



## **Morbidity and Mortality Weekly Report**

Weekly

May 5, 2006 / Vol. 55 / No. 17

# National Arthritis Month — May 2006

May is National Arthritis Month. Arthritis affects persons of both sexes and all ages and races and is the most common cause of disability in the United States. The national prevalence of arthritis and arthritis-attributable activity limitation are both projected to increase during the next 25 years.

Persons with arthritis can reduce the effects of the disease by staying physically active, maintaining a healthy weight, and getting educated about arthritis self-management. To help persons with arthritis better manage their disease, the Arthritis Foundation offers community-based exercise classes (the Arthritis Foundation Exercise Program and the Arthritis Foundation Aquatics Program) and self-management education classes (the Arthritis Foundation Self-Help Program), which can reduce pain and improve function and mental health among persons with arthritis.

The CDC Arthritis Program helps fund activities by 36 state arthritis programs to increase the quality of life among persons affected by arthritis by implementing recommendations in the *National Arthritis Action Plan: A Public Health Strategy* and promoting progress toward reaching the arthritis-related *Healthy People 2010* objectives (objectives 2-1 through 2-8). The CDC Arthritis Program has developed and is using a physical activity awareness intervention (Physical Activity: The Arthritis Pain Reliever) and is developing a similar intervention for Spanish language speakers.

Additional information about arthritis as a public health problem is available at http://www.cdc.gov/arthritis. Information about arthritis and local arthritis programs and services is available from the Arthritis Foundation at http://www.arthritis.org or by telephone at 800-568-4045.

## State Prevalence of Self-Reported Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation — United States, 2003

Arthritis is costly (\$86 billion annually), highly prevalent (affecting 43 million U.S. adults), the leading cause of disability, and associated with substantial disparities in pain, activity limitations, and compromised quality of life (1-3). State-based estimates of arthritis prevalence and impact help define the burden of arthritis and provide state arthritis programs with data for program planning. This report summarizes results from the 2003 Behavioral Risk Factor Surveillance System (BRFSS) survey on state-specific prevalence of selfreported doctor-diagnosed arthritis and arthritis-attributable activity limitation in 50 states, the District of Columbia (DC), and three territories. The findings indicated that the prevalence of adults with self-reported doctor-diagnosed arthritis ranged from 17.9% to 37.2% (state median: 27.0%) and with arthritis-attributable activity limitation ranged from 6.3% to 16.7% (state median: 9.9%); the proportion of adults with arthritis-attributable activity limitation among those with selfreported doctor-diagnosed arthritis ranged from 30.1% to 49.8% (state median: 37.4%). These high rates of arthritis prevalence and activity limitation are projected to increase with the aging of the population (4), requiring increased intervention measures to reduce this impact.

### INSIDE

- 481 Parental Report of Diagnosed Autism in Children Aged 4–17 Years — United States, 2003–2004
- 486 Worker Illness Related to Ground Application of Pesticide Kern County, California, 2005
- 488 Respiratory Illness Associated with Boot Sealant Products Five States, 2005–2006
- 491 QuickStats

The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

#### **SUGGESTED CITATION**

Centers for Disease Control and Prevention. [Article title]. MMWR 2006;55:[inclusive page numbers].

#### **Centers for Disease Control and Prevention**

Julie L. Gerberding, MD, MPH *Director* 

Dixie E. Snider, MD, MPH Chief Science Officer

Tanja Popovic, MD, PhD Associate Director for Science

# Coordinating Center for Health Information and Service

Steven L. Solomon, MD Director

#### **National Center for Health Marketing**

Jay M. Bernhardt, PhD, MPH

Director

#### **Division of Scientific Communications**

Judith R. Aguilar (Acting) Director

Mary Lou Lindegren, MD *Editor*, MMWR *Series* 

Suzanne M. Hewitt, MPA

Managing Editor, MMWR Series

Douglas W. Weatherwax (Acting) Lead Technical Writer-Editor

David C. Johnson Jude C. Rutledge Writers-Editors

Lynda G. Cupell Malbea A. LaPete Visual Information Specialists

Quang M. Doan, MBA Erica R. Shaver Information Technology Specialists

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

Patsy A. Hall Deborah A. Adams Lenee Blanton

Rosaline Dhara Pearl C. Sharp BRFSS is a state-based, random-digit—dialed telephone survey of the noninstitutionalized, civilian, U.S. adult population aged ≥18 years. The survey is conducted annually in all 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands. In odd-numbered years, a five-question module on arthritis and activity limitation is included with the core survey. In 2003, self-reported doctor-diagnosed arthritis was defined as a "yes" response to the question, "Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" Respondents with self-reported doctor-diagnosed arthritis were also asked, "Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?" Those responding "yes" were considered to have arthritis-attributable activity limitation.

To estimate the state and territory burden and impact of arthritis, calculations of the prevalence of self-reported doctordiagnosed arthritis and arthritis-attributable activity limitation used the weighted state population of adults aged ≥18 years as the denominator. To estimate the impact of arthritisattributable activity limitation among adults with self-reported doctor-diagnosed arthritis, the unadjusted proportion of adults with arthritis-attributable activity limitation was calculated using the weighted number of adults aged ≥18 years with selfreported doctor-diagnosed arthritis as the denominator. To allow comparison of the prevalence of arthritis-attributable activity limitation between states, an age-adjusted estimate for states was calculated using the 2000 population standard. Statistical analysis software was used to calculate point estimates and 95% confidence intervals. The median response rate for the states and territories included in this report was 53.2% (range: 34.4% [New Jersey] to 80.5% [Puerto Rico]).\*

During 2003, the unadjusted prevalence of arthritis ranged from 17.9% in Hawaii to 37.2% in West Virginia (state median: 27.0%) and from 16.4% to 24.4% in the territories (Table). The unadjusted prevalence of arthritis-attributable activity limitation ranged from 6.3% in Hawaii to 16.7% in West Virginia (state median: 9.9%) and from 6.1% to 11.7% in the territories. The unadjusted proportion of arthritis-attributable activity limitation among adults with self-reported doctor-diagnosed arthritis ranged from 30.1% in DC to 49.8% in Kentucky (state median: 37.4%) and from 35.7% to 48.3% in the territories. The median age-adjusted state prevalence of arthritis-attributable activity limitation was 9.6%, and the states with the highest prevalences were in the southern region (Figure). In each state, DC, and territory, arthritis was

<sup>\*2003</sup> Behavioral Risk Factor Surveillance System Summary Data Quality Report. Available at http://www.cdc.gov/brfss/technical\_infodata/pdf/2003summarydataqualityreport.pdf.

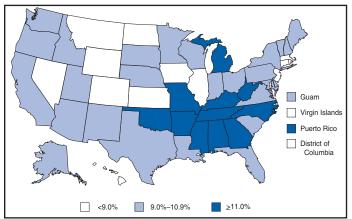
TABLE. State/territory-specific population prevalence of self-reported doctor-diagnosed arthritis and arthritis-attributable activity limitation and proportion of adults with arthritis-attributable activity limitation among adults with self-reported doctor-diagnosed arthritis — Behavioral Risk Factor Surveillance System (BRFSS), United States, 2003

			Proportion with arthritis-attributable activity					
	Doctor-	diagnosed a	arthritis	Doctor-diaç arthritis-attribu	nosed arthr		limitation amo	ong adults with
State/Territory	Weighted no. (in 1,000s)	Weighted %	(95% CI*)	Weighted no. (in 1,000s)	Weighted %	(95% CI)	Weighted %	(95% CI)
Alabama	1,139	33.9	(32.1-35.8)	459	13.5	(12.3-14.8)	40.4	(37.4-43.5)
Alaska	113	24.6	(22.4-26.9)	44	9.5	(8.0-11.0)	39.0	(34.0-44.0)
Arizona	1,068	26.3	(24.2-28.4)	414	10.1	(8.8-11.4)	38.9	(34.6-43.1)
Arkansas	638	31.6	(30.0-33.2)	273	13.4	(12.3-14.5)	43.2	(40.3-46.0)
California	5,503	22.0	(20.6-23.4)	2,265	8.7	(7.8-9.7)	41.2	(37.8-44.7)
Colorado	835	24.6	(23.2-26.0)	286	8.4	(7.5-9.3)	34.4	(31.3-37.4)
Connecticut	671	25.9	(24.6-27.2)	235	8.9	(8.1-9.8)	35.1	(32.3-37.8)
Delaware	164	28.0	(26.2-29.8)	60	9.7	(8.6-10.7)	36.3	(32.9-39.7)
District of Columbia	103	23.0	(20.8-25.3)	31	6.8	(5.5-8.1)	30.1	(25.2-35.0)
Florida	3,623	27.8	(26.0-29.6)	1,379	10.5	(9.3-11.6)	38.6	(35.1-42.1)
Georgia	1,696	26.7	(25.4-28.0)	690	10.8	(9.9-11.6)	41.0	(38.3-43.7)
Hawaii	171	17.9	(16.5-19.2)	60	6.3	(5.4-7.1)	35.3	(31.3-39.2)
Idaho	249	25.6	(24.2-27.0)	99	10.1	(9.2-11.0)	40.0	(37.0-43.0)
Illinois <sup>†</sup>	2,246	24.0	(22.1-26.1)	706	7.5	(6.4-8.8)	31.6	(27.5-35.9)
Indiana	1,388	30.4	(29.1-31.7)	482	10.5	(9.6-11.3)	35.0	(23.6-37.4)
lowa	585	26.6	(25.3-28.0)	188	8.5	(7.7-9.3)	32.3	(29.6-35.0)
Kansas	492	24.6	(23.3-26.0)	184	9.1	(8.2-10.0)	37.6	(34.6-40.6)
Kentucky	1,044	34.6	(33.0-36.2)	519	16.6	(15.5-17.8)	49.8	(47.2-52.4)
Louisiana	895	27.5	(26.1-28.9)	340	10.3	(9.4-11.2)	38.6	(35.8-41.4)
Maine	292	29.3	(27.3-31.3)	117	11.7	(10.3-13.0)	40.4	(36.6-44.2)
Maryland	1,068	26.3	(24.7-27.8)	379	9.2	(8.2-10.2)	35.6	(32.4-38.8)
Massachusetts	1,244	25.6	(24.4-26.8)	426	8.6	(7.9-9.4)	34.5	(32.0-37.1)
Michigan	2,409	32.3	(30.6-34.0)	875	11.7	(10.5-12.8)	36.4	(33.5-39.4)
Minnesota	955	25.6	(24.1-27.1)	397	10.5	(9.5-11.6)	41.8	(38.4-45.1)
Mississippi	658	31.3	(29.8-32.8)	300	14.1	(13.0-15.3)	45.8	(43.0-48.6)
Missouri	1,280	30.1	(28.3-31.9)	521	12.2	(10.9-13.5)	40.7	(37.3-44.2)
Montana	180	26.3	(24.5-28.1)	62	9.0	(8.0-10.0)	34.7	(31.2-38.2)
Nebraska	345	27.0	(25.6-28.3)	128	9.9	(9.0-10.8)	37.1	(34.4-39.7)
Nevada	442	27.0	(24.7-29.3)	138	8.3	(7.0-9.7)	31.7	(27.3-36.2)
New Hampshire	254	26.4	(25.1-27.8)	92	9.4	(8.5-10.3)	36.3	(33.4-39.1)
New Jersey	1,611	25.0	(24.1-25.9)	540	8.3	(7.7-8.8)	33.7	(31.8-35.6)
New Mexico	341	25.5	(24.2-26.9)	134	9.9	(9.0-10.7)	39.4	(36.6-42.2)
New York	3,937	27.5	(26.2-28.9)	1,421	9.8	(8.9-10.6)	36.3	(33.7-39.0)
North Carolina	1,806	28.5	(27.2-29.9)	742	11.6	(10.7-12.5)	41.3	(38.7-43.9)
North Dakota	130	27.5	(25.8-29.2)	43	9.0	(8.0-10.0)	33.3	(30.1-36.6)
Ohio	2,538	29.8	(28.0-31.5)	884	10.3	(9.2-11.4)	34.9	(31.7-38.1)
Oklahoma	731	27.9	(26.8-29.1)	311	11.8	(11.1-12.6)	42.7	(40.5-44.9)
	731 721	27.9	(25.5-28.5)	288	10.7	(9.7-11.7)	40.1	(37.0-43.2)
Oregon	2,965	31.6	,	927	9.8	,	31.4	` ,
Pennsylvania	2,965	28.3	(29.9-33.2)	92 <i>1</i> 75	9.0	(8.7-10.8) (8.1-10.0)	32.5	(28.6-34.3)
Rhode Island	934		(26.7-29.9) (29.0-31.7)	345				(29.5-35.5) (34.6-39.5)
South Carolina South Dakota	162	30.4			11.1	(10.2-11.9)	37.0	
		28.8	(27.4-30.2)	59 550	10.4	(9.6-11.3)	36.6	(34.0-39.2)
Tennessee Toxas	1,378	31.6	(29.5-33.6)	559 1 425	12.6	(11.2-14.0)	40.7	(37.0-44.4)
Texas	3,788	24.1	(22.9-25.3)	1,435	9.0	(8.2-9.8)	38.2	(35.5-40.9)
Utah Vormont	355	22.3	(20.7-24.0)	133	8.3	(7.2-9.4)	37.4	(33.6-41.3)
Vermont	129	27.3	(25.8-28.8)	51 554	10.6	(9.6-11.7)	39.4	(36.4-42.3)
Virginia Washington	1,495	27.2	(25.7-28.8)	554 500	9.9	(8.9-10.9)	37.4	(34.2-40.5)
Washington	1,216	26.7	(25.9-27.5)	500	10.9	(10.4-11.4)	41.4	(39.8-43.0)
West Virginia	523	37.2	(35.4-39.0)	236	16.7	(15.3-18.1)	45.4	(42.5-48.4)
Wisconsin	1,096	26.9	(25.2-28.5)	391	9.5	(8.5-10.5)	35.8	(32.5-39.0)
Wyoming <i>State median</i> §	107	28.5 <i>27.0</i>	(27.0-30.0)	34	8.9 <i>9.9</i>	(8.0-9.9)	31.6 <i>37.4</i>	(28.8-34.4)
Guam	17	16.4	(13.6-19.3)	7	6.3	(4.5-8.2)	39.3	(30.3-48.5)
Puerto Rico	683	24.4	(22.8-26.0)	330	11.7	(10.6-12.8)	48.3	(44.7-51.8)
Virgin Islands	13	17.4	(15.3-19.4)	4	6.1	(4.8-7.4)	35.7	(29.6-41.8)

<sup>\*</sup> Confidence interval.

† The Illinois BRFSS uses a split-sample design, which requires different weighting procedures to produce accurate estimates. The estimates reported here for Illinois were provided directly by the Illinois BRFSS coordinator. Median for all 50 states and the District of Columbia.

FIGURE. Age-adjusted\* population prevalence of arthritisattributable activity limitation — Behavioral Risk Factor Surveillance System, United States, 2003



<sup>\*</sup> Age-adjusted to the 2000 standard U.S. population.

more prevalent in women than in men and in adults aged  $\geq$ 65 years than in younger adults.

**Reported by:** B Steiner, Center for Health Statistics, Illinois Dept of Public Health. J Hootman, PhD, G Langmaid, J Bolen, PhD, CG Helmick MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report provide the first state-specific estimates of self-reported doctor-diagnosed arthritis and arthritis-attributable activity limitation for all 50 states, DC, and U.S territories using updated case-finding questions. In all state and territorial populations, self-reported doctor-diagnosed arthritis is one of the most common chronic conditions, and arthritis-attributable activity limitation has a substantial impact. As the U.S. population continues to age, the prevalence of arthritis and arthritis-attributable activity limitation is projected to increase (4), likely increasing these already substantial state estimates of arthritis burden.

Arthritis-attributable activity limitation can be prevented or reduced in many persons. For example, both aerobic and strengthening exercises can improve physical function and self-reported disability among older disabled adults with knee osteoarthritis (5). In addition, among persons with arthritis who are not limited in activity, regular physical activity can reduce the risk for functional activity limitation by 32% (6). Arthritis self-management education classes also have substantially reduced pain and disability (7). However, despite the known benefits of exercise for persons with arthritis, 44% of adults with arthritis are physically inactive (8).

