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National Arthritis Month — May 2004

May is National Arthritis Month. This year's theme is "The 11-Step Challenge," and the Arthritis Foundation is urging persons to limit the impact of arthritis on their lives by following 11 steps, among them shedding excess weight, becoming active, and maintaining a healthy diet.

In 2001, an estimated 49 million U.S. adults had doctor-diagnosed arthritis, and an additional 21 million adults had possible arthritis (*1*). Arthritis and other rheumatic conditions are the leading causes of disability in the United States (*2*). CDC, the Arthritis Foundation, and other organizations continue to implement the *National Arthritis Action Plan: A Public Health Strategy* (*3*) to promote progress toward reaching the arthritis-related national health objectives for 2010 (objectives 2.1–2.8) (*4*).

Additional information about arthritis, National Arthritis Month, the 11-Step Challenge, the National Arthritis Action Plan, and local arthritis programs and services is available at http://www.arthritis.org or by telephone, 800-283-7800.

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Prevalence of Doctor-Diagnosed Arthritis and Possible Arthritis — 30 States, 2002

Arthritis is the leading cause of disability in the United States (*1*), and its prevalence is expected to increase as the U.S. population ages (*2*). State-specific estimates of the prevalence of this condition are key to planning health services and programs to prevent arthritis-related disability and to track progress toward meeting national health objectives for 2010 (objectives 2.1–2.8) (*3*). In 2002, new questions about arthritis were released as an optional module of the Behavioral Risk Factor Surveillance System (BRFSS), and 30 states elected to use the module. This report summarizes results from the 2002 BRFSS on prevalence of doctor-diagnosed arthritis and possible arthritis. The findings indicate that the estimated prevalence of doctor-diagnosed arthritis among adults in the 30 states ranged from 17.8% to 35.8%, and the prevalence of possible arthritis ranged from 10.3% to 21.3%. Increased intervention efforts, including early diagnosis and appropriate clinical and self-management (e.g., physical activity, education, and maintaining appropriate weight), are needed to reduce the impact of arthritis.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, civilian U.S. population aged ≥18 years. The survey is administered in all 50 states, the District of Columbia, and Puerto Rico. In 2002, respondents in 30 states were asked, "Have you ever been told by a doctor or other health professional that you have some form of

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arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?" Those who answered "yes" were classified as having doctor-diagnosed arthritis. Respondents also were asked, "The next questions refer to your joints. Please do not include the back or neck. During the past 30 days, have you had any symptoms of pain, aching, or stiffness in or around a joint?" and "Did your joint symptoms first begin more than 3 months ago?" Those who answered "yes" to both were classified as having chronic joint symptoms (CJS). Those with CJS but without doctor-diagnosed arthritis were classified as having possible arthritis.

The median response rate for the 30 selected states in 2002 was 58.3% (range: 42.2% [New Jersey]–82.6% [Minnesota]) (*4*). Data were weighted by age and sex to reflect each state's most recent estimate of the adult population. SUDAAN was used to calculate point estimates and 95% confidence intervals (CIs).

During 2002, the prevalence of doctor-diagnosed arthritis ranged from 17.8% in Hawaii to 35.8% in Alabama (median: 27.6%). Among all 30 states, the prevalence of doctor-diagnosed arthritis was higher among women and increased with age (Table 1). The prevalence of possible arthritis ranged from 10.3% in Hawaii to 21.3% in Iowa (median: 17.3%) (Table 2). Possible arthritis was more prevalent among men in 28 states (medians: men, 18.9% [range: 11.2%–23.2%] and women, 15.5% [range: 9.5%–20.4%]) and was consistently more prevalent among persons aged <65 years (medians: aged 18–44 years, 18.3% [range: 10.0%–22.8%]; aged 45–64 years, 18.3% [range: 13.0%–22.7%]; and aged ≥65 years, 10.7% [range: 6.1%–14.8%]).

