73	15	8	4	5	10		
Cincinnati, Ohio	81	58	16	4	2	1	8	Las Vegas, Nev.	279	191	66	17	3	2	19		
Cleveland, Ohio	230	166	45	10	3	6	5	Ogden, Utah	38	27	7	4	—	—	1		
Columbus, Ohio	186	123	37	14	2	10	17	Phoenix, Ariz.	206	103	60	28	10	5	14		
Dayton, Ohio	144	98	30	14	1	1	9	Pueblo, Colo.	41	27	9	4	1	—	—		
Detroit, Mich.	178	94	60	13	6	5	5	Salt Lake City, Utah	149	99	29	11	5	5	11		
Evansville, Ind.	44	33	10	1	—	—	3	Tucson, Ariz.	177	127	30	14	5	1	12		
Fort Wayne, Ind.	68	47	10	6	3	2	5	PACIFIC	1,841	1,257	371	110	56	47	190		
Gary, Ind.	15	9	6	—	—	—	1	Berkeley, Calif.	12	10	2	—	—	—	1		
Grand Rapids, Mich.	61	44	11	2	—	4	7	Fresno, Calif.	132	89	24	10	6	3	15		
Indianapolis, Ind.	230	160	49	11	6	4	20	Glendale, Calif.	15	10	4	1	—	—	—		
Lansing, Mich.	44	36	4	4	—	—	3	Honolulu, Hawaii	73	46	18	6	—	3	8		
Milwaukee, Wis.	120	77	37	3	2	1	5	Long Beach, Calif.	72	43	20	4	4	1	5		
Peoria, Ill.	58	44	10	3	—	1	7	Los Angeles, Calif.	347	238	62	21	17	9	27		
Rockford, Ill.	39	28	7	3	1	—	4	Pasadena, Calif.	30	20	5	3	—	2	2		
South Bend, Ind.	85	61	8	13	3	—	9	Portland, Oreg.	131	86	31	6	4	4	6		
Toledo, Ohio	100	63	23	8	5	1	5	Sacramento, Calif.	209	147	43	9	5	5	26		
Youngstown, Ohio	71	59	11	—	1	—	10	San Diego, Calif.	172	122	30	8	6	6	22		
W.N. CENTRAL	741	489	170	41	21	19	51	San Francisco, Calif.	144	97	36	8	1	2	30		
Des Moines, Iowa	73	58	8	4	—	3	3	San Jose, Calif.	176	122	32	15	5	2	27		
Duluth, Minn.	36	29	6	1	—	—	2	Santa Cruz, Calif.	27	19	4	4	—	—	3		
Kansas City, Kans.	36	24	7	3	2	—	1	Seattle, Wash.	118	77	22	7	5	7	8		
Kansas City, Mo.	143	96	29	5	8	5	7	Spokane, Wash.	57	42	13	1	—	1	4		
Lincoln, Nebr.	33	26	6	1	—	—	5	Tacoma, Wash.	126	89	25	7	3	2	6		
Minneapolis, Minn.	59	31	15	7	4	2	5	TOTAL	15,219 <sup>¶</sup>	10,314	3,197	1,050	358	297	1,095		
Omaha, Nebr.	93	59	30	2	2	—	10										
St. Louis, Mo.	124	69	35	10	2	7	10										
St. Paul, Minn.	59	37	15	6	1	—	3										
Wichita, Kans.	85	60	19	2	2	2	5										

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.





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