The findings in this report are subject to at least four limitations. First, doctor-diagnosed arthritis is self reported and has not been confirmed by a health-care provider, although such self report appears valid for surveillance purposes (9). Second, BRFSS is a telephone survey and does not cover per-

sons without land-line telephones, persons in the military, or those residing in institutions. Third, state comparisons of data presented (Table) are difficult because they are unadjusted for potentially important variables (e.g., age); however, ageadjusted data are presented (Figure). Finally, response rates for BRFSS are low; however, demographic characteristics of state BRFSS survey respondents are representative of the state adult populations.

These state-specific data on self-reported doctor-diagnosed arthritis prevalence and arthritis-attributable activity limitation are important for monitoring and targeting programs to reduce the burden of arthritis. One of the national Healthy *People 2010* objectives (objective 2-2) is to reduce the proportion of adults with self-reported doctor-diagnosed arthritis who experience arthritis-attributable activity limitation from 36% in 2002 (baseline) to 33%. CDC funds 36 state health departments to expand the reach of evidence-based programs for persons with arthritis. These include physical activity programs (Arthritis Foundation Exercise Program, Arthritis Foundation Aquatics Program, and EnhanceFitness) and self-management education programs (Arthritis Foundation Self-Help Program and the Chronic Disease Self-Management Program) that are delivered in community settings by trained instructors. Benefits of these physical activity and selfmanagement education programs include reduced pain, improved function and mental health, and less need for health care (10). Improving access to these evidence-based programs through national and local partnerships with states and the Arthritis Foundation might help meet the 2010 health objectives for arthritis and thereby improve the quality of life for those affected by arthritis.

#### References

- CDC. Prevalence of disabilities and associated health conditions among adults—United States, 1999. MMWR 2001;50:120–5.
- CDC. Racial/ethnic differences in the prevalence and impact of doctordiagnosed arthritis—United States, 2002. MMWR 2005;54:119–23.
- 3. CDC. Update: Direct and indirect costs of arthritis and other rheumatic conditions—United States, 1997. MMWR 2004;53:388–9.
- 4. Hootman JM, Helmick CG. Projections of US prevalence of arthritis and associated activity limitations. Arthritis Rheum 2006;54:226–9.
- 5. Ettinger WH Jr, Burns R, Messier SP, et al. A randomized trial comparing aerobic exercise and resistance exercise with a health education program in older adults with knee osteoarthritis: the Fitness Arthritis and Seniors Trial (FAST). JAMA 1997;277:25–31.
- Dunlop DD, Semanik P, Song J, Manheim LM, Shih V, Chang RW. Risk factors for functional decline in older adults with arthritis. Arthritis Rheum 2005;52:1274–82.
- 7. Lorig K, Ritter PL, Plant K. A disease-specific self-help program compared with a generalized chronic disease self-help program for arthritis patients. Arthritis Care Res 2005;53:950–7.
- Shih M, Hootman JM, Kruger J, Helmick CG. Physical activity in men and women with arthritis: National Health Interview Survey, 2002. Am J Prev Med 2006;30:385–93.

- Sacks JJ, Harrold LR, Helmick CG, Gurwitz JH, Emani S, Yood RA. Validation of a surveillance case definition for arthritis. J Rheumatol 2005;32:340–7.
- 10. Brady TJ, Kruger J, Helmick CG, et al. Intervention programs for arthritis and other rheumatic diseases. Health Educ Behav 2003;30:44–63.

#### Mental Health in the United States

# Parental Report of Diagnosed Autism in Children Aged 4–17 Years — United States, 2003–2004

Autism is a lifelong neurodevelopmental disorder characterized by early onset of impairments in social interaction and communication and unusual, stereotyped behaviors. Autism (i.e., autistic disorder) often is classified with two related, although less severe, developmental disorders: Asperger disorder and pervasive developmental disorder—not otherwise specified. These three constitute the autism spectrum disorders

(ASDs). Diagnosis of ASDs is based exclusively on developmental pattern and behavioral observation (Box). Two population-based studies conducted by CDC in selected U.S. locations reported ASD prevalence of 3.4 and 6.7 per 1,000 children, respectively (1,2). CDC also conducts two nationally representative surveys, the National Health Interview Survey (NHIS) and the National Survey of Children's Health (NSCH), in which parents are asked whether their child ever received a diagnosis of autism. Because of similarities in methodology used by the two surveys, CDC analyzed 2003-2004 data from NHIS and data from the first-ever NSCH (collected during January 2003-July 2004) to 1) estimate the population-based prevalence of parental report of diagnosed autism in the United States and 2) assess parental reporting of child social, emotional, and behavioral strengths and difficulties and special-health care needs among children with and without reported autism. This report describes the results of

### BOX. Diagnostic criteria for autism

#### Autistic disorder\*

- A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):
  - (1) qualitative impairment in social interaction, as manifested by at least two of the following:
    - (a) marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
    - (b) failure to develop peer relationships appropriate to developmental level
    - (c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)
    - (d) lack of social or emotional reciprocity
  - (2) qualitative impairments in communication, as manifested by at least one of the following:
    - (a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
    - (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others

- (c) stereotyped and repetitive use of language or idiosyncratic language
- (d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
- (3) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities as manifested by at least one of the following:
  - (a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
  - (b) apparently inflexible adherence to specific, nonfunctional routines or rituals
  - (c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting or complex whole-body movements)
  - (d) persistent precoccupation with parts of objects
- B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.
- C. The disturbance is not better accounted for by Rett disorder or childhood disintegrative disorder.

**SOURCE:** American Psychiatric Association. Diagnostic and statistical manual of mental disorders—text revision (DSM-IV-TR<sup>TM</sup>, 2000) Arlington, VA: American Psychiatric Association, 2000.

<sup>\*</sup> Autistic disorder is one of three autism spectrum disorders categorized within the five pervasive developmental disorders included in DSM-IV-TR, 2000. The other two autism spectrum disorders are Asperger disorder and pervasive developmental disorder—not otherwise specified. The two remaining pervasive developmental disorders are Rett disorder and childhood disintegrative disorder

that analysis, which indicated that the prevalence of parent-reported diagnosis of autism was 5.7 per 1,000 children in NHIS and 5.5 per 1,000 children in NSCH. Prevalence estimates in the two studies were similar across age, sex, and racial/ethnic populations. The consistency in estimates between the two surveys suggests high reliability for parental report of autism. These estimates suggest that, as of 2003–2004, autism had been diagnosed in at least 300,000 U.S. children aged 4–17 years. In addition, parental reports of autism were associated with reported social, emotional, and behavioral symptoms and specialized needs. Thus, these surveys might be useful to assess health, education, and social service needs of children with autism.

NHIS is an ongoing, annual, in-person survey of the civilian, noninstitutionalized U.S. population, based on a multistage sampling of housing units. NHIS includes a child survey component in which one child aged ≤17 years is selected randomly as the interview subject from each applicable household. Responses to questions about the child are obtained from parents or other knowledgeable adults. For this report, the analysis was based on 24,673 children from the combined NHIS surveys of 2003 and 2004, the most recent reporting years and a period comparable to that of the first NSCH interviews. Response rates for the child survey component of NHIS for 2003 and 2004 were 81.1% and 79.4%, respectively.

NSCH is a random-digit—dialed telephone survey conducted by CDC as part of the State and Local Area Integrated Telephone Survey sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration. NSCH was initiated in 2003 to estimate the prevalence of physical, emotional, and behavioral child health indicators in combination with information on the family context and neighborhood environment. The survey uses a multistage sampling method based on identification of households with one or more children aged ≤17 years and random selection of a sample child as the interview subject. Parents or guardians of 102,353 children completed the interview during January 2003–July 2004. The response rate was 55.5%. CDC plans to conduct this survey approximately every 4 years.

In both surveys, autism was ascertained from the question: "Has a doctor or health-care provider ever told you that [child's name] has autism?" For both surveys, children who were aged 4–17 years at the time of the survey were selected; children with missing data on autism (<0.2%) were excluded. The final samples included 18,885 children from NHIS and 79,590 children from NSCH.

Population-based estimates of parent-reported autism used weighted data to reflect the noninstitutionalized population of children nationally. From NHIS, the consistency between parent-reported autism and parental responses to the Strengths

and Difficulties Questionnaire (SDQ) was examined. The SDQ is a 25-item behavioral screening instrument that includes both positive and negative psychological attributes. The items are divided into five scales: emotional symptoms, conduct problems, hyperactive behavior, peer relationships, and prosocial behavior. For each scale, children are categorized as having low, moderate, or high levels of difficulties on the basis of established criteria for U.S. children (3). From NSCH, the extent to which children reported to have autism also were reported to have special health-care needs was examined (4). Additionally, for children aged 4-5 years in the NSCH survey, a risk score for developmental delay was computed from responses to a series of questions from the Parent's Evaluation of Developmental Status (PEDS) questionnaire (5). PEDS is designed to identify children who have or are at risk for developmental problems generally, including developmental problems associated with ASD.

Total prevalence estimates of parent-reported diagnosis of autism and estimates by sex, age, and race/ethnicity were similar for the two surveys (Table 1). Prevalence was 5.7 per 1,000 children (95% confidence interval [CI] = 4.5–7.2) in NHIS and 5.5 per 1,000 children (CI = 4.7–6.4) in NSCH. In both surveys, prevalence was 3.7 times as high for males as for females, peak prevalence was observed at ages 6–11 years, and lower rates were observed among children of Hispanic ethnicity.

On the basis of NHIS data, children with parent-reported autism were more likely than children without autism to have moderate or high levels of emotional symptoms, conduct problems, hyperactivity, peer problems, and total difficulties (Table 2). Approximately 83% of children reported with autism had moderate or high levels of total difficulties compared with 15% of children without autism. The most notable differences were for peer problems (82.0% versus 15.9%) and hyperactivity (65.2% versus 11.9%). Substantially fewer children reported with autism had a high level of social skills (39.6%) compared with children without autism (82.3%).

On the basis of NSCH data, 93.8% of children with parent-reported autism were classified as having special health-care needs lasting or expected to last ≥12 months; 90.1% were reported as needing more medical, mental health, or educational services than usual for a child of the same age or needing treatment or counseling for an emotional, developmental, or behavioral problem (Table 3). These percentages compared with 19.6% and 10.5%, respectively, for children reported without autism.

Substantial differences also were observed among children aged 4–5 years regarding their risk for developmental delay, on the basis of the PEDS questions. Among those with

TABLE 1. Prevalence of parent-reported autism among children aged 4–17 years,\* by selected demographic characteristics — National Health Interview Survey (NHIS) and National Survey of Children's Health (NSCH), United States, 2003–2004

		N	NHIS			N:	SCH	
Demographic characteristics	No. in sample	No. with reported autism	Weighted <sup>†</sup> prevalence per 1,000	(95% CI§)	No. in sample	No. with reported autism	Weighted prevalence per 1,000	(95% CI)
Total	18,885	102	5.7	(4.5–7.2)	79,590	465	5.5	(4.7-6.4)
Sex								
Male	9,781	82	8.8 <sup>¶</sup>	(6.7-11.5)	40,846	360	8.5 <sup>¶</sup>	(7.0-10.3)
Female	9,104	20	2.4	(1.4–4.2)	38,671	105	2.3	(1.8–3.0)
Age (yrs)								
4–5	2,598	11	4.8	(2.4-9.7)	10,650	64	4.4	(3.0-6.3)
6–8	3,668	27	7.5	(5.0–11.5)	15,143	115	7.6	(5.1–11.2)
9–11	3,912	24	7.2	(4.5-11.3)	15,937	113	6.8	(5.1 - 9.0)
12–14	4,151	21	4.6	(2.7–7.9)	18,149	83	4.3	(3.1-6.0)
15–17	4,556	19	4.2	(2.3-7.3)	19,711	90	4.1	(3.0-5.5)
Race/Ethnicity**								
Hispanic	5,315	16	2.9¶	(1.5-5.6)	9,569	35	3.2 <sup>¶</sup>	(1.6-6.5)
White, non-Hispanic	9,748	66	7.0	(5.3-9.2)	55,334	347	6.2	(5.3-7.3)
Black, non-Hispanic	3,023	18	5.2	(3.0-9.1)	7,642	44	5.8	(3.3-10.2)
Highest level of education achieved								
by a family member								
≤ High school graduate	7,164	27	4.0	(2.5-6.3)	20,091	88	4.1	(2.9-5.9)
> High school	11,627	73	6.6	(5.0-8.6)	59,194	373	6.0	(5.0-7.1)
Family income								
<200% of poverty level <sup>††</sup>	5,735	26	5.7	(3.6-9.0)	22,500	129	5.6	(4.0-7.9)
≥200% of poverty level	8,671	61	7.1	(5.3-9.7)	49,900	294	5.6	(4.7-6.6)

<sup>\*</sup> Children with missing data on autism (0.07% in NHIS and 0.13% in NSCH) were excluded from all analyses. Children with missing variables on demographic factors also were excluded from relevant analyses. Percentage missing was <1% for all factors in both surveys, except race/ethnicity in NSCH (1.6% missing) and family income in both surveys (24% missing from NHIS and 9% missing from NSCH).

reported autism, 92.6% were classified as at high risk for developmental delay, 6.4% were classified as at moderate risk, and 1.1% as at low risk. Among children without autism, 9.4% were classified as at high risk for developmental delay, 17.1% were classified as at moderate risk, and 73.6% as at low risk or no risk (Table 3).

Reported by: LA Schieve, PhD, C Rice, PhD, C Boyle, PhD, Div of Birth Defects and Developmental Disabilities, SN Visser, MS, Div of Human Development and Disability, National Center on Birth Defects and Developmental Disabilities; SJ Blumberg, PhD, Div of Health Interview Statistics, National Center for Health Statistics, CDC.

**Editorial Note:** Because diagnosis of autism is made only by assessment of developmental patterns and observation of behavioral symptoms, establishing and tracking prevalence is difficult; thus, multiple methods for case ascertainment can be useful. Parental report of autism diagnosis has not been assessed previously. However, a study of parental report of birth defects (6) documented high specificity; sensitivity varied depending on the defect. Validation studies of self-reported medical conditions among adults have reported similar find-

ings (7,8). Although the autism diagnosis question from NHIS and NSCH has not been externally validated, the consistency of results from these two independent surveys of the U.S. population during the same approximate period suggests a degree of reliability of these estimates. The associations between reported autism and 1) parental rating of difficulties with SDQ items included in NHIS and 2) reports of special health-care needs and risk for developmental delay in NSCH suggest consistency between reported autism and expected behavioral and emotional symptoms and health-care use patterns. Moreover, the estimates of autism in this report and the male-to-female prevalence ratios are consistent with estimates from recent population-based studies of autism and ASD prevalence on the basis of clinical examination and medical and educational record review (1,2). Additionally the finding that parentreported autism prevalence was highest during early school age (i.e., 6–11 years) appears similar to that of a 1996 study using medical and education record review in metropolitan Atlanta in which peak prevalence was observed among children aged 5-8 years (1).

<sup>†</sup> Estimates are weighted to reflect the noninstitutionalized population of children nationally. Sample weights reflect the probability of selection of each child and are adjusted to account for nonresponse and noncoverage.

<sup>§</sup> Confidence interval; adjusted to account for complex sample design using statistical software.

<sup>¶</sup> p<0.05 on the basis of chi-square comparison of prevalence rates across demographic subgroups.

<sup>\*\*</sup> Children classified as of race/ethnicity other than Hispanic, non-Hispanic white, or non-Hispanic black were not included in subgroup analyses by race/ethnicity because of small sample size in both surveys.

<sup>††</sup> Poverty level was derived from household income level on the basis of U.S. Department of Health and Human Services guidelines.