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Editorial Note: The findings in this report provide the first state-specific estimates of doctor-diagnosed arthritis using the new BRFSS module. Doctor-diagnosed arthritis affects a median of 27.6% of adults in 30 states and occurs more frequently among women and older adults. An additional median of 17.3% of adults had possible arthritis. Persons with doctor-diagnosed arthritis tend to report more activity limitation and likely have more severe symptoms than those with possible arthritis. Unlike doctor-diagnosed arthritis, possible arthritis occurred more frequently among men and adults aged <65 years.

In 1990, the National Arthritis Data Work Group defined approximately 150 conditions and the associated *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) codes thought to represent arthritis and other rheumatic conditions (*5*). However, a practical method to

TABLE 1. Number and percentage of adults aged ≥18 years with doctor-diagnosed arthritis, by state, sex, and age group — Behavioral Risk Factor Surveillance System, 30 states, 2002

State	Total adults			Men (%)	Women (%)	Age group (yrs) (%)		
	No.*	(%)	(95% CI†)			18–44	45–64	≥65
Alabama	**1,150**	**(35.8)**	**(33.8–37.8)**	32.5	38.8	18.0	49.2	64.2
Arizona	**1,058**	**(27.7)**	**(25.4–30.0)**	22.2	33.2	9.7	42.8	55.3
Arkansas	**636**	**(32.7)**	**(31.0–34.4)**	28.1	37.0	16.1	43.4	59.0
California	**5,498**	**(22.2)**	**(20.7–23.7)**	19.1	25.3	8.6	32.1	54.4
Connecticut	**611**	**(25.1)**	**(23.7–26.5)**	20.5	29.2	10.1	31.3	54.6
Florida	**3,363**	**(27.2)**	**(26.0–28.5)**	22.5	31.6	10.6	35.0	51.2
Hawaii	**166**	**(17.8)**	**(16.6–19.0)**	15.4	20.2	5.4	21.0	48.1
Idaho	**236**	**(25.4)**	**(24.0–26.8)**	22.4	28.4	11.8	34.9	53.0
Indiana	**1,318**	**(30.4)**	**(29.1–31.8)**	25.1	35.3	14.3	43.3	57.5
Iowa	**585**	**(27.8)**	**(26.1–29.5)**	25.3	30.1	12.8	37.9	51.3
Kentucky	**930**	**(34.2)**	**(32.5–36.0)**	30.0	38.0	18.4	47.0	60.1
Maine	**303**	**(32.0)**	**(29.9–34.1)**	29.3	34.5	14.6	41.6	58.8
Maryland	**1,012**	**(26.4)**	**(24.7–28.1)**	22.8	29.6	12.1	36.9	53.2
Minnesota	**887**	**(24.3)**	**(22.9–25.6)**	20.8	27.6	12.1	31.8	50.3
Mississippi	**576**	**(29.0)**	**(27.4–30.6)**	22.8	34.5	13.5	40.0	57.5
Nebraska	**331**	**(27.4)**	**(25.8–28.9)**	23.7	30.8	12.1	35.2	57.5
New Jersey	**1,484**	**(24.6)**	**(22.4–26.8)**	21.9	27.1	8.0	35.3	54.6
New Mexico	**325**	**(25.5)**	**(24.0–27.0)**	23.1	27.8	11.5	33.8	53.8
New York	**3,619**	**(26.5)**	**(25.0–28.0)**	22.2	30.3	11.4	35.5	55.2
North Carolina	**1,760**	**(28.8)**	**(27.2–30.4)**	23.6	33.7	12.9	41.6	58.2
North Dakota	**129**	**(28.2)**	**(26.4–30.1)**	24.2	32.1	13.3	35.2	55.8
Ohio	**2,519**	**(31.1)**	**(29.4–32.8)**	26.8	35.0	14.4	42.1	59.8
Oklahoma	**726**	**(28.4)**	**(27.1–29.6)**	24.8	31.7	13.1	37.4	56.9
Oregon	**691**	**(27.2)**	**(25.5–29.0)**	22.8	31.5	10.9	37.4	56.3
Rhode Island	**217**	**(28.3)**	**(26.7–29.9)**	23.5	32.5	11.3	39.1	57.3
South Carolina	**776**	**(28.0)**	**(26.2–29.7)**	21.8	33.5	11.1	39.7	58.6
Tennessee	**1,260**	**(29.5)**	**(27.7–31.3)**	24.6	33.9	14.3	41.4	54.2
Utah	**342**	**(22.3)**	**(20.7–23.9)**	19.2	25.4	9.5	35.2	58.5
Vermont	**112**	**(24.7)**	**(23.3–26.1)**	21.8	27.4	10.5	32.5	50.6
Virginia	**1,314**	**(26.2)**	**(24.4–27.9)**	22.3	29.7	12.7	36.9	52.3
Median		***(27.6)***		*22.8*	*31.6*	*12.1*	*37.2*	*55.6*