TABLE 2. Parental scoring of child strengths and difficulties among children aged 4–17 years, by parent-reported autism status — National Health Interview Survey, United States, 2003–2004

	Weighted† percentage among a children	Weighted percentage among children without	ı	
Strengths and difficulties scales*	with reported autism	reported autism	Prevalence ratio§	(95% CI <sup>¶</sup> )
Emotional symptoms				
Low	56.3	87.0	Referent	
Moderate	17.6	5.3	4.2	(2.6-6.8)
High	26.0	7.7	3.9	(2.6-5.8)
Conduct problems				
Low	66.2	82.1	Referent	
Moderate	12.2	10.2	1.4	(0.7-2.7)
High	21.6	7.8	2.9	(1.9-4.4)
Hyperactivity				
Low	34.9	88.1	Referent	
Moderate	11.8	3.8	6.1	(3.6-10.4)
High	53.4	8.1	7.2	(5.9-8.7)
Peer problems				
Low	18.0	84.2	Referent	
Moderate	14.5	7.6	5.4	(3.4 - 8.4)
High	67.5	8.3	8.8	(7.7-10.2)
Total difficulties**				
Low	17.4	84.7	Referent	
Moderate	24.4	7.8	6.9	(5.2-9.2)
High	58.2	7.5	9.5	(8.1–11.1)
Prosocial behavior				
High	39.6	82.3	Referent	
Moderate	22.5	12.3	2.8	(1.9-4.1)
Low	38.0	5.4	7.9	(5.9–10.6)

\* Missing data for children reduced certain sample sizes. Maximum missing data was 5% for peer problems and 6% for total difficulties.

<sup>†</sup> Estimates are weighted to reflect the noninstitutionalized population of children nationally. Sample weights reflect the probability of selection of each child and are adjusted to account for nonresponse and noncoverage.

§ For each scale other than prosocial behavior, prevalence ratios compare children with and without autism by presence of moderate and high levels of difficulties, using low level of difficulty as the referent category. For prosocial behavior, prevalence ratios compare children with and without autism by presence of moderate and low level of prosocial behavior, using high level of prosocial behavior as the referent category.

Onfidence interval; adjusted to account for complex sample design using statistical software.

\*\* Based on scales for emotional symptoms, conduct problems, hyperactivity, and peer problems.

The findings in this report of parental report of diagnosed autism complement other CDC studies of the prevalence of autism, such as population-based surveillance conducted in Atlanta and other areas of the United States that compose the Autism and Developmental Disabilities Monitoring (ADDM) Network. Estimates from ADDM surveillance are on the basis of medical and education record review of eligible children aged 8 years and provide more detail regarding the prevalence of ASDs in selected U.S. populations. In addition, ADDM surveillance provides information on the clinical characteristics of children with ASDs and will provide data to track ASD prevalence trends in these populations. NHIS and NSCH data supplement

ADDM data by providing national estimates of parent-reported diagnoses of autism. Because these surveys contain information on health-care use and family functioning, they might be helpful for future analyses examining the impact of ASDs on children and their families. Previous reports on parent-reported estimates of other developmental disabilities from NHIS (9) and of attention-deficit/hyperactivity disorder from NSCH (10) have provided valuable data on the national prevalence and insight into the impact of these disorders on children in the United States.

Because autism is defined behaviorally, autism usually is not diagnosed before age 4 years. Later identification of children with autism might suggest an underestimate of autism prevalence among younger age groups. Similarly, although autism is considered a chronic condition, to what extent the "ever diagnosed" cases described in this report reflect parental report of current levels of clinical symptomatology rather than past diagnoses is unclear; thus, the peak prevalence estimates for children aged 6–11 years might be reflective of peak ages for diagnosis and treatment. Although Hispanic children had lower rates of reported autism in the two surveys, whether the lower rates resulted from etiologic differences or differential cultural factors related to autism symptom recognition and access to services for diagnosis and treatment could not be determined. Thus, differences observed between age or race/ethnicity subgroups should not be used to infer potential etiologic associations. Nonetheless, such differences point to the need to consider potential underdiagnosis in certain populations. CDC has recognized the need to improve early detection of autism and has begun a public education campaign with national partner groups (Learn the Signs. Act Early) to educate parents and professionals about early warning signs of autism and other developmental disorders and to encourage developmental screening and intervention.

The findings in this report are subject to at least four limitations. First, the NSCH response rate was lower than the NHIS response rate; however, the comparability of the prevalence estimates suggests a differential nonresponse bias did not occur. Second, parental report of autism is dependent on access to appropriate health or educational services for diagnosis and communication of that diagnosis to the parent. Third, because the survey asked only about autism, how parents of children with diagnoses of other, less severe, ASD disorders (i.e., pervasive developmental disorder—not otherwise specified or Asperger disorder) might have responded is unclear. However, because prevalence estimates from NHIS and NSCH

TABLE 3. Parental reports of special health-care needs\* of children aged 4–17 years† and concerns over early development of children aged 4–5 years, by reported autism status — National Survey of Children's Health, United States, 2003–2004

Parental report/concern	Weighted <sup>§</sup> percentage among children with reported autism	Weighted percentage among children without reported autism	n Prevalence ratio <sup>1</sup>	(95% CI**)
Special health-care needs of children aged 4–17 years	44110111	uu.ioiii	14110	(00/001)
Need/use prescription medications (except vitamins)	53.2	15.1	3.5	(3.0-4.1)
Need/use more medical, mental health, or education services than usual for most children same age	85.0	8.0	10.6	(9.9–11.3)
Limited/prevented in any way in ability to do things most children of same age can do	64.0	4.0	16.0	(14.0-18.5)
Need/receive special therapy such as physical, occupational, or speech	70.7	2.8	25.3	(22.3-28.4)
Have any kind of emotional, developmental, or behavioral problem for which treatment or counseling needed	74.9	5.7	13.1	(11.9–14.5)
Any of five special health-care needs listed above	93.8	19.6	4.8	(4.6-5.0)
Either more medical, mental health, education services than usual for most children same age OR emotional, developmental, or behavioral problem for which treatment or counseling needed	90.1	10.5	8.6	(8.1–9.1)
Early development of children aged 4-5 years <sup>††</sup>				
Concerned with learning, development, or behavior	87.9	8.2	10.8	(8.8-13.1)
Concerned with talking	92.4	20.5	4.5	(4.0-5.1)
Concerned with understanding	86.3	12.3	7.0	(5.8-8.5)
Concerned with use of hands/fingers	74.0	8.2	9.0	(7.2-11.3)
Concerned with use of arms/legs	52.9	6.6	8.0	(5.5-11.6)
Concerned with behaviors	93.5	23.8	3.9	(3.5-4.4)
Concerned with getting along with others	87.0	16.8	5.2	(4.5-6.0)
Concerned with learning to do things for self	91.8	11.7	7.9	(7.0-8.9)
Risk assessment score§§				
No or low risk	1.1	73.6	Referent	
Moderate risk	6.4	17.1	4.6	(3.4-6.1)
High risk	92.6	9.4	8.7	(7.8–9.8)

<sup>\*</sup> Lasting or expected to last ≥12 months.

are greater than the estimate for ASDs (3.4 per 1,000 population) reported in a previous study (1) and the estimate for autism (4.0 per 1,000 population [compared with 6.7 per 1,000 for ASDs]) reported in another (2), the findings in this report might indicate that children with the other two ASDs were reported by their parents as having autism. Finally, the findings in this report represent cross-sectional analyses of NHIS and NSCH data from interviews conducted during the same approximate period and do not assess trends in the rate of autism.

Results from these two national surveys of parental report of diagnosed autism suggest that, as of 2003–2004, autism had been diagnosed in at least 300,000 U.S. children aged 4–17 years. Parents who reported that their children had autism also reported these children experienced moderate or high levels of social, emotional, and behavioral difficulties and needed special health-care and educational services. These population-based surveys might be useful to assess the specialized health and educational needs of families and children with disabilities such as autism.

<sup>†</sup> Missing data (<1% missing for all concerns) for children reduced certain sample sizes.

<sup>§</sup> Estimates are weighted to reflect the noninstitutionalized population of children nationally. Sample weights reflect the probability of selection of each child and are adjusted to account for nonresponse and noncoverage.

<sup>&</sup>lt;sup>¶</sup> Prevalence ratios compare parental concerns regarding children with and without reported autism. For the PEDS risk assessment score, prevalence ratios compare children with and without reported autism who had moderate or high risk scores, using no or low risk scores as the referent category.

<sup>\*\*</sup> Confidence interval; adjusted to account for complex sample design using statistical software.

<sup>††</sup> Based on responses to Parent's Evaluation of Developmental Status (PEDS) questions. Possible responses to each PEDS question were concerned "a lot," "a little," or "not at all." Percentages of those responding concerned "a lot" are presented.

<sup>§§</sup> Based on all PEDS questions presented.

#### References

- Yeargin-Allsopp M, Rice C, Karapurkar T, Doernberg N, Boyle C, Murphy C. Prevalence of autism in a US metropolitan area. JAMA 2003;289:49–55.
- 2. Bertrand J, Mars A, Boyle C, Bove F, Yeargin-Allsopp M, Decoufle P. Prevalence of autism in a United States population: the Brick Township, New Jersey, investigation. Pediatrics 2001;108:1155–61.
- Bourdon KH, Goodman R, Rae DS, Simpson G, Koretz DS. The strengths and difficulties questionnaire: U.S. normative data and psychometric properties. J Am Acad Child Adolesc Psychiatry 2005;44: 557–64.
- Bethell CD, Read D, Stein RE, Blumberg SJ, Wells SN, Newacheck PN. Identifying children with special health care needs: development and evaluation of a short screening instrument. Ambul Pediatr 2002;2:38–48.
- Glascoe FP. Collaborating with parents: using parents' evaluation of developmental status to detect and address developmental and behavioral problems in children. Nashville, TN: Ellsworth & Vandermeer Press, Ltd: 1998.
- Rasmussen SA, Mulinare J, Khoury MJ, Maloney EK. Evaluation of birth defect histories obtained through maternal interviews. Am J Hum Genet 1990;46:478–85.
- Bayliss EA, Ellis JL, Steiner JF. Subjective assessments of comorbidity correlate with quality of life health outcomes: initial validation of a comorbidity assessment instrument. Health Qual Life Outcomes 2005;3:51.
- 8. Martin LM, Leff M, Calonge N, Garrett C, Nelson DE. Validation of self-reported chronic conditions and health services in a managed care population. Am J Prev Med 2000;18:215–18.
- Boyle CA, Decoufle P, Yeargin-Allsopp M. Prevalence and health impact of developmental disabilities in US children. Pediatr 1994;93: 399–403.
- CDC. Prevalence of diagnosis and medication treatment for attentiondeficit/hyperactivity disorder—United States, 2003. MMWR 2005;54: 842-7

## Worker Illness Related to Ground Application of Pesticide — Kern County, California, 2005

In California, suspected pesticide and work-related illnesses and injuries are reportable conditions. The Occupational Health Branch (OHB) of the California Department of Health Services (CDHS) conducts surveillance of work-related pesticide illness with support from the National Institute for Occupational Safety and Health (NIOSH) and the U.S. Environmental Protection Agency (EPA). On May 12, 2005, CDHS received a report from the California Department of Pesticide Regulation (CDPR) of a suspected pesticide incident in Kern County involving 27 farmworkers (age range: 21–61 years; median: 32.5 years) and six emergency responders (age range: 28–51 years; median: 33.5 years). CDHS investigated this incident by conducting a site visit; reviewing medical and meteorologic records; and interviewing affected workers, pesticide applicators, and the farmworker employer.

Findings indicated that workers became ill from drift of a pyrethroid pesticide (cyfluthrin) that was being applied in a neighboring field. Pyrethroid pesticide applicators should always operate in a manner that ensures workers are not exposed.

On May 12 at 7:00 a.m., a commercial pesticide application team was spraying in a citrus orchard to control thrip, a small insect that feeds on oranges. The pesticide solution contained 32 ounces of cyfluthrin (pyrethroid, EPA toxicity category I), 84 ounces of spinosad (EPA toxicity category III), 18.5 gallons of petroleum oil (EPA toxicity category III), and 1,800 gallons of water. The pesticide was sprayed from three enclosed ground rig applicator tractors that traveled up and down rows and turned around on a dirt road that borders the field. In a neighboring grape vineyard southeast of the pesticide application, 27 farmworkers (23 female) were suckering (i.e., pruning unwanted shoots), lifting, and tying grape vines. Although employers are required by CDPR to notify their workers when they are within a quarter mile of cyfluthrin application, notification of farmworkers in the neighboring vineyard was not required because they worked for a different employer.

A supervisor for the pesticide applicators observed the workers in the grape vineyard and suspended application. The applicator supervisor spoke with the farmworker supervisor, but the substance of their conversation is unknown. The farmworkers continued to work, and spraying resumed approximately 20 minutes later. Shortly thereafter, some of the workers noticed a chemical odor, began feeling ill, and stopped working. A 911 telephone call was made, and a hazardous material (HAZMAT) team arrived at 7:55 a.m. Twentythree workers (all female) were decontaminated on site by the HAZMAT team. They were then transported by ambulances to local hospitals. Four other workers (all male), who had been lifting grape vines in a location further from the spraying, were identified later that day and transported by their supervisor to medical care the following day as a precaution. After evaluation in emergency departments, all 27 farmworkers were discharged home.

CDHS conducted in-person interviews in Spanish with the farmworkers and telephone interviews in English with the emergency responders and reviewed medical records from emergency department and clinic visits. Data were abstracted and coded according to a standardized case definition for pesticide-related illness (1). Symptoms most commonly reported by the 27 farmworkers were headache (96%), nausea (89%), eye irritation (70%), muscle weakness (70%), anxiety (67%), and shortness of breath (64%) (Table). Illness severity was classified according to a severity index for acute pesticide-

TABLE. Symptoms/signs reported by 27 farmworkers exposed to pesticide application — Kern County, California, May 2005

Communication (Cine			
Symptom/Sign	No.	(%)	
Respiratory	24	(89)	
Cough	8	(30)	
Upper respiratory pain/irritation	16	(59)	
Shortness of breath	17	(64)	
Pleuritic chest pain	15	(56)	
Wheezing	5	(19)	
Odor	18	(67)	
Gastrointestinal	24	(89)	
Nausea	24	(89)	
Vomiting	7	(26)	
Abdominal pain/Cramping	14	(52)	
Anorexia	16	(59)	
Neurologic	26	(96)	
Headache	26	(96)	
Muscle weakness	19	(70)	
Anxiety	18	(67)	
Confusion	16	(59)	
Dizziness	5	(19)	
Eyes	23	(85)	
Pain or Irritation/Inflammation	19	(70)	
Tearing	14	(52)	
Skin	11	(41)	
Irritation/Pain	6	(22)	
Itching	5	(19)	

related illness (2). Illness severity was moderate in five (19%), low in 20 (74%), and not applicable (i.e., less than two symptoms) in two (7%) farmworkers (2). Because of the known toxicity of the different substances applied, these effects were attributed primarily to cyfluthrin. Illness symptoms were not reported by the applicators, who were wearing appropriate protective equipment. Foliage samples obtained by CDPR from the citrus orchard southeast of the pesticide spraying indicated cyfluthrin levels of 1.14 ppm. Neither foliage samples obtained from the grape vineyard nor clothing samples obtained from the farmworkers had measurable levels of cyfluthrin. CDHS is conducting follow-up with these workers to assess any potential persistent effects associated with acute cyfluthrin exposure.

Six emergency responders (four male) responded to the incident and were evaluated in emergency departments. Health effects were reported by four of six emergency responders and included respiratory (four), skin (three), and eye (two) symptoms. The illness severity rating was low in four of six emergency responders and, in two others, was not applicable (2).

Reported by: R Das, MD, B Materna, PhD, Occupational Health Branch, G Windham, PhD, Environmental Health Investigations Branch, California Dept of Health Services. J Beckman, M Marcellini, MS, Public Health Institute, Oakland, California. K Carrigan, MD, Univ of California, San Francisco. M Ibarra, California Dept of Pesticide Regulation. A Sumner, MD, EIS Officer, CDC.

Editorial Note: The incident described in this report highlights two potential occupational hazards in agriculture: pyrethroid toxicity and pesticide drift. In this incident, drift of the pyrethroid compound cyfluthrin was determined to be the cause of symptoms in all 27 farmworkers and four of six emergency responders. This finding is substantiated by the short distance between the site of pesticide application and the farmworkers; the detection of cyfluthrin on citrus foliage samples southeast of the spray position, suggesting that the pesticide drifted in the direction of the farmworkers; the sudden onset of symptoms coinciding with the application; and symptoms among both farmworkers and response workers that were consistent with those caused by pyrethroid pesticides. Wind direction and speed, measured at a weather station approximately 7 miles from the pesticide application site, is highly variable in the area where the incident occurred and likely contributed to the incident.

Cyfluthrin is a type II pyrethroid that increased in use 1,100% in California from 1990 (4,099 lbs. applied) to 2003 (47,610 lbs. applied) (3). Pyrethroid pesticides are synthetic derivatives of natural pyrethrin insecticides. Both pyrethrins and pyrethroids act on insects by prolonging the inactivation of sodium channels in their nervous systems. Because mammals rapidly detoxify these compounds, humans are less susceptible to systemic effects by this mode of action. However, most human health effects caused by pyrethroids are the result of effects on sodium channels on nerves, in skin, and other organs. At high doses, signs of poisoning attributable to type II pyrethroids include profuse salivation and pulmonary edema, clonic seizures, opisthotonos (i.e., the spine is bent forward such that a supine body rests on its head and heels), coma, and death (4,5). At lower doses, commonly observed effects include paresthesia, erythema, dizziness, headache, fatigue, irritability to sound and touch, and skin, eye, upper respiratory tract, and gastrointestinal irritation (5,6). Symptoms typically improve within 24-48 hours in the absence of continued exposure. The inactive ingredients, which include solvents, also might have accounted for some of the reported symptoms.

Illness caused by pyrethroid pesticides is diagnosed on the basis of exposure history and symptoms; erythema of exposed skin also might be evident. Urine metabolites are an indicator of exposure but are impractical for clinical evaluation because they are not measured by most clinical laboratories and because analysis requires knowledge of the exact parent compound (7). Moreover, urine metabolites do not correlate with exposure dose or symptoms. Treatment consists of decontamination and symptomatic therapy. Topical vitamin E cream can alleviate dermal paresthesia.

During 1998-2003 in California, 12% (297 of 2,470) of occupational pesticide illness reports were attributed to pesticide drift (3). Because weather patterns are unpredictable, pesticide drift can occur even when applications are begun during calm periods. In this incident, pesticide drifted onto workers in a grape vineyard who had not been notified of a pesticide application in a neighboring citrus orchard. Inadequate communication between the applicators and farmworkers might have resulted in continued spraying despite the presence of workers in the grape vineyard. Employers are required to give notification of cyfluthrin application only to their own employees. Neither the applicators nor the citrus grower were required by law to provide notification to the farmworkers, who worked for a different employer. Even when not required, CDHS recommends that workers in adjacent areas should be notified about scheduled pesticide applications. Furthermore, pesticide applications should cease if workers are observed in neighboring areas.

Pyrethroid pesticides are in widespread use for both agricultural and structural applications. Although considered to be a safer alternative to many other pesticides, pyrethroid pesticides such as cyfluthrin can cause pesticide illness even at low doses. Evaluating physicians should be knowledgeable regarding the potential for occupational illness caused by pesticide exposure, signs and symptoms, and methods of treatment. Nontoxic, sustainable methods of pest control should be encouraged for primary prevention of pesticide illness.

#### **References**

- CDC. Case definition for acute pesticide-related illness and injury cases reportable to the National Public Health Surveillance System. Cincinnati, OH: US Department of Health and Human Services, CDC, National Institute for Occupational Safety and Health; 2005. Available at http://www.cdc.gov/niosh/topics/pesticides/pdfs/casedef2003\_rev APR2005.pdf.
- CDC. Severity index for use in state-based surveillance of acute pesticide-related illness and injury. Cincinnati, OH: US Department of Health and Human Services, CDC, National Institute for Occupational Safety and Health; 2001 Available at http://www.cdc.gov/niosh/topics/pesticides/pdfs/pest-sevindexv6.pdf.
- California Department of Pesticide Regulation. Pesticide use reporting. Sacramento, CA: California Department of Pesticide Regulation. Available at http://www.cdpr.ca.gov/docs/pur/purmain.htm.
- 4. Ecobichon DJ. Toxic effects of pesticides. In: Klaassen CD, ed. Casarett and Doull's toxicology: the basic science of poisons. 6th ed. New York, NY: McGraw-Hill Medical Publishing; 2001:784–5.
- Ray DE. Pyrethroid insecticides. In: Krieger R, ed. Handbook of pesticide toxicology. Orlando, FL: Academic Press; 2001:1289–1303.
- Reigart JR, Roberts JR. Recognition and management of pesticide poisonings. 5th ed. Washington, DC: US Environmental Protection Agency; 1999. Available at http://www.epa.gov/pesticides/safety/healthcare/hand-book/handbook.htm.
- 7. Hardt J, Angerer J. Biological monitoring of workers after the application of insecticidal pyrethroids. Int Arch Occup Environ Health 2003;76:492–8.

#### Brief Report

# Respiratory Illness Associated with Boot Sealant Products — Five States, 2005–2006

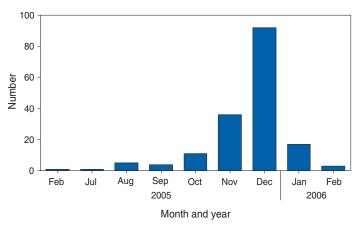
During February 2005-February 2006, six regional poison control centers in five states were consulted regarding 172 human and 19 animal (i.e., pet cat or dog) exposures to shoe or boot leather protection or sealant products resulting in respiratory illness. One product was associated with 126 cases of human illness and another product with seven cases. An ongoing investigation, begun in December 2005, is being conducted by the poison centers. The majority of cases occurred in Michigan, where poison control centers are collaborating with the Michigan Department of Community Health to further document exposures and adverse health effects from the products. Results of the investigation of the 150 cases reported during 2005 underscore the continuing need to assess the magnitude of the problem, evaluate the toxic etiology of the products involved, and determine how to prevent further cases of illness resulting from use of the products.

A case was defined as a report to a poison control center of illness after exposure to an aerosol agent used for waterproofing boots or shoes; reports were made directly by persons exposed, by family members or friends, or by health-care facilities where persons sought treatment. Specific illness symptoms were not required to meet the case definition.

During 2005, the number of cases increased substantially with the onset of winter. One case was reported in February and one in July; five were reported in August, four in September, 11 (7%) in October, 36 (24%) in November, and 92 (61%) in December (Figure). Eighty-four (56%) cases were reported in Michigan, 25 (17%) in Indiana, 19 (13%) in western Pennsylvania, 12 (8%) in central Ohio, and 10 (7%) in Kentucky.

Ages of the 150 patients ranged from one to 70 years (median: 33 years); 33 (22%) were aged <18 years. Among the patients, 50% were the persons in their households who most used the product; however, persons who did not use the product also were affected. The product was sprayed indoors in 131 (87%) of 150 cases; 19 (13%) of the patients were exposed when the product was used outdoors. No evidence was observed that substance abuse was related to the exposures. Investigators determined that sprayed shoes and boots brought into the home from garages or outdoors continued to be a source of exposure to both humans and pets as the product evaporated. Five occupational exposures occurred,

FIGURE. Number\* of exposures to boot sealant products reported to poison control centers, by month of exposure — five states, 2005–2006



\* N = 172.

four while spraying clothing items at work and one while demonstrating a product to a customer. Preexisting respiratory risk factors were identified in 40 (27%) of the 150 patients: asthma (13 [8%]) and smoking (27 [18%]).

A total of 144 patients were symptomatic, including 137 (95%) who reported symptoms of respiratory illness; all were encouraged to seek medical care. Among those who were symptomatic, the most common symptoms were cough [(113 patients [78%])] and dyspnea [(86 [60%])]. Eighty (56%) were known to have been evaluated in hospitals or hospital emergency departments, including 15 (10%) who were admitted and had hospital stays of up to 5 days. Pulse oximetry of patients evaluated in hospitals ranged from 61% to 100% (median: 94.9%). Chest radiographs were positive for infiltrates in 13 of 47 patients for whom this finding was recorded. Eight patients met the case definition for chemical pneumonitis (i.e., bilateral infiltrates suggestive of chemical pneumonitis and pulse oximetry ≤95% on room air). One person lost consciousness and was in respiratory distress, but recovered; no human patient died.

Among 134 persons whose treatment was known, treatment consisted of bronchodilators alone in 28 (21%) patients, bronchodilators plus corticosteroids in 13 (10%) patients, and no intervention other than oxygen in 69 (51%) patients. The duration of illness was determined on the basis of last follow-up and ranged from 0.25–360 hours (median: 17.6 hours) in 116 patients for whom duration could be evaluated.

Among the 19 pets with illness, four were evaluated by veterinarians. Reported symptoms for the animals included dyspnea (13 [68%]), cough (three), and vomiting (three). Chest radiographs were positive for infiltrates in one animal, and

one cat met the case definition for chemical pneumonitis. Treatment included bronchodilators in one animal, corticosteroids in one animal, diuretics with anti-inflammatory agent in one animal, and no treatment other than oxygen and supportive care in 12 (8%) animals. Two cats died from respiratory failure.

Two products were primarily associated with the 150 cases of human illness, both manufactured by Assured Packaging (Mississauga, Ontario, Canada) and distributed by the Manakey Group LLC (Grand Rapids, Michigan). Use of Jobsite Heavy Duty Bootmate was cited by patients in 126 (84%) cases. Rocky Boot Weather and Stain Protector was named in seven (5%) cases. The two Assured Packaging products consist of 45% heptane, 20%–30% petroleum distillates, 25%–30% isobutane propellant, 5%–10% propane propellant, 0.33% fluoropolymer, and 0.33% silicone. Neither the product labels nor the material safety data sheets for the products list fluoropolymer or silicone. Previous outbreaks of acute pulmonary illness associated with exposure to waterproofing agents have implicated fluoropolymer/hydrocarbon-based products (1–4).

The Consumer Product Safety Commission is evaluating these exposures and boot sealant products. Local health departments and emergency departments were alerted to report cases to their regional poison centers. The American Association of Poison Control Centers has instituted 13 new product codes and three new generic codes for waterproofing agents to enable all poison centers to conduct surveillance on exposures more readily.

On January 3, 2006, at the request of the Michigan Department of Community Health, Manakey Group issued a recall of Jobsite Heavy Duty Bootmate and Rocky Boot Weather and Stain Protector from store shelves, but not from consumers' homes. During January–February 2006, 22 additional exposures were reported to the six regional poison centers. Among callers asked, all purchased the product before the recall date. No product defect has been identified. Consumers should be encouraged to use all products for waterproofing shoes and boots as directed, to apply them outdoors, and to leave the sprayed shoes and boots and any contaminated clothing outdoors until all fumes have dissipated.

Reported by: S Smolinske, PharmD, S White, MD, GP Daubert, MD, Children's Hospital of Michigan Regional Poison Control Center, Detroit; R Didrichsons, B Eisenga, MD, DeVos Children's Hospital Regional Poison Center, Grand Rapids, Michigan; J Mowry, PharmD, Indiana Poison Center, Indianapolis; R Mrvos, E Krenzelok, PharmD, Pittsburgh Poison Center, Pennsylvania; M Casavant, MD, D Baker, PharmD, Central Ohio Poison Center, Columbus; HA Spiller, MS, Kentucky Regional Poison Center, Louisville.

#### **Acknowledgments**

This report is based, in part, on technical assistance provided by A Bronstein, MD, Rocky Mountain Poison and Drug Center, Denver, Colorado; T Litovitz, MD, National Capital Poison Center, Washington DC; and M Lai, MD, American Association of Poison Control Centers, Washington DC. Assistance with the investigation was provided by M Stanbury, Div of Environmental and Occupational Epidemiology, Michigan Dept of Community Health, Lansing, Michigan; and G Liss, MD, Occupational Health and Safety Branch, Ontario Ministry of Labour, Toronto, Canada.

#### References

- CDC. Acute respiratory illness linked to use of aerosol leather conditioner—Oregon, December 1992. MMWR 1993;41:965–7.
- CDC. Severe acute respiratory illness linked to use of shoe sprays— Colorado, November 1993. MMWR 1993;42:885–7.
- 3. Laliberté M, Sanfacon G, Blais, R. Acute pulmonary toxicity linked to use of a leather protector. *Ann Emerg Med* 1995;25:841–4.
- Burkhart KK, Britt A, Petrini G, O'Donnell S, Donovan JW. Pulmonary toxicity following exposure to an aerosolized leather protector. J Toxicol Clin Toxicol 1996;34:21–24.

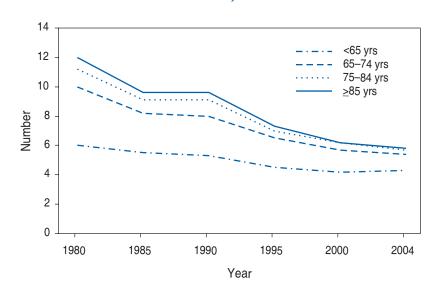
## Errata: Volume 54, No. 12

In the report, "Tobacco Use, Access, and Exposure to Tobacco in Media Among Middle and High School Students — United States, 2004," an error was made in computing analytic weights for data in the 2004 National Youth Tobacco Survey (NYTS); consequently, both estimates and standard errors were affected. The corrected report text and tables are available at http://www.cdc.gov/tobacco/nyts/correctionnotice.htm.

# **QuickStats**

#### FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

# Average Number of Days of Hospital Stay, by Age Group — United States, 1980–2004



During 1980–2004, the average length of a hospital stay declined significantly to 5.4 days for those aged 65–74 years, 5.7 days for those aged 75–84 years, and 5.8 days for those aged  $\geq$ 85 years. The average stay for patients aged <65 years was 4.3 days in 2004.

**SOURCE:** 1980–2004 National Hospital Discharge Survey annual data files. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics. Available at http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 29 2006 (17th Week)\*

	Current	Cum	5-year weekly	Total	Total cases reported for previous years				
Disease	Current week	2006	average <sup>†</sup>	2005	2004	2003	2002	2001	States reporting cases during current week (No.)
Anthrax		1					2	23	
Botulism:									
foodborne	_	_	0	15	16	20	28	39	
infant	1	22	1	85	87	76	69	97	WA (1)
other (wound & unspecified)	4	19	0	24	30	33	21	19	CA (4)
Brucellosis	2	24	2	118	114	104	125	136	CA (2)
Chancroid	_	13	1	16	30	54	67	38	
Cholera	_	_	0	6	5	2	2	3	
Cyclosporiasis§	1	14	12	734	171	75	156	147	MD (1)
Diphtheria	_	_	0	_	_	1	1	2	
Domestic arboviral diseases <sup>§¶</sup> :				70	440	400	404	400	
California serogroup	_	_	0	78	112	108	164	128	
eastern equine	_	_	_	21	6	14	10	9	
Powassan	_	_	_	1	1 12	<u> </u>	1 28	N 79	
St. Louis western equine	_	_	_	10	- 12	41 —	<u> </u>	79	
Ehrlichiosis§:		_	_			_	_		
human granulocytic	2	15	3	746	537	362	511	261	MN (1), MD (1)
human monocytic	_	45	2	457	338	321	216	142	WIT (1), WID (1)
human (other & unspecified)	_	2	0	123	59	44	23	6	
Haemophilus influenzae,**		_	Ü	120	00	• • •		Ŭ	
invasive disease (age <5 yrs):									
serotype b	_	2	1	10	19	32	34	_	
nonserotype b	3	34	4	129	135	117	144	_	MN (1), FL (1), CA (1)
unknown serotype	3	67	4	209	177	227	153	_	OH (1), MD (1), FL (1)
Hansen disease§	1	13	1	83	105	95	96	79	AR (1)
Hantavirus pulmonary syndrome§	1	6	0	22	24	26	19	8	WA (1)
Hemolytic uremic syndrome, postdiarrheal§	1	25	2	207	200	178	216	202	MO (1)
Hepatitis C viral, acute	5	244	34	782	713	1,102	1,835	3,976	MD (1), FL (1), WA (1), OR (1), CA (1)
HIV infection, pediatric (age <13 yrs)§††	_	52	4	380	436	504	420	543	
Influenza-associated pediatric mortality <sup>§,§§,¶¶</sup>	2	22	0	49	_	N	N	N	CA (1)
Listeriosis	5	152	10	862	753	696	665	613	IN (1), GA (1), FL (1), CA (2)
Measles	_	5*	<sup>**</sup> 1	65	37	56	44	116	
Meningococcal disease, <sup>†††</sup> invasive:		77	_	005					NAT (4)
A, C, Y, & W-135	1	77 53	5 2	305 173	_	_	_	_	MT (1)
serogroup B other serogroup	_	9	0	27	_	_	_	_	
Mumps	893	1,882	5	305	 258	231	270	266	MA (4) NV (1) DA (7) OH (1) IA (702)
Wumps	093	1,002	3	303	236	231	270	200	MA (4), NY (1), PA (7), OH (1), IA (723), MO (31), SD (15), NE (15), KS (89), MD (3), FL (2), AZ (1), UT (1)
Plague	_	1	0	7	3	1	2	2	
Poliomyelitis, paralytic	_	_	_	1	_	_	_	_	
Psittacosis§	_	5	0	21	12	12	18	25	
Q fever§	_	33	1	128	70	71	61	26	
Rabies, human	_	_	_	2	7	2	3	1	
Rubella	_	1	0	8	10	7	18	23	
Rubella, congenital syndrome	_	1	_	1	_	1	1	3	
SARS-CoV <sup>§,§§</sup>	_	_	_	_	_	8	N	N	
Smallpox§	_								***
Streptococcal toxic-shock syndrome§	1	47	4	105	132	161	118	77	IN (1)
Streptococcus pneumoniae,§	40	000	47	4 4 5 0	4 400	0.45	540	400	NIV (0) BA (4) OUL (5) MAN (0) 1(0 (4) MB (0)
invasive disease (age <5 yrs)  Syphilis, congenital (age <1 yr)	18 1	392 71	17 8	1,150 340	1,162 353	845 413	513 412	498 441	NY (2), PA (1), OH (5), MN (3), KS (1), MD (3), OK (1), CO (1), AZ (1) IL (1)
Tetanus		5	1	24	34	20	25	37	·- (·/
Toxic-shock syndrome (other than streptococc	al)§ 1	38	2	93	95	133	109	127	NY (1)
Trichinellosis	~·, ·	3	0	20	5	6	14	22	('/
Tularemia§	2	6	1	134	134	129	90	129	NC (1), OR (1)
Typhoid fever	4	71	6	305	322	356	321	368	CA (4)
Vancomycin-intermediate Staphylococcus auro		1	_	2	_	N	N	N	` '
Vancomycin-resistant Staphylococcus aureus§		_	_	_	1	N	N	N	
Yellow fever	_	_	_	_	_	_	1	_	