* In thousands.
† Confidence interval.

estimate arthritis prevalence by state by using ICD-9-CM codes and other health-care system data has not been developed. As a result, self-reported data are needed to estimate prevalence of doctor-diagnosed arthritis. Because many persons with arthritis do not visit a clinician for their symptoms and their conditions remain undiagnosed, self-report surveys also are needed to estimate possible arthritis in the population (*6*).

The self-report methods used to estimate arthritis and possible arthritis at the state and national levels have evolved over time. During 1996–2001, self-report questions on doctor-diagnosed arthritis and CJS were used in BRFSS (Table 3). To address cognitive problems with these questions, they were revised; those revisions were used for the 2002 BRFSS survey (Table 3).

The method of estimating population burden also has evolved over time. During 1996–2001, burden was estimated by totaling doctor-diagnosed arthritis and possible arthritis. However, CDC observed that this approach produced unstable estimates in states from year to year. In consultation with arthritis public health experts, states, and health officials, CDC began to focus on doctor-diagnosed arthritis to estimate population burden starting in 2002 and to report possible arthritis separately. The shift to using doctor-diagnosed arthritis is consistent with the approach used by other programs (e.g., asthma surveillance) to estimate burden (*7*).

The findings in this report are subject to at least three limitations. First, the estimates use self-reported data that were not confirmed by a physician. Second, BRFSS is a telephone survey and does not include persons without telephone service or those in the military or in institutions. Finally, the median response rate for the survey was 58.3%; however, the distribution of demographic characteristics in the BRFSS sample was similar to the distribution based on U.S. census data (i.e., by sex, age, and race/ethnicity).

The CDC Arthritis Program funds programs in 36 states that rely on BRFSS data to monitor the burden of arthritis and to target programmatic interventions. BRFSS and the National Health Interview Survey (NHIS) have used identical arthritis questions since 2002 to define doctor-diagnosed arthritis and possible arthritis. To maintain consistency and

TABLE 2. Number and percentage of adults aged ≥18 years with possible arthritis*, by state — Behavioral Risk Factor Surveillance System, 30 states, 2002

State	No.†	(%)	(95% CI§)
Alabama	578	(18.0)	(16.3–19.7)
Arizona	734	(19.3)	(17.0–21.6)
Arkansas	362	(18.6)	(17.1–20.2)
California	4,900	(19.8)	(18.4–21.2)
Connecticut	400	(16.4)	(15.2–17.7)
Florida	1,572	(12.7)	(11.7–13.8)
Hawaii	96	(10.3)	(9.3–11.4)
Idaho	184	(19.9)	(18.5–21.3)
Indiana	706	(16.3)	(15.2–17.4)
Iowa	447	(21.3)	(19.6–22.9)
Kentucky	451	(16.7)	(15.1–18.3)
Maine	164	(17.3)	(15.6–19.1)
Maryland	625	(16.3)	(14.9–17.7)
Minnesota	670	(18.4)	(17.0–19.7)
Mississippi	329	(16.6)	(15.1–18.1)
Nebraska	213	(17.6)	(16.2–19.0)
New Jersey	976	(16.2)	(14.2–18.2)
New Mexico	235	(18.5)	(17.1–19.9)
New York	2,019	(14.9)	(13.6–16.1)
North Carolina	895	(14.7)	(13.3–16.0)
North Dakota	84	(18.4)	(16.8–20.0)
Ohio	1,477	(18.3)	(16.8–19.7)
Oklahoma	444	(17.4)	(16.2–18.5)
Oregon	515	(20.3)	(18.6–22.1)
Rhode Island	110	(14.3)	(13.0–15.7)
South Carolina	476	(17.2)	(15.6–18.8)
Tennessee	573	(13.4)	(12.0–14.8)
Utah	259	(17.0)	(15.4–18.5)
Vermont	73	(16.1)	(14.8–17.3)
Virginia	887	(17.7)	(15.9–19.5)
Median		*(17.3)*	