<sup>—:</sup> No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

Incidence data for reporting years 2004, 2005, and 2006 are provisional, whereas data for 2001, 2002, and 2003 are finalized.

Calculated by summing the incidence counts for the current week, the two weeks preceding the current week, and the two weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf. Not notifiable in all states.

Includes both neuroinvasive and non-neuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious

Diseases (ArboNET Surveillance). Data for H. influenzae (all ages, all serotypes) are available in Table II.

<sup>††</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Data for HIV/AIDS are available in Table IV quarterly.

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

Of the 30 cases reported since October 2, 2005 (week 40), only 28 occurred during the current 2005–06 season.

No measles cases were reported for the current week.

<sup>†††</sup> Data for meningococcal disease (all serogroups and unknown serogroups) are available in Table II.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

			Chlamyd	lia†			Coccio	lioidomy	cosis			Cry	otosporid	iosis	
	Current		vious veeks	Cum	Cum	Current	Previo		Cum	Cum	Current	Previ 52 we		Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	11,690	18,654	34,581	293,165	309,911	301	109	1,577	2,990	1,244	32	71	852	728	622
New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont <sup>§</sup>	440 — 38 306 18 57 21	633 168 41 285 30 65 19	1,533 1,197 74 432 64 99 43	9,114 1,862 675 4,962 109 1,088 418	8,681 1,210 719 4,684 616 1,112 340	N N — — — N	0 0 0 0 0	0 0 0 0 0	N N — — N	N N — — N	2 - 2 - -	5 0 0 2 1 0	34 14 3 15 3 6 5	45 6 10 21 6 —	43 4 4 13 5 1 16
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	1,627 193 425 483 526	2,260 351 502 703 715	3,697 526 1,728 1,615 1,069	35,976 4,205 7,112 12,089 12,570	37,620 5,889 7,016 12,381 12,334	N N N N	0 0 0 0	0 0 0 0	N N N N	N N N N	3 - - 3	10 0 4 2 4	598 8 562 15 21	104 1 29 13 61	88 7 20 26 35
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	1,666 976 — 542 121 27	3,247 954 390 624 805 402	12,510 1,792 553 9,885 1,445 531	53,801 14,204 6,084 16,755 10,518 6,240	51,709 14,310 6,651 8,272 15,810 6,666	1 N 1 N	0 0 0 0 0	3 0 0 3 1 0	12  N 7 5 N	3 N 3 — N	3 1 - 2	13 1 1 2 5 4	162 16 13 7 109 38	144 9 11 26 67 31	135 17 8 19 40 51
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	644 119 156 — 201 83 — 85	1,123 144 151 231 434 98 30 52	1,449 225 269 298 525 176 50	17,745 2,708 2,678 2,842 6,501 1,665 472 879	19,271 2,332 2,415 4,155 7,319 1,682 452 916	N N N N N N N	0 0 0 0 0 0	12 0 0 12 1 1 0	N N   N N N N N N N	3 N 3 N 3 N N N N	6 -2 4  	9 1 1 3 2 0 0	51 11 5 22 37 3 1	112 8 19 48 23 3 1	80 16 8 19 28 1 — 8
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	2,066 64 40 696 1 298 — 388 507 72	3,247 68 62 865 600 358 569 251 425 55	4,833 92 101 1,085 2,070 525 1,743 1,306 840 224	53,185 1,179 673 14,830 5,585 5,826 11,111 5,925 6,851 1,205	58,374 1,090 1,304 13,980 9,699 5,667 11,501 6,625 7,756 752	N	0 0 0 0 0 0	1 0 0 0 0 0 1 0 0	2 N N 2 N N	N N N 	11 — 7 4 — —	15 0 0 6 3 0 1 0	54 2 3 28 12 4 10 4 8 3	203 	126 — 1 46 36 6 15 8 10 4
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	1,013 — 217 324 472	1,376 351 153 380 477	2,188 1,048 336 801 624	22,836 6,154 3,339 5,308 8,035	22,142 3,646 3,957 7,034 7,505	N N — N	0 0 0 0	0 0 0 0	N N —	N N - N	_ _ _ _	3 0 1 0	21 3 20 1 4	22 7 6 1 8	12 4 4 1 3
W.S. Central Arkansas Louisiana Oklahoma Texas <sup>§</sup>	1,594 155 164 235 1,040	2,083 169 271 222 1,353	3,372 340 760 2,160 1,765	34,874 2,628 4,845 3,415 23,986	37,609 2,831 6,059 3,421 25,298	 N N	0 0 0 0	1 0 1 0 0	 N N	 N N	3 - 1 2	4 0 0 0 1	30 2 21 10 19	56 5 5 13 33	20 — 3 7 10
Mountain Arizona Colorado Idaho <sup>§</sup> Montana Nevada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming	447 397 — 31 4 — 5	1,058 313 265 41 42 130 156 82 24	1,718 536 482 235 181 448 337 138 43	13,536 5,562 2,211 450 656 1,346 2,533 318 460	20,405 6,923 4,979 741 776 2,456 2,709 1,456 365	133 133 N N N —	83 81 0 0 0 1 0 0	452 448 0 0 0 4 2 2	2,219 2,194 N N N 16 — 7 2	710 671 N N N 28 7 4	2 2   	2 0 1 0 0 0 0	9 1 3 2 2 1 3 3	20 3 9 2 5 1 —	39 3 11 3 4 5 7 4 2
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	2,193 56 1,540 — 241 356	3,175 78 2,457 107 179 359	5,003 121 4,236 135 315 604	52,098 1,317 39,845 1,751 3,216 5,969	54,100 1,275 41,882 1,765 2,823 6,355	167 167 N N	29 0 29 0 0	1,113 0 1,113 0 0	757 — 757 N N N	528 — 528 N N	2 1 — 1	3 0 2 0 1	94 2 14 1 20 80	22 1 — 21	79 — 63 — 16
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	U U — —	0 0 0 72 4	0 0 0 141 8	U U  1,343 	U 64 1,446 115	U - N	0 0 0 0	0 0 0 0	U U N	U U N	U     N 	0 0 0 0	0 0 0 0	U U N	U U N

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-out incidence data for reporting years 2005 and 2006 are provisional.
Chlamydia refers to genital infections caused by Chlamydia trachomatis.
Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

(17th week)*			Giardiasi	s			G	onorrhe	a		Нае		s influen es, all ser	zae, invas otypes	ive
	_		vious	_			Previ		_		_	Previ			
Reporting area	Current week	Med Med	eeks Max	Cum 2006	Cum 2005	Current week	52 we Med	eks Max	Cum 2006	Cum 2005	Current week	52 we	eks Max	Cum 2006	Cum 2005
United States	147	322	1,258	4,073	4,994	4,031	6,528	13,869	101,356	103,388	33	37	115	664	867
New England Connecticut Maine Massachusetts New Hampshire	5 2 1	28 0 3 12 0	73 37 11 34 7	315 82 22 136 9	481 109 46 187 18	98  1 76 6	107 42 2 47 3	286 239 6 76 7	1,524 474 40 813 18	1,629 427 43 928 45	_ _ _ _	3 0 0 1	10 8 1 5 1	40 8 5 21 1	59 17 3 23
Rhode Island Vermont <sup>†</sup>	2	0 3	25 15	22 44	21 100	14 1	7 1	25 4	160 19	173 13	_	0 0	7 2	2 3	6 10
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	17  9  8	63 7 22 15 16	264 18 237 32 29	716 55 286 158 217	953 143 272 291 247	369 61 122 90 96	644 102 123 185 215	1,015 150 455 402 390	9,795 1,353 1,937 2,960 3,545	10,679 1,822 2,116 3,160 3,581	3 3 —	7 1 2 1 3	28 4 25 4 8	125 12 43 12 58	151 21 45 28 57
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	24 N 2 22	56 13 0 14 16 15	114 32 0 29 34 39	585 24 N 205 248 108	855 218 N 224 193 220	755 401 — 298 48 8	1,374 386 161 266 380 121	7,035 761 229 5,877 681 172	23,363 5,563 2,647 8,214 4,845 2,094	19,908 5,346 2,572 3,068 7,085 1,837	3 — — 3 —	6 1 1 0 2 1	14 5 6 3 6 3	87 14 19 14 30 10	142 38 27 10 53 14
W.N. Central lowa Kansas Minnesota Missouri Nebraska† North Dakota South Dakota	6 -2 - 3 1 -	34 6 4 8 10 2 0 2	247 14 9 238 32 6 3 7	366 68 47 78 127 23 3 20	612 76 51 282 131 38 1 33	172 15 47 — 82 22 — 6	362 31 48 63 181 22 2 6	461 54 124 88 240 56 6 15	5,381 524 762 688 2,877 392 26 112	5,969 495 793 1,128 3,007 400 27 119	4  2 2  	1 0 0 0 0 0 0	12 0 2 9 7 2 2 0	33 6 12 12 3 —	36 1 16 13 4 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland† North Carolina South Carolina† Virginia† West Virginia	22 	55 1 1 19 15 4 0 1	110 3 5 39 70 11 0 9 50 6	798 8 20 285 278 48 N 23 130 6	799 18 13 259 230 52 N 37 181	874 32 37 336 1 128 — 167 159	1,450 20 39 401 273 134 272 109 149 16	2,240 44 67 512 918 242 766 748 288 42	22,178 483 492 6,769 2,461 2,277 4,902 2,548 1,944 302	24,951 258 667 6,093 4,306 2,147 5,602 2,888 2,780 210	15 — 9 4 2 —	9 0 0 3 2 1 0 1 1	24 1 1 8 5 5 11 3 8 4	185 1 1 64 43 22 15 14 16 9	213 — 54 57 33 25 10 21
E.S. Central Alabama <sup>†</sup> Kentucky Mississippi Tennessee <sup>†</sup>	1 N - 1	8 4 0 0 4	19 13 0 0 11	112 57 N — 55	119 55 N — 64	380 — 80 98 202	541 183 53 137 174	868 491 116 225 284	8,832 2,796 1,151 1,973 2,912	8,395 2,281 1,248 2,099 2,767	_ _ _ _	2 0 0 0 2	8 4 3 1 5	47 11 2 2 32	42 7 6 — 29
W.S. Central Arkansas Louisiana Oklahoma Texas <sup>†</sup>	2 — 2 N	5 2 1 3 0	23 6 6 16 0	67 22 18 27 N	69 26 9 34 N	711 86 119 74 432	837 86 164 83 520	1,307 186 461 764 713	14,535 1,452 2,921 1,186 8,976	14,700 1,444 3,230 1,462 8,564	1 - 1 -	1 0 0 1 0	6 1 3 4 1	34 2 6 26	52 — 25 27 —
Mountain Arizona Colorado Idaho† Montana Nevada† New Mexico† Utah Wyoming	31 11 —————————————————————————————————	27 2 9 2 1 2 1 6	57 36 33 11 7 6 6 18 2	285 40 136 30 22 12 13 26 6	371 54 124 47 10 27 17 85	123 116 — — 1 4 — 2	225 76 59 1 2 52 29 12 2	529 176 90 9 13 195 64 22 6	3,071 1,372 579 25 33 522 440 47 53	4,259 1,531 1,018 33 44 920 470 226 17	4 3 1 — — —	4 1 0 0 0 0 0 0	10 9 5 1 0 1 3 2	72 36 23 2 — 10 —	101 45 23 3 — 10 15 4
Pacific Alaska California Hawaii Oregon <sup>†</sup> Washington	39 1 25 1 7 5	53 1 41 1 8 0	474 6 87 6 21 381	829 10 613 17 118 71	735 23 594 22 96	549 6 445 — 25 73	800 10 651 19 28 73	942 23 807 36 58 142	12,677 179 10,365 326 456 1,351	12,898 164 10,765 317 525 1,127	3 1 - 2 -	2 0 0 0 1	20 19 8 2 8 4	41 3 8 6 23 1	71 2 17 4 48
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	U — —	0 0 0 3 0	0 0 0 14 0	U - 3 -	U — 46 —	U - -	0 0 0 6 0	0 0 0 16 4	U — 101 —	U U 1 132 35	U - -	0 0 0 0	0 0 0 1	U — —	U — —