* Had chronic joint symptoms but did not have doctor-diagnosed arthritis.
† In thousands.
§ Confidence interval.

allow comparison, states should use doctor-diagnosed arthritis to define the burden of arthritis when reporting prevalence for 2002 and beyond for BRFSS and NHIS data. Efforts are under way to better characterize persons with possible arthritis and to identify the best approach to incorporate them into measuring the burden of arthritis.

Evidence-based intervention programs (e.g., the Arthritis Foundation's People with Arthritis Can Exercise [PACE] or aquatics programs) and self-management education programs (e.g., the Arthritis Self-Help Course, which has helped persons with arthritis and joint symptoms experience less pain and reduce the number of clinical visits) (*8*) should continue to be offered to persons with doctor-diagnosed arthritis; persons with possible arthritis also might benefit. Additional information about these programs is available at http://www.arthritis.org/events/getinvolved/programsservices.

Acknowledgment

This report is based on data contributed by state BRFSS coordinators and arthritis program contacts.

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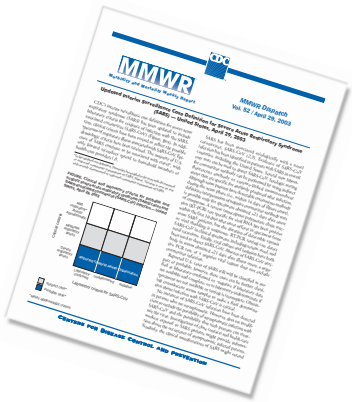
TABLE 3. Comparison of questions used to define chronic joint symptoms (CJS) and doctor-diagnosed arthritis for Behavioral Risk Factor Surveillance System surveys, 1996–2002

Years of use	Doctor-diagnosed arthritis	CJS	
1996–2001	Have you ever been told by a doctor that you have arthritis?	During the past 12 months have you had pain, aching, stiffness, or swelling in or around a joint?	Were these symptoms present on most days for at least 1 month?
2002	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?	The next questions refer to your joints. Please do not include the back or neck. During the past 30 days, have you had any symptoms of pain, aching, or stiffness in or around a joint?	Did your joint symptoms first begin more than 3 months ago?

up-to-the-minute: *adj*

1 : extending up to the immediate present, including the very latest information; see also *MMWR*.



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Update: Direct and Indirect Costs of Arthritis and Other Rheumatic Conditions — United States, 1997

The medical and societal impact of arthritis and other rheumatic conditions (AORC) has been characterized with respect to disability (*1*), ambulatory care (*2*), hospitalization (*3*), and economic burden (*4,5*). CDC's estimates of the national and state-specific costs of AORC in the United States in 1997 have been published previously (*4*). However, CDC has re-estimated indirect costs by enhancing the statistical methods. This report summarizes the results of that analysis, which indicated that indirect costs were $30.1 billion less than previously estimated. The total cost of AORC in the United States in 1997 was $86.2 billion (including $51.1 billion in direct costs and $35.1 billion in indirect costs), approximately 1% of the U.S. gross domestic product. Total costs attributable to AORC by state ranged from $121 million in Wyoming to $8.4 billion in California. Although indirect costs were lower than estimated previously, costs for arthritis remain high and underscore the need for better interventions to reduce the economic burden of arthritis.