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

			_	Hepa	titis (viral,	acute), by ty	/pe					1.4	gionello	eie	
		Prev	A ious				Previo	B us				Previ		515	
Danastina assa	Current	52 w	eeks	Cum	Cum	Current	52 wee	ks	Cum	Cum	Current	52 we	eks	Cum	Cum
Reporting area United States	week 63	Med 74	<b>Max</b> 280	<b>2006</b> 1,159	<b>2005</b> 1,265	week 57	Med 86	<b>Max</b> 603	<b>2006</b> 1,302	<b>2005</b> 1,677	week 15	Med 40	<b>Max</b> 122	<b>2006</b> 371	<b>2005</b> 343
New England	_	6	22	62	135	_	2	8	41	40	_	2	11	14	17
Connecticut	_	1	3	10	20	_	0	5	_	17	_	0	8	4	3
Maine Massachusetts	_	0 4	2 14	3 28	94	_	0 1	2 7	2 32	4 11	_	0 1	1 5	2 6	1 9
New Hampshire Rhode Island	_	1 0	12 4	14 2	14 5	_	0	2 2	4	4	_	0	1 10	1	3
Vermont <sup>†</sup>	_	0	2	5	2	_	0	1	_	4	_	0	3	1	
Mid. Atlantic	2	10	24	61	218	3	9	54	118	211	5	11	53	102	103
New Jersey New York (Upstate)		2 1	9 16	17 16	39 30	3	2 1	7 42	32 24	51 25	3	1 3	13 30	6 38	14 28
New York City	_	3 1	10 6	13	109 40	_	2	5 9	13	54 81		2	20 17	9 49	13
Pennsylvania E.N. Central	3	6	17	15 84	136	 4	8	9 26	49 92	188	2	5 7	26	49 66	48 78
Illinois	_	1	9	11	44	_	2	7	_	49	_	1	5	7	13
Indiana Michigan	2 1	1 2	10 8	8 39	15 37	_ 1	0 3	17 7	10 45	7 68	_	0 2	6 6	2 19	7 20
Ohio	_	1	4	25	23	3	2	8	35	52	2	3	19	36	32
Wisconsin	_	0	5	1	17	_	0	6	2	12	_	0	3	2	6
W.N. Central lowa	_	2	29 2	40 3	43 8		5 0	14 2	39 1	83 4	_	1 0	12 1	11	10
Kansas Minnesota	_	0	5 29	15 2	7 3	1	0	3 9	4 2	11 6	_	0	1 10	1	1
Missouri	_	0	2	12	22	1	3	8	31	49	_	0	3	7	7
Nebraska† North Dakota	_	0	3 0	3	3	_	0 0	2	1	12	_	0 0	2 1	2	1
South Dakota	_	0	3	5	_	_	0	1	_	1	_	0	6	1	_
S. Atlantic Delaware	2	12 0	34 2	175 4	184 2	20	23 0	61 4	346 12	524 17	5	9	20 4	106 1	72 1
District of Columbia	_	0	2	1	2	_	0	4	4	_	_	Ō	2	4	1
Florida Georgia	2	5 1	18 6	65 14	68 33	7 4	9 3	19 8	142 38	179 86	2	2	8 4	48 3	28 5
Maryland <sup>†</sup>	_	2	7	23	15	_	2	8	42	60	1	2	9	21	19
North Carolina South Carolina <sup>†</sup>	_	0 1	20 3	40 7	25 9	8 —	0 2	23 9	67 17	53 49		0 0	3 2	13 1	2
Virginia† West Virginia	_	1 0	11 1	20 1	28 2	1	1 0	18 14	11 13	67 13	_	1 0	8 3	14 1	5
E.S. Central	2	3	16	40	79	2	6	20	96	135	_	2	6	11	10
Alabama†	_	0	6	2	9	_	1	7	27	26	_	0	2	3	5
Kentucky Mississippi	1	0 0	5 2	18 2	6 12	2	1 1	5 4	28 5	27 28	_	0	4 1	_	1
Tennessee <sup>†</sup>	1	2	8	18	52	_	2	12	36	54	_	1	4	6	3
W.S. Central Arkansas	_	9 0	80 7	100 22	132 5	11	14 1	286 3	329 9	161 21	_	1 0	30 3	9	3
Louisiana	_	1	4	2	28	_	1	6	7	24	_	0	2	4	_
Oklahoma Texas <sup>†</sup>	_	0 7	2 76	4 72	3 96	11	0 12	5 282	1 312	16 100	_	0 0	3 27	1 4	
Mountain	2	5	19	93	111	8	8	39	97	153	2	1	8	15	30
Arizona Colorado	2	3 1	18 4	64 15	54 11	7	5 1	32 5	69 9	97 11	1	0	3 3	10 1	7
Idaho†	_	0	2	3	14	_	0	2	4	5	_	0	2	_	1
Montana Nevada <sup>†</sup>	_	0 0	1 2	1 3	6 6	_	0 1	7 4	9	 11	_	0	1 2	3	2
New Mexico†	_	0	3	5	7	_	0	3	1	9	_	Ō	1	_	2
Utah Wyoming	_	0 0	2 1	1 1	12 1	1 —	0 0	3 1	5 —	19 1	1	0 0	2 1	1	4
Pacific	52	15	149	504	227	7	9	110	144	182	1	1	9	37	20
Alaska California	— 48	0 14	1 148	 470	3 201	<u> </u>	0 6	2 39	1 116	3 139	_ 1	0 1	1 9	— 37	20
Hawaii	_	0	2	5	9	_	0	1	1	1	_	0	1	_	_
Oregon† Washington	1 3	1 0	5 47	13 16	14 —	_ 1	2	6 67	17 9	39	<u>N</u>	0 0	0 0	N —	N
American Samoa	U	0	1	U	_	U	0	0	U	_	U	0	0	U	L
C.N.M.I. Guam	U	0	0	<u>U</u>	<u>U</u>	U 	0	0	<u>U</u>	U —	<u>U</u>	0	0	U	L
Puerto Rico	_	0	4	3	25	_	1	6	4	7	_	0	0	=	_
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	

Max: Maximum.

Cum: Cumulative year-to-date counts. Med: Median.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

(17th week)			Lyme disea	ase				Malaria		
	Current		vious veeks	Cum	Cum	Current		/ious /eeks	Cum	Cum
Reporting area	week	Med	Max	Cum 2006	2005	week	Med	Max	2006	Cum 2005
United States	26	289	1,313	1,470	1,981	8	23	136	268	349
New England	3	54	263	81	205	1	1	12	12	15
Connecticut Maine	1	9 2	154 26	47 11	7 15	_	0 0	10 1	1 2	_
Massachusetts	_	20	197	1	167	1	0	4	6	12
lew Hampshire Rhode Island	2	3 0	13 12	18	12 2	_	0	1 8	2	2 1
ermont <sup>†</sup>	_	1	5	4	2	_	Ö	2	1	
/lid. Atlantic	14	158	928	1,026	1,201	1	5	15	41	93
lew Jersey lew York (Upstate)	12	25 73	310 900	176 526	398 225	_ 1	0 1	7 11	9	22 18
lew York City	_	4	33	_	70	_	3	8	21	42
Pennsylvania	2	45	388	324	508	_	1	2 6	11	11
.N. Central inois	1 —	14 0	155 6	51 —	100 1	<u>2</u>	2	2	35 7	27 9
ndiana Nichigan	_	0 1	4 7	1 9	2 1	1	0 0	3 2	5 6	3 8
)hio	1	1	5	13	16	1	0	3	12	3
/isconsin	_	11	145	28	80	_	0	3	5	4
<b>/.N. Central</b> wa	3	12 0	99 8	37 2	51 10	_	0	31 1	6 1	16 2
ansas	_	0	3	_	2	_	0	1	_	1
innesota issouri	3	7 0	96 2	33 1	38 1	_	0 0	30 2	2 1	5 8
ebraska†	_	0	2	i	_	_	0	2	_	_
orth Dakota outh Dakota	_	0 0	0 1	_	_	_	0	1 1	1 1	_
Atlantic	2	33	124	217	376	2	6	16	91	80
elaware	_	9	37	87	143	_	0	1	2	1
strict of Columbia orida	1 1	0 1	2 5	7 12	1 10		0 1	2 6	 16	2 16
orgia	_	0	1	_	1	_	1	6	24	14
aryland <sup>†</sup> orth Carolina	_	16 0	87 5	99 8	171 15	_	1 0	9 8	21 10	26 9
outh Carolina†	_	0	3	2	7	_	0	2	3	3
ginia <sup>†</sup> est Virginia	_	3 0	22 42	2	28 —	_	0 0	9 2	14 1	8 1
S. Central	_	0	4	_	7	_	1	2	7	7
ıbama†	_	0 0	1 1	_	<u> </u>	_	0 0	1 2	3 1	2 2
entucky ssissippi		0	Ó	_	_	_	0	1	i	_
nnessee†	_	0	4	_	6	_	0	2	2	3
.S. Central kansas	_	1 0	7 2	1	18	_	1 0	30 2	12 —	31 2
uisiana	_	0	1	_	2	_	0	1	_	1
lahoma xas†	_	0 0	0 7	1	— 16	_	0 1	6 29	2 10	2 26
ountain	_	0	4	2	2	_	0	9	7	16
rizona	_	0	4	2	_	_	0	9	2	2
olorado aho <sup>†</sup>	_	0 0	1 1	_	_	_	0	3 0	4	<u>8</u>
ontana evada <sup>†</sup>	_	0	0 2	_	_	_	0	1 2	1	_
evada ew Mexico <sup>†</sup>	_	0	1	_	_	_	0	1	_	<u> </u>
ah yoming	_	0	1 1	_	1 1	_	0	2 1	_	4 1
yoming cific	 3	3	1 20	— 55	21	_ 2	4	26	— 57	64
aska	_	0	1	_	1	_	0	1	4	2
alifornia awaii	3 N	2	18 0	55 N	18 N	2	2	10 4	42	56 4
egon <sup>†</sup>	_	0	3	_	2	_	0	2	4	2
ashington	_	0	13	_	_	_	0	21	7	_
nerican Samoa N.M.I.	U U	0 0	0 0	U U	U U	U U	0 0	0 0	U U	U U
ıam	_	0	0	_	_	_	0	0	_	_
ierto Rico S. Virgin Islands	N —	0 0	0 0	N —	N —	_	0	1 0	_	_
o. Tirgiri isiarius	_	U	U	_	-	_	J	U	_	_

Cum: Cumulative year-to-date counts.

Med: Median.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

Previous   Previous   Previous   S2 week   Med   Max   Mode	
Current   S2 week   Med   Max   Ma	
New Figure   New   New	Cum
New England	2005
Connecticut         —         0         2         4         9         —         0         2         4         2         —         1         4         10           Massachusetts         —         0         3         11         15         —         0         3         11         4         —         23         44         306           New Hampshire         —         0         2         2         3         —         0         0         —         —         0         17         —           Phode Island         —         0         1         —         2         —         0         0         —         —         —         0         17         —           Vermont**         —         0         2         2         1         4         4         2         2         1         1         2         2         4         13         4         4         2         2         1         1         2         2         4         13         2         2         1         1         2         2         4         13         2         2         1         1         2         2	6,072
Maine	437
Massachusetts	23 15
Phode Island	306
Mich. Attantic	5
New York (Upstate)	88
New York Čity	519 70
Pennsylvaniá	176 34
Illinois	239
Indiana	1,473
Ohio         —         1         5         18         18         —         0         4         15         16         18         16         30         232           Wisconsin         —         0         1         —         8         —         0         1         —         8         —         15         41         41           W.N. Central         3         1         4         23         30         3         0         3         13         13         59         62         516         480           Iowa         1         0         2         5         11         1         0         2         4         3         —         11         55         94           Kansas         1         0         1         1         4         2         11         29         140           Minnesota         1         0         1         1         4         1         2         11         4         2         11         29         140           Missouri         —         0         3         8         7         —         0         2         2         3         4         10 </td <td>307 113</td>	307 113
Wisconsin         —         0         1         —         8         —         0         1         —         8         —         15         41         41           W.N. Central         3         1         4         23         30         3         0         3         13         13         59         62         516         480           Iowa         1         0         2         5         11         1         0         2         4         3         —         11         55         94           Kansas         1         0         1         1         4         2         11         55         94           Missouri         —         0         2         3         5         1         0         1         2         1         53         0         485         68           Missouri         —         0         3         8         7         —         0         2         2         3         4         10         43         130           North Dakota         —         0         1         1         —         0         1         1         —         0         28 <td>100 586</td>	100 586
Iowa	367
Kansas 1 0 1 1 4 1 4 1 0 1 1 1 4 2 11 29 140 Minnesota 1 0 2 3 5 1 0 1 2 1 53 0 485 68 Missouri — 0 3 8 7 — 0 2 2 3 3 4 10 43 130 Nebraska† — 0 1 5 2 — 0 1 3 2 — 4 14 39 North Dakota — 0 1 1 1 — — 0 1 1 — 0 0 0 — — 1 8 5 S. Atlantic 2 4 14 80 81 2 2 7 34 34 14 23 92 316 Delaware — 0 1 2 2 2 — 0 1 2 2 2 — 0 1 1 District of Columbia — 0 1 2 2 2 — 0 1 1 District of Columbia — 0 0 0 — — 0 0 0 — 0 0 0 0 0 0 0 0 0	838 269
Missouri         —         0         3         8         7         —         0         2         2         3         4         10         43         130           Nebraska†         —         0         1         5         2         —         0         1         14         39           North Dakota         —         0         1         1         —         —         0         1         1         —         —         4         14         39           S. Atlantic         2         4         14         80         81         2         2         7         34         34         14         23         92         316           Delaware         —         0         1         2         2         —         0         1         2         2         —         0         1         1         23         92         316           Delaware         —         0         1         2         2         —         0         1         2         2         —         0         1         1         1         1         1         1         1         1         1         1         1	100
Nebraska†         —         0         1         5         2         —         0         1         3         2         —         4         14         39           North Dakota         —         0         1         1         —         —         0         1         1         —         —         0         28         4           South Dakota         —         0         1         —         1         —         0         0         —         —         0         28         4           S. Atlantic         2         4         14         80         81         2         2         7         34         34         14         23         92         316           Delaware         —         0         1         2         2         —         0         1         2         2         —         0         1         2         2         —         0         1         1         1         1         1         1         2         2         —         0         1         1         2         2         —         0         1         1         1         4         1         1         1 <td>100 145</td>	100 145
South Dakota         —         0         1         —         1         —         0         0         —         —         1         8         5           S. Atlantic         2         4         14         80         81         2         2         7         34         34         14         23         92         316           Delaware         —         0         1         2         2         —         0         1         1           District of Columbia         —         0         0         —         —         0         0         —         —         0         1         1           Piorida         —         0         0         —         —         0         0         —         —         0         0         —         —         0         0         —         —         0         0         —         —         0         3         3         3         3         —         0         2         —         0         3         3         —         1         4         4         4         4         4         4         4         4         4         4         4         8 </td <td>83 64</td>	83 64
Delaware         —         0         1         2         2         —         0         1         2         2         —         0         1         2         2         —         0         1         2         2         —         0         1         2         2         —         0         1         1         1         4<	77
District of Columbia   -	437
Georgia — 0 2 6 8 — 0 2 6 8 — 1 3 6 Maryland† — 0 2 6 7 — 0 2 3 — 2 4 8 59 North Carolina — 0 11 14 7 — 0 3 3 — 7 0 21 70 South Carolina† — 0 2 7 10 — 0 1 2 7 1 5 22 45 Virginia† — 0 4 10 11 — 0 3 4 4 4 — 3 73 52 West Virginia — 0 1 1 3 — 0 1 — 1 — 0 5 4 E.S. Central — 1 4 14 27 — 1 4 10 18 — 7 25 75 Alabama† — 0 1 3 2 — 0 1 3 1 — 1 9 22 Kentucky — 0 2 4 9 — 0 2 4 9 — 1 10 6 Mississippi — 0 1 1 4 9	13 3
Maryland†         —         0         2         6         7         —         0         2         3         —         2         4         8         59           North Carolina†         —         0         11         14         7         —         0         3         3         —         7         0         21         70           South Carolina†         —         0         2         7         10         —         0         1         2         7         1         5         22         45           Virginia†         —         0         4         10         11         —         0         3         4         4         —         3         73         52           West Virginia         —         0         1         1         3         —         0         1         —         0         5         4           E.S. Central         —         1         4         14         27         —         1         4         10         18         —         7         25         75           Alabama†         —         0         1         3         2         —         0	53 13
South Carolina†         —         0         2         7         10         —         0         1         2         7         1         5         22         45           Virginia†         —         0         4         10         11         —         0         3         4         4         —         3         73         52           West Virginia         —         0         1         1         3         —         0         1         —         0         5         4           E.S. Central         —         1         4         14         27         —         1         4         10         18         —         7         25         75           Alabama†         —         0         1         3         2         —         0         1         3         1         —         1         9         22           Kentucky         —         0         2         4         9         —         0         2         4         9         —         1         1         4         —         1         4         9	83
West Virginia         —         0         1         —         0         1         —         0         5         4           E.S. Central         —         1         4         14         27         —         1         4         10         18         —         7         25         75           Alabama†         —         0         1         3         2         —         0         1         3         1         —         1         9         22           Kentucky         —         0         2         4         9         —         0         2         4         9         —         1         10         6           Mississispipi         —         0         1         1         4         —         0         1         1         4         —	21 165
E.S. Central — 1 4 14 27 — 1 4 10 18 — 7 25 75 Alabama† — 0 1 3 2 — 0 1 3 1 — 1 9 22 Kentucky — 0 2 4 9 — 0 2 4 9 — 1 10 6 Mississippi — 0 1 1 4 — 0 1 4 9	63 23
Kentucky — 0 2 4 9 — 0 2 4 9 — 1 10 6 Mississippi — 0 1 1 4 — 0 1 1 4 — 1 4 9	174
Mississippi $-$ 0 1 1 4 $-$ 0 1 1 4 $-$ 9	32 57
Tennessee <sup>†</sup> $-$ 0 2 6 12 $-$ 0 2 2 4 $-$ 3 17 38	24
	61
W.S. Central       —       2       22       44       52       —       1       9       19       14       1       46       237       229         Arkansas       —       0       3       5       8       —       0       2       4       1       —       4       21       22	333 72
Louisiana — 0 4 22 19 — 0 3 12 4 — 0 3 4 Oklahoma — 0 3 6 6 — 0 3 — 1 — 0 1 3	13
Texas $^{\dagger}$ — 1 16 11 19 — 0 4 3 8 1 39 216 200	248
Mountain         2         1         7         33         37         1         0         4         25         8         25         67         232         702           Arizona         —         0         4         16         17         —         0         4         16         5         11         16         178         193	1,333 155
Colorado 1 0 2 12 10 1 0 1 5 — 9 24 41 401	556
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	102 268
Nevada $^{\dagger}$ — 0 2 — 3 — 0 1 — — 0 6 11	18
Utah — 0 2 1 3 — 0 1 1 — 9 32 —	94 130
Wyoming — 0 2 2 — — 0 2 2 — 3 1 5 26	10
Pacific     3     5     53     130     117     3     4     33     110     91     50     55     1,184     268       Alaska     —     0     1     1     1     1     1     1     1     1     2     15     27	528 14
California     2     2     11     73     63     2     2     11     73     63     2     41     1,101     46       Hawaii     —     0     1     3     7     —     0     1     3     2     —     2     10     22	197 50
Oregon $^{\dagger}$ 1 2 8 34 46 1 1 6 25 25 — 4 33 47	267
Washington — 0 34 19 — — 0 18 8 — 47 0 80 126	_
American Samoa U 0 1 — — U 0 1 U U 0 0 0 C.N.M.I. U 0 0 0 U U 0 0 0 U	U
Guam — 0 0 — — — 0 0 — — — 0 0 — — Puerto Rico — 0 1 2 4 — 0 1 2 4 — 0 2 —	4
U.S. Virgin Islands — 0 0 — — 0 0 — — 0 0 —	_

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

			abies, ani	mal		Roc	ky Mour	ıtain spo	tted fever			Sa	almonello	sis	
	Current	Prev 52 w		Cum	Cum	Current	Previo		Cum	Cum	Current	Prev 52 w		Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	41	96	177	1,353	1,854	4	36	98	310	182	368	855	2,059	7,809	8,212
New England Connecticut	4	13 3	26 13	179 38	276 49	_	0	2	_	1	22 —	39 7	95 88	410 88	504 102
Maine Massachusetts	2	1	4 17	22 96	19 163	N	0	0	N	N	 12	2 19	8 41	15 252	35 267
New Hampshire	_	0	2	5	2 5	_	0	1	_	_	2	2	12	27	30
Rhode Island Vermont <sup>†</sup>	_	0 1	14	1 17	38	_	0	2 0	_	1	6 2	1	17 11	20 8	15 55
Mid. Atlantic New Jersey	10 N	18 0	40 0	223 N	265 N	_	1 0	8	5	12 3	24	91 15	274 41	799 74	1,022 204
New York (Upstate)	10	11	24	130	120	_	0	2	_	_	12	22	234	210	234
New York City Pennsylvania	_	0 7	3 22	93	10 135	_	0 1	2 6	2	9	12	21 31	44 60	199 316	287 297
E.N. Central	2	2	69 4	9	19 7	1	0	6 3	4 1	4 1	56 —	97 28	206 126	1,009 170	1,130 376
Indiana	_	0	3	_	2	1	0	1	1	_	19	11	69	143	93
Michigan Ohio	2	0 0	4 66	7 2	6 4	_	0 0	1 3		1 2	7 30	18 23	35 52	193 329	210 237
Wisconsin	N	0	2	N	N	_	0	1	_	_	_	15	45	174	214
W.N. Central lowa	3	6 1	23 10	70 14	118 22	<u>1</u>	2	17 2	8	9 1	25 —	44 7	90 18	552 86	548 103
Kansas Minnesota	1 1	1 1	5 5	24 7	32 19	_	0 0	2 1	_ 1	_	2 9	7 10	17 30	76 142	59 140
Missouri Nebraska <sup>†</sup>	1	1 0	7 0	6	12	1	2	15 2	7	7	13 1	15 3	40 10	178 40	149 47
North Dakota South Dakota	_	0	4 5	2 17	6 27	_	0	0 2	_	<u> </u>	_	0	5 11	4 26	12 38
S. Atlantic Delaware	9	28 0	57 0	486	641	2	18 0	94 2	277 2	123 1	112	261 2	516 9	2,088 21	2,097 18
District of Columbia	=	0	0	_	_	_	0	1	_	_	_	1	7	19	13
Florida Georgia	_	0 4	19 27	50 43	201 97	<u>1</u>	0 1	3 11	9 16	8 10	79 15	99 37	230 88	951 313	825 307
Maryland <sup>†</sup> North Carolina	 8	6 8	16 20	59 101	89 151	_	2 5	7 87	13 228	10 82	7 10	14 30	39 114	123 373	166 342
South Carolina† Virginia†	_	3 0	11 26	33 175	59 36	_ 1	1	6 10	5 4	7 4	1	21 20	146 66	98 168	186 211
West Virginia	1	ő	13	25	8	<u>.</u>	0	2		1	_	3	13	22	29
E.S. Central Alabama <sup>†</sup>	3	3 1	9 5	71 19	35 19	_	5 0	24 9	10 5	11 2	11	56 14	135 39	406 145	461 120
Kentucky Mississippi	_	0	3	4	3	_	0	1	_	_	7	8 13	26 66	88 49	65 81
Tennessee <sup>†</sup>	3	1	7	48	13	_	3	18	5	9	4	14	41	124	195
W.S. Central Arkansas	2 1	13 0	30 3	232 9	375 11	_	2	34 32	5 4	5	21 5	85 16	884 67	842 238	657 84
Louisiana Oklahoma	_	0	0 7	13	36	_	0	2 23	_	2		14	42 26	81 66	172 72
Texas <sup>†</sup>	1	12	27	210	328	_	0	8	1	_	11	45	844	457	329
<b>Mountain</b> Arizona	4	4 2	16 11	36 33	78 67	_	0	6 6	1	16 12	29 7	48 14	110 67	512 172	553 167
Colorado		0	3	_	1	_	0	ī	_	_	12	11	45	164	138
Idaho† Montana	_	0 0	12 3	3	_	_	0 0	2 0	_	1	2 2	2 2	15 16	32 33	49 25
Nevada† New Mexico†	_	0 0	2 1	_	_ 1	_	0	0 1	_	_	_	3 4	8 13	23 40	52 58
Utah Wyoming	_	0	5 2	_	9	_	0	0 1	_	<u> </u>	6	5 1	30 12	27 21	54 10
Pacific	4	4	15	47	47	_	0	2	_	1	68	89	294	1,191	1,240
Alaska California	2 2	0 3	4 15	9 38	1 46	_	0	0 1	_	_ 1	— 59	1 70	7 285	29 885	16 1,031
Hawaii Oregon†		0	0	=		_	0	0	_	_	3	5	15 25	71 101	90
Washington	U	0	0	U	U	N	0	0	N	Ν	6	0	23	105	_
American Samoa C.N.M.I.	U	0	0 0	U	U	U U	0	0	U U	U U	U U	0	2	U U	1 U
Guam Puerto Rico		0 2	0 4	33			0	0			3	0 6	0 23		1 111
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

	Shig		Sh	igellosis	;	Streptococcal disease, invasive, group A									
	Previous Current 52 weeks			Cum Cum		Previous Current 52 weeks			Cum Cum		Previous Current 52 weeks			Cum	Cum
Reporting area	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	19	44	212	293	421	94	296	613	2,530	3,382	74	80	269	1,875	1,764
New England	_	3 0	14 11	27 11	42 14	2	5 0	17 10	74 10	64 15	_ U	4 0	9 0	66 U	73 U
Connecticut Maine	_	0	5	_	7	_	0	3	_	3	_	0	2	6	2
Massachusetts New Hampshire	_	2	7 2	14 2	15 3	2	4 0	11 4	56 4	34 4	_	2	7 3	41 13	46 5
Rhode Island	_	0	2	_	1	_	0	6	3	2	_	0	3	3	6
Vermont <sup>§</sup>	_	0 5	4 101	2 4	2 45	_	0	4 70	1 187	6	16	0 14	4	3 315	14 408
<b>Mid. Atlantic</b> New Jersey	_	1	6	_	13		18 5	18	50	369 95	16 —	2	44 8	10	88
New York (Upstate) New York City	2	2 0	98 2	19 4	17 —	2	4 6	58 14	71 38	90 162	10	4 3	33 8	135 35	132 76
Pennsylvania	_	2	8	_	15	_	2	48	28	22	6	6	13	135	112
E.N. Central	2	9	33	73	74	10	18	79	244	285	7	14	37	353	387
Illinois Indiana	_	1 1	8 7	9	24 9	4	6 1	26 56	56 42	70 32		3 2	9 11	56 50	105 43
Michigan Ohio	1	0 2	4 14	19 24	 25	2 4	3	10 11	64 53	101 20	2	4 4	11 19	103 118	102 88
Wisconsin		3	15	21	16	_	3	10	29	62	_	1	4	26	49
W.N. Central	3	8	35	51	63	6	39	65	234	215	_	5	57	149	113
Iowa Kansas	_	1 0	10 4	10	11 10	4	1 4	7 20	10 27	39 11	<u>N</u>	0 0	0 5	N 32	N 17
Minnesota Missouri	3 1	3 2	19 7	38 19	10 16	1 1	2 22	6 45	22 128	18 117	_	0 1	52 5	67 28	41 33
Nebraska <sup>§</sup>	_	1	4	5	13	_	2	10	24	20	_	0	4	13	9
North Dakota South Dakota	_	0 0	2 5	3	1 2	_	0 2	2 17	4 19	2 8	_	0 0	3 3	5 4	3 10
S. Atlantic	5	7	39	49	90	38	51	122	716	505	23	19	41	436	324
Delaware District of Columbia	_	0	2 1	1	_	_	0	2	3	5 4	_	0	2	3 4	3
Florida	3	1	29	20	50	23	22	66	300	225	6	5	12	101	88
Georgia Maryland <sup>§</sup>	1	0 1	6 5		8 7	13 1	13 2	34 8	258 34	135 19	10 2	4 3	9 12	103 84	68 65
North Carolina South Carolina <sup>§</sup>	_	1 0	11 2	21 3	12 1	_ 1	2	22 9	65 41	54 36	2	1 0	21 6	61 27	45 19
Virginia <sup>§</sup>	_	1	9	_	12	_	2	9	15	27	2	2	11	45	27
West Virginia	_	0	2	_	_	_	0	1		405	_	0	4	8	9
E.S. Central Alabama§	_	2	12 3	14	22 6	7 —	17 3	50 20	182 38	435 89	6 N	3 0	10 0	87 N	76 N
Kentucky Mississippi	_	1 0	9 2	10	4	4	6 1	31 7	95 22	34 36	_	0	5 0	21	21
Tennessee§	_	1	4	21	12	3	3	46	27	276	6	3	9	66	55
W.S. Central	1	2	43	3	16	7	66	250	253	789	3	7	50	176	98
Arkansas Louisiana	_	0 0	2 2	1 —	3 7	5 —	1 2	9 11	31 36	15 42	1	0 0	5 2	14 5	7 5
Oklahoma Texas <sup>§</sup>	1	0 1	3 43	2 18	1 5	2	7 52	41 243	34 152	209 523	2	2 5	9 43	60 97	55 31
Mountain	1	5	16	30	57	7	16	47	183	187	19	10	76	263	248
Arizona	1	0	4	13	7 12	2	9	29 18	102 37	84 31	9	4	56 10	153 76	100 93
Colorado Idaho§	_	i	8	11 8	10	4	0	4	5	3	_	0	2	4	1
Montana Nevada <sup>§</sup>	_	0	2	_	2 9	_	0 1	1 6	1 12	2 25	_	0	0 6	_	_
New Mexico§	_	0	3	2	3	_	2	9	24	29	_	1	6	24	28
Utah Wyoming	_	0 0	7 3	1	13 1	<u>1</u>	0 0	4 1	1 1	13	3	1 0	4 1	4 2	25 1
Pacific	7	2	47	42	12	15	37	105	457	533	_	2	8	30	37
Alaska California	7	0	2 5	30	3 1	 12	0 32	2 103	6 332	8 492	_	0	0	_	_
Hawaii	_	0	4	4	3	_	0	4	11	9		2	8	30	37
Oregon <sup>§</sup> Washington	=	1 0	47 2	14 8	5	3	1 0	31 12	59 49	24 —	N N	0	0	N N	N N
American Samoa	U	0	0	U	U	U	0	2	U	2	U	0	0	U	U
C.N.M.I. Guam	<u>U</u>	0	0	U —	<u>U</u>	U —	0	0	U —	U 1	U —	0	0	U —	U —
Puerto Rico	_	0	1	_	1	_	0	1	1	_	N	0	0	Ν	N
U.S. Virgin Islands		0	0				0	0				0	0		

Med: Median. Max: Maximum.

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

\* Incidence data for reporting years 2005 and 2006 are provisional.
Includes *E. coli* O157:H7; Shiga toxin positive, serogroup non-0157; and Shiga toxin positive, not serogrouped.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