Data from the 1997 Medical Expenditure Panel Survey and 2002 Behavioral Risk Factor Surveillance System were used to derive estimated costs; these data also were used in the previous report (*4*). In this analysis, direct costs were medical-care expenditures, and indirect costs were lost earnings attributable to AORC. A total of 22,435 respondents aged ≥18 years had complete data for all covariates. As with the previous study, a series of two- and four-stage Duan econometric regression models (*6*) were used to derive individual-level direct and indirect cost estimates. Direct cost models adjusted for six sociodemographic factors (i.e., categorized age [18–44 years (referent group), 45–64 years, and ≥65 years], sex, race, Hispanic ethnicity, marital status, and education level), health insurance status, and nine of the most costly comorbidities (i.e., hypertension, other forms of heart disease, pulmonary conditions, stroke, other neurologic conditions, diabetes, cancer, mental illness, and nonarthritis musculoskeletal conditions). Indirect costs also were estimated by using the Duan two- and four-stage models with adjustments for the same sociodemographic and comorbidity variables as used for the direct cost estimates. However, the indirect models did not include health insurance. Two modifications were made to the original indirect models. First, age was included in the updated model as a categorical rather than a continuous variable (using the age groups 18–34 years [referent group], 35–44 years, 45–54 years, and 55–64 years). Age was modeled in categorical form to reflect a nonlinear relation between age and indirect costs. Second, nine costly comorbidities were included in the indirect model; these variables were omitted in the previous analysis. Results from the enhanced analysis reflect a model that adjusts for sociodemographic variables and nine costly comorbidities. Methods for generating the increment and total costs attributable to AORC were the same as described previously (*4*).

No changes were made to the cost estimates or attributable fractions for direct costs. The national indirect cost estimates decreased by $30.1 billion. The revised total cost of AORC in the United States was $86.2 billion (i.e., $51.1 billion in direct costs plus $35.1 billion in indirect costs). By state, indirect costs for AORC ranged from $49 million in Wyoming to $3.4 billion in California (median: $499 million), and total costs ranged from $121 million in Wyoming to $8.4 billion in California (Table).

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Editorial Note: This report presents enhanced population-based indirect and total cost estimates of AORC for states and the nation in 1997, based on a revised statistical model. Direct cost estimates are unchanged from those in the previous report for AORC, but the revised indirect cost estimates are now less than the direct costs, which is the opposite of what was found in the original analysis (*4*). Because the indirect costs only included value of time lost from work among persons aged 18–64 years, these estimates might be considered conservative.

The strengths and limitations discussed in the previous report also apply to these estimates (*4*). The statistical enhancement proved important in reducing residual confounding in the model on which the indirect cost estimates were based, and illustrates how simple choices, such as the variable form (e.g., continuous versus categorical), can result in substantially different cost estimates. In this study, inclusion of a categorized, rather than continuous, age variable resulted in a 17% decrease in the national estimate of total AORC costs.

Review of the current cost-of-illness (COI) literature indicates that many COI studies are limited to estimating direct costs, although indirect costs are an important measure of societal burden of disease. In addition, few methodologic standards are available for the statistical estimation of indirect costs. Developing a consensus on methodologic standards for COI studies will help ensure that study results are valid and comparable across disease groupings and therefore of greatest value to policy makers.

TABLE. Proportion of national arthritis* cases and estimated direct, indirect, and total† costs of arthritis and other rheumatic conditions (AORC), by area — United States, 1997

Area	% national cases	Costs§		
		Direct	Indirect	Total¶
Alabama	2.08	1,064	730	**1,794**
Alaska	0.15	77	53	**129**
Arizona	1.86	951	653	**1,604**
Arkansas	1.13	578	397	**975**
California	9.69	4,955	3,402	**8,357**
Colorado	1.32	675	463	**1,138**
Connecticut	1.11	568	390	**957**
Delaware	0.29	148	102	**250**
District of Columbia	0.19	97	67	**164**
Florida	6.53	3,339	2,293	**5,632**
Georgia	2.91	1,488	1,022	**2,510**
Hawaii	0.22	112	77	**190**
Idaho	0.42	215	147	**362**
Illinois	4.35	2,224	1,527	**3,752**
Indiana	2.50	1,278	878	**2,156**
Iowa	0.95	486	334	**819**
Kansas	0.96	491	337	**828**
Kentucky	1.87	956	657	**1,613**
Louisiana	1.51	772	530	**1,302**
Maine	0.50	256	176	**431**
Maryland	1.77	905	622	**1,527**
Massachusetts	2.08	1,064	730	**1,794**
Michigan	4.34	2,219	1,524	**3,743**
Minnesota	1.51	772	530	**1,302**
Mississippi	1.10	562	386	**949**
Missouri	2.32	1,186	815	**2,001**
Montana	0.33	169	116	**285**
Nebraska	0.53	271	186	**457**
Nevada	0.67	343	235	**578**
New Hampshire	0.41	210	144	**354**
New Jersey	2.82	1,442	990	**2,432**
New Mexico	0.59	302	207	**509**
New York	6.71	3,431	2,356	**5,787**
North Carolina	2.96	1,514	1,039	**2,553**
North Dakota	0.20	102	70	**172**
Ohio	4.49	2,296	1,577	**3,872**
Oklahoma	1.42	726	499	**1,225**
Oregon	1.16	593	407	**1,000**
Pennsylvania	5.10	2,608	1,791	**4,399**
Rhode Island	0.43	220	151	**371**
South Carolina	1.48	757	520	**1,276**
South Dakota	0.25	128	88	**216**
Tennessee	2.36	1,207	829	**2,035**
Texas	6.17	3,155	2,166	**5,321**
Utah	0.60	307	211	**517**
Vermont	0.20	102	70	**172**
Virginia	2.54	1,299	892	**2,191**
Washington	1.86	951	653	**1,604**
West Virginia	0.87	445	305	**750**
Wisconsin	2.03	1,038	713	**1,751**
Wyoming	0.14	72	49	**121**
Total**	**100.00**	**51,132**	**35,113**	**86,245**
Median	—	*726*	*499*	*1,225*

* Doctor-diagnosed arthritis cases.
† Total of direct and indirect costs.
§ In millions of dollars.
¶ State-specific direct and indirect values do not add to state total because of rounding.
** State-specific values do not add to national total because of rounding.

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Outbreak of Varicella Among Vaccinated Children — Michigan, 2003

On November 18, 2003, the Oakland County Health Division alerted the Michigan Department of Community Health (MDCH) to a varicella (chicken pox) outbreak in a kindergarten–third grade elementary school. On December 11, MDCH and Oakland County public health epidemiologists, with the technical assistance of CDC, conducted a retrospective cohort study to describe the outbreak, determine varicella vaccine effectiveness (VE), and examine risk factors for breakthrough disease (i.e., varicella occurring >42 days after vaccination). This report summarizes the results of that study, which indicated that 1) transmission of varicella was sustained at the school for nearly 1 month despite high vaccination coverage, 2) vaccinated patients had substantially milder disease (<50 lesions), and 3) a period of ≥4 years since vaccination was a risk factor for breakthrough disease. These findings highlight the importance of case-based reporting of varicella and the exclusion of patients from school until all lesions crust or fade away. Information about recognizing vaccinated patients with mild cases should be disseminated to health-care providers, school administrators, and parents.

Self-administered standard questionnaires were sent to parents of all students to collect data on students' vaccination and disease history. Parents of patients were interviewed by telephone to ascertain detailed information about potential exposures to varicella and clinical characteristics of disease. A case was defined as an acute generalized maculopapulovesicular rash, without other apparent cause, in a student who attended the school during September 1–December 19. Disease was categorized as mild (<50 lesions), moderate (50–500 lesions),

or severe (>500 lesions or presence of complications or hospitalization). Vaccination status was confirmed for students by reviewing school vaccination records and contacting healthcare providers. VE was calculated by comparing attack rates among vaccinated and unvaccinated students. The following were excluded from VE calculations and analyses of risk factors for breakthrough disease: 1) students with previous or unknown varicella disease history, 2) recipients of invalid doses (i.e., doses administered before age 12 months), 3) those with unverified vaccination, 4) those vaccinated <42 days before the start of the outbreak, and 5) those whose parents did not return surveys.