	Strepto		neumonia esistant,	e, invasive	disease	Svnl	seconda	rv	Varicella (chickenpox)						
		Prev	ious			Previous			<u> </u>		Previous			. ,	
Reporting area	Current week	Med 52 w	eeks Max	Cum 2006	Cum 2005	Current week	52 wee	ks Max	Cum 2006	Cum 2005	Current week	Med	eeks Max	Cum 2006	Cum 2005
United States	55	47	325	1,059	1,104	80	169	328	2,411	2,497	777	660	3,091	16,994	9,267
New England Connecticut	_ U	1 0	17 0	10 U	62 U	_	4 0	17 11	58 15	59 3	17 U	33 0	112 0	481 U	1,102 U
Maine	N	0	0	N	N		0	2	3	1	_	6	20	85	125
Massachusetts New Hampshire	_	1 0	6 0	_	50 —	_	2 0	5 2	35 —	48 3		9 5	85 38	2 138	952 —
Rhode Island Vermont <sup>†</sup>	_	0	11 4	1 9	6 6	_	0	6 1	3 2	4	 15	0 6	0 25	 256	 25
Mid. Atlantic	7	2	15	58	116	16	20	34	335	331	111	111	183	2,071	1,912
New Jersey New York (Upstate)	N 1	0 1	0 10	N 15	N 44	6 6	2 2	7 15	59 52	41 23	_	0	0	_	_
New York City Pennsylvania	Ú 6	0 2	0	U 43	U 72	2	11 4	21 9	155 69	219 48	111	0 111	0 183	 2,071	 1,912
E.N. Central	17	11	39	272	262	10	19	42	270	181	319	155	556	6,965	2,503
Illinois Indiana	_ 2	0 3	2 21	8 59	2 77	6	10 1	32 5	116 24	57 19	N	1	5 347	4 N	33 N
Michigan	_	1	4	9	18	1	2	19	44	29	82	91	231	1,987	1,533
Ohio Wisconsin	15 N	6 0	32 0	196 N	165 N	3	4 1	11 3	72 14	67 9	237	42 11	423 41	4,616 358	715 222
W.N. Central lowa	1 N	1 0	191 0	19 N	23 N	_	4 0	9 1	56 3	80 4	44 N	17 0	84 0	748 N	73 N
Kansas	N	0	0	N	N	_	0	2	9	7	_	0	0	_	_
Minnesota Missouri	1	0 1	191 3	 19	20	_	1 3	4 8	7 36	21 46	42	0 14	0 82	703	6
Nebraska† North Dakota	_	0	1 1	_	1	_	0 0	1 1	1	2	_	0	1 25	 18	 10
South Dakota	_	0	1	_	2	_	0	1	_	_	2	1	12	27	57
S. Atlantic Delaware	29 —	22 0	51 2	561 —	457 1	24 1	43 0	182 2	594 9	578 5	49 —	55 1	843 5	1,726 30	814 11
District of Columbia Florida	 14	0 13	3 36	19 314	13 238	1 10	2 14	9 29	35 233	34 237	_	0	6 0	14	12
Georgia	15	7	19	188	166	_	8	143	47	78	_	0	0	_	_
Maryland† North Carolina	N	0	0	N	N	4	5 5	19 17	100 101	89 78	_	0	0		_
South Carolina† Virginia†	N	0 0	0 0	N	N	2 5	1 3	7 12	22 47	24 31	20 —	14 16	48 797	447 539	200 94
West Virginia	_	2	10	40	39	_	0	1	_	2	29	24	70	696	497
E.S. Central Alabama†	N	3 0	14 0	84 N	77 N	11	10 3	21 12	183 84	142 58	_	0 0	0	_	_
Kentucky Mississippi	_	0	5 0	13	13	7	1	8 5	27 12	9 19	N	0	0	N —	N
Tennessee <sup>†</sup>	_	3	13	71	64	4	4	11	60	56	N	0	0	N	N
W.S. Central Arkansas	_	1 0	7 3	36 6	77 6	16 1	24 1	37 6	426 28	400 16	188 16	175 2	1,717 110	4,079 302	1,537
Louisiana Oklahoma	N	1 0	5 0	30 N	71 N	_	3 1	17 6	39 23	71 12	_	0	17 0	80	99
Texas <sup>†</sup>	N	0	0	N	N	15	16	30	336	301	172	163	1,607	3,697	1,438
<b>Mountain</b> Arizona	1 N	1 0	27 0	19 N	30 N	1 1	7 3	17 13	104 59	139 42	49 —	45 0	102 0	924	1,326
Colorado Idaho†	N N	0	0	N N	N N	_	1 0	3	10 1	18 12	39	35 0	74 0	685	910
Montana	_	0	1	_	_	_	0	1	_	5	_	0	0	_	_
Nevada <sup>†</sup> New Mexico <sup>†</sup>	_	0	27 0	1 —	2	_	2 1	6 4	22 12	39 18	1	0 3	2 32	1 198	110
Utah Wyoming	1	0 0	6 3	18	12 16	_	0 0	1 0	_	5 —	9	3 0	38 3	31 9	265 41
Pacific	_	0	0	_	_	2	32	45	385	587	_	0	0	_	_
Alaska California	N	0 0	0 0	N	N	2	0 29	4 41	5 298	3 522	_	0 0	0 0	_	_
Hawaii Oregon <sup>†</sup>	N	0 0	0	N	N	_	0	2 6	7 5	1 10	N N	0	0	N N	N N
Washington	N	0	Ō	N	N	_	2	11	70	51	N	0	0	N	N
American Samoa C.N.M.I.	_	0 0	0 0	_	_	U U	0 0	0 0	U U	U U	U U	0 0	0	U U	U
Guam Puerto Rico	_ N	0	0	N	 N	_	0	0 16	43	<u> </u>	4	0	0 47	<del>-</del> 87	26 278
U.S. Virgin Islands		0	0	_	_	_	0	0	_	<del>-</del>	_	0	0	_	_

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to\* Incidence data for reporting years 2005 and 2006 are provisional.

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

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 29, 2006, and April 30, 2005 (17th Week)\*

(17th Week)*	West Nile virus disease <sup>†</sup>													
			Neuroinvas	ive			Non-neuroinvasive							
	•		vious	•				revious						
Reporting area	Current week	Med Med	reeks Max	Cum 2006	Cum 2005	Curre wee		2 weeks Max	Cum 2006	Cum 2005				
United States	_	1	154	1	1	_	2	203	_	4				
New England	_	0	3	_	_	_		2	_	_				
Connecticut Maine	_	0 0	2 0	_	_		-	1 0	_	_				
Massachusetts	_	0	3	_	_	_	_	1	_	_				
New Hampshire	_	0	0	_	_	_	•	0	_	_				
Rhode Island Vermont <sup>§</sup>	_	0 0	1 0	_	_			0 0	_	_				
Mid. Atlantic	_	0	10	_	_			4	_	_				
New Jersey	_	0	1	_	_	_	. 0	2	_	_				
New York (Upstate)	_	0	7	_	_	_		2	_	_				
New York City Pennsylvania	_	0 0	2	_	_		-	2 2	_	_				
E.N. Central	_	0	39	_	_	_	_	18	_	_				
Illinois	_	0	25	_	_	_	0	16	_	_				
Indiana Michigan	_	0 0	2 14	_		_		1 3	_	_				
Ohio	_	0	9	_	_	_		4	_	_				
Wisconsin	_	Ō	3	_	_	_		2	_	_				
W.N. Central	_	0	26	_	_	_		80	_	_				
Iowa Kansas	_	0 0	3 3	_	_	N	-	5 3	 N	 N				
Minnesota	_	0	5	_	_		_	5	_	_				
Missouri	_	0	4	_	_	_		3	_	_				
Nebraska <sup>§</sup> North Dakota	_	0 0	9 4	_	_			24 15	_	_				
South Dakota	_	Ő	7	_	_	_		33	_	_				
S. Atlantic	_	0	6	_	_	_	•	4	_	_				
Delaware District of Columbia	_	0 0	1 1	_	_	_	-	0 1	_	_				
Florida	_	0	2	_	_			4	_	_				
Georgia	_	0	3	_	_	_	0	3	_	_				
Maryland <sup>§</sup> North Carolina	_	0 0	2 1	_	_			1 1	_	_				
South Carolina <sup>§</sup>	_	0	i	_	_	_		Ö	_	_				
Virginia§	_	0	0	_	_		•	1	<u> </u>	<u> </u>				
West Virginia	_	0	0	_	_	N		0	N	N				
E.S. Central Alabama§	_	0	10 1	1	_	_	· ·	5 2	_	_				
Kentucky	_	0	1	_	_	_	0	0	_	_				
Mississippi	_	0	9 3	1	_	_		5 1	_	_				
Tennessee§	_	0		_	_	_			_	_				
W.S. Central Arkansas	_	0 0	32 3	_	_	_	· ·	22 2	_	2				
Louisiana	_	0	20	_	_	_	0	9	_	2				
Oklahoma Texas <sup>§</sup>	_	0 0	6 16	_	_	_	-	3 13	_	_				
Mountain	_	0	16		_ 1	_	_	39	_	_				
Arizona	_	0	8	_	1	_	0	8	_	_				
Colorado	_	0	5	_	_	_	. 0	13	_	_				
Idaho§ Montana	_	0 0	2	_	_		-	3 9	_	_				
Nevada <sup>§</sup>		0	3	_	_		0	8	_	_				
New Mexico§ Utah	_	0	3 6	_	_	_	Ξ.	4 8	_	_				
Wyoming	_	0	2	_	_	_		1	_	_				
Pacific	_	0	50	_	_	_	0	90	_	2				
Alaska	_	0	0	_	_	_	0	0	_	_				
California Hawaii		0 0	50 0	_			0	89 0	_	2				
Oregon§	_	0	1	_	_		0	2	_	_				
Washington	_	0	0	_	_	_	0	0	_	_				
American Samoa	U	0	0	U	U	U		0	U	U				
C.N.M.I. Guam	<u>U</u>	0 0	0 0	<u>U</u>	U —	U	_	0	U —	U —				
Puerto Rico	_	0	0	_	_	_	0	0	_	_				
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_				

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: No

Max: Maximum.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximu Incidence data for reporting years 2005 and 2006 are provisional. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance). Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths	eaths in 122 U.S. cities,* week ending April 29, 2006 (17th Week)  All causes, by age (years)  All causes, by age (years)														
	A11	All C	auses, b	y age (ye	ars)		P&I†		1	iuses, by	age (ye	ars)		-	P&I <sup>†</sup>
Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	Total
New England	539	381	116	28	8	6	51	S. Atlantic	1,417	847	371	113	49	37	76
Boston, MA Bridgeport, CT	138 44	88 35	35 9	11	2	2	11 9	Atlanta, GA Baltimore, MD	319 143	168 82	105 39	30 12	11 5	5 5	18 16
Cambridge, MA	19	17	2	_	_	_	3	Charlotte, NC	122	82	25	9	3	3	6
Fall River, MA	28	24	3	1	_	_	2	Jacksonville, FL	135	87	37	7	2	2	5
Hartford, CT	58	30	20	3	3	2	6	Miami, FL	138	83	33	13	8	1	4
Lowell, MA Lynn, MA	25 5	16 3	6 1	3 1	_	_	1 2	Norfolk, VA Richmond, VA	45 57	29 30	11 18	1 5	1 4	3	1 1
New Bedford, MA	31	28	2	i	_	_	2	Savannah, GA	60	36	19	2	1	2	6
New Haven, CT	U	U	U	U	U	U	U	St. Petersburg, FL	74	47	13	3	6	5	7
Providence, RI	58	43	12	1	1	1	3	Tampa, FL	191	131	29	19	4	8	11
Somerville, MA Springfield, MA	1 49	1 29	— 15		_	_ 1	<u> </u>	Washington, D.C. Wilmington, DE	120 13	65 7	39 3	10 2	3 1	3	1
Waterbury, CT	29	23	5	1	_		1	l "							
Worcester, MA	54	44	6	4	_	_	5	E.S. Central Birmingham, AL	836 208	552 139	189 46	54 13	17 2	24 8	64 23
Mid. Atlantic	2,310	1,621	490	125	42	32	117	Chattanooga, TN	78	53	15	8	1	1	2
Albany, NY	54	45	7	1	1	_	9	Knoxville, TN	91	58	26	4	2	1	5
Allentown, PA	28	24	2	2	_	_ 1	2	Lexington, KY	80	62	11	5	_	2	5
Buffalo, NY Camden, NJ	84 22	64 10	16 7	3 4	_	1	3 2	Memphis, TN Mobile, AL	131 68	84 45	29 18	9	8	1 2	13 3
Elizabeth, NJ	13	8	4	1	_		2	Montgomery, AL	30	22	8	_	_	_	3
Erie, PA	40	30	7	2	1	_	5	Nashville, TN	150	89	36	12	4	9	10
Jersey City, NJ	36	19	11	5	_	1	_	W.S. Central	1,433	922	333	93	46	39	89
New York City, NY Newark, NJ	1,085 53	777 26	222 21	52 3	20 2	14 1	47 4	Austin, TX	103	64	24	7	4	4	9
Paterson, NJ	20	13	6	1	_		1	Baton Rouge, LA	68	41	18	7	2	_	
Philadelphia, PA	368	217	97	28	13	13	3	Corpus Christi, TX Dallas, TX	U 201	U 113	U 47	U 18	U 12	U 11	U 9
Pittsburgh, PA§	35	28	6	_	_	1	3	El Paso, TX	79	53	17	3	4	2	6
Reading, PA Rochester, NY	29 130	23 106	3 21	2	1	_	3 11	Fort Worth, TX	120	75	36	7	_	2	7
Schenectady, NY	29	23	5	1	_	_	5	Houston, TX	329	195	85	26	12	11	17
Scranton, PA	33	29	3	1	_	_	1	Little Rock, AR New Orleans, LA <sup>1</sup>	78 U	52 U	11 U	9 U	3 U	3 U	3 U
Syracuse, NY Trenton, NJ	179 33	124 24	38 8	13 1	4	_	11	San Antonio, TX	279	203	59	8	5	4	25
Utica, NY	20	17	1	2	_	_	 5	Shreveport, LA	64	42	17	3	_	2	5
Yonkers, NY	19	14	5	_	_	_	_	Tulsa, OK	112	84	19	5	4	_	8
E.N. Central	2,084	1,378	483	125	52	46	149	Mountain Albuquerque, NM	1,198 191	800 135	249 37	86 17	36 2	27	101 20
Akron, OH Canton, OH	62 35	40 25	18 8	_ 1	3 1	1	2 7	Boise, ID	50	30	14	2	1	3	2
Chicago, IL	363	202	103	38	13	7	26	Colorado Springs, CO		52	16	11	2	5	4
Cincinnati, OH	55	36	8	2	3	6	4	Denver, CO Las Vegas, NV	84 276	53 195	15 58	5 14	7 6	4	7 19
Cleveland, OH	246	171	55	11	4	5	7	Ogden, UT	24	18	6	_	_	_	4
Columbus, OH Dayton, OH	202 128	134 90	53 29	10 4	2 3	3 2	18 9	Phoenix, AZ	163	92	42	13	11	5	16
Detroit, MI	163	89	54	9	8	3	12	Pueblo, CO	33	31	2	_	_	_	4
Evansville, IN	48	38	6	4	_	_	4	Salt Like City, UT Tucson, AZ	129 162	83 111	29 30	11 13	4 3	2 5	9 16
Fort Wayne, IN	65 12	38 5	14 1	8 4	2	3	4 1					74			
Gary, IN Grand Rapids, MI	57	40	9	4	1	3	4	Pacific Berkeley, CA	1,645 12	1,159 10	344 2		41	27	156 1
Indianapolis, IN	202	136	44	12	5	5	12	Fresno, CA	77	49	18	5	4	1	6
Lansing, MI	49	35	13	1	_	_	2	Glendale, CA	16	16	_	_	_	_	_
Milwaukee, WI Peoria, IL	110 41	81 28	19 8	6 1	_	4 2	11 4	Honolulu, HI Long Beach, CA	65 70	48 48	11 20	2 1	1	3 1	13
Rockford, IL	43	32	8	2	1	_	3	Los Angeles, CA	247	176	57	8	 5	1	34
South Bend, IN	59	42	12	4	_	1	6	Pasadena, CA	45	35	9	_	1	_	8
Toledo, OH	85 50	63	15	4	2	1	8	Portland, OR	120	87	23	3	4	3	6
Youngstown, OH	59	53	6				5	Sacramento, CA San Diego, CA	230 184	160 132	51 28	13 8	4 7	2 9	21 22
W.N. Central	585	385	134	35	12	18	46	San Francisco, CA	99	57	32	10	_	_	12
Des Moines, IA Duluth, MN	65 27	46 19	15 5	1 2	2	1 1	3 5	San Jose, CA	186	139	31	9	3	4	20
Kansas City, KS	34	21	9	1	1	1	3	Santa Cruz, CA	24	19	4	1	 6	_	1
Kansas City, MO	80	53	17	5	2	3	8	Seattle, WA Spokane, WA	117 46	74 37	26 8	8 1	_	3	7 2
Lincoln, NE	30 54	27 27	2	 5	1	3	4 2	Tacoma, WA	107	72	24	5	6	_	3
Minneapolis, MN Omaha, NE	54 72	37 48	7 17	3	2 1	3	7	Total	12,047**	8.045	2,709	733	303	256	849
St. Louis, MO	105	51	35	13	1	5	9		,5 .,	5,510	_,, 00	, 00	200	_00	0.10
St. Paul, MN	55	38	13	2	1	1	3								
Wichita, KS	63	45	14	3	1		2								

<sup>—:</sup>No reported cases.

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.

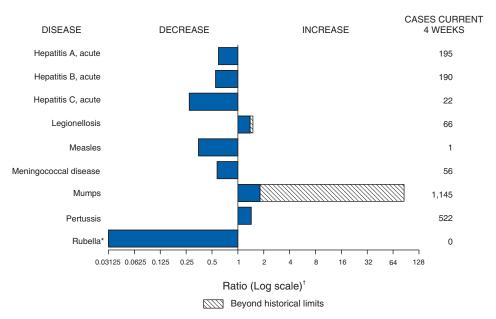
† Pneumonia and influenza.

§ 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.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 29, 2006, with historical data



<sup>\*</sup> No rubella cases were reported for the current 4-week period yielding a ratio for week 17 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.

The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read SUBscribe mmwr-toc. Electronic copy also is available from CDC's World-Wide Web server at http://www.cdc.gov/mmwr or from CDC's file transfer protocol server at ftp://ftp.cdc.gov/pub/publications/mmwr. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

All MMWR references are available on the Internet at http://www.cdc.gov/mmwr. Use the search function to find specific articles.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to MMWR readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in MMWR were current as of the date of publication.

☆U.S. Government Printing Office: 2006-523-056/40043 Region IV ISSN: 0149-2195