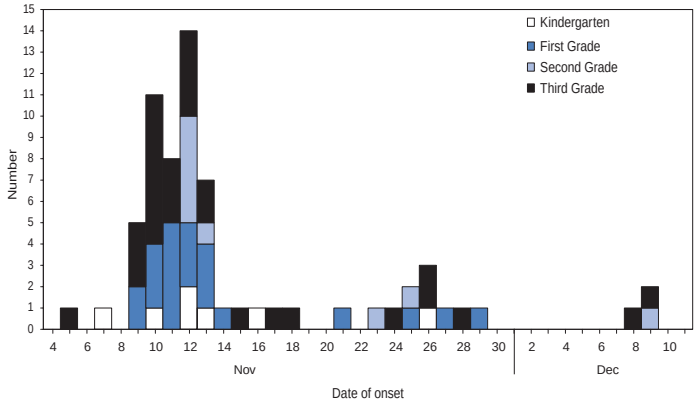
The elementary school had 580 students; 73 (12.6%) had illness consistent with the case definition. Testing for varicella zoster virus DNA using polymerase chain reaction (PCR) on lesion specimens collected from two patients yielded one positive result. Cases were concentrated in first and third graders; grade-specific attack rates* were as follows: kindergarten, 5.6% (seven of 125); first grade, 15.7% (21 of 134); second grade, 6.7% (nine of 134); and third grade, 26.6% (29 of 109) (Figure). Male students accounted for 54.5% (36 of 66) of the patients†.

The earliest rash onset date was November 5 in a previously vaccinated third grader. Her rash consisted of two pruritic, vesicular lesions of 5 days' duration on her neck and stomach. She did not appear clinically ill, was afebrile, and missed no days of school. Her parents did not recall any potential exposure to varicella in the weeks before rash onset. The outbreak peaked 7 days after this onset; however, a source case was not identified. Date of rash onset was unknown for four patients whose parents were not interviewed; however, their clinical course was inconsistent with rash onset occurring before November 5. Students did not attend school during November 12–14 because of parent-teacher conferences and during November 26–28 because of the Thanksgiving holiday. These breaks in attendance might have interrupted disease transmission. Eight secondary cases outside the school were identified among six siblings and two adults (one father and one aunt). All had rash within 2 weeks of exposure.

Survey response rate was 95.5% (554 of 580). Among respondents, 62 reported no vaccination history. Among these, 47 reported varicella disease history before the outbreak, 13 reported no previous disease history, and two had an unknown disease history. Among the 507 respondents with no disease history, 492 reported vaccination history, and vaccination was verified for 485 students, resulting in a vaccination coverage of 95.7% (485 of 507); 43 of the 485 verified vaccinees were excluded from further analyses because they either reported a previous or unknown varicella disease history (n = 32), were vaccinated before age 12 months (n = five), had an unknown age at vaccination (n = two), or were vaccinated <42 days before the start of the outbreak (n = four), resulting in 442 children who were vaccinated appropriately with no known disease history.

Attack rates were 11.8% (52 of 442) for vaccinated and 76.9% (10 of 13) for unvaccinated students. VE was 84.7% (95% confidence interval [CI] = 77.4%–89.7%) in preventing varicella of any severity and 97.6% (95% CI = 95.0%–98.9%) in preventing moderate to severe varicella. Vaccinated patients were more likely to have mild disease than unvaccinated patients (84.6% versus 20.0%; $p<0.01$), were less likely to have fever (44.2% versus 88.9%; $p<0.05$), and missed fewer days of school (1.3 versus 3.5 median days; $p<0.01$). Children vaccinated ≥4 years before the outbreak were nearly five times more likely to acquire varicella than children vaccinated within the previous 4 years (relative risk = 4.65; 95% CI = 1.48–14.61). Age at vaccination, sex, and preexisting conditions (e.g., asthma and eczema) were not associated with vaccine failure. Vaccine lot numbers were identified for 30 patients; vaccine from 26 different lot numbers was administered on multiple dates by multiple providers, indicating that breakdown in vaccine storage or handling procedures was not a likely risk factor for vaccine failure.

FIGURE. Number* of students with varicella, by date of rash onset and grade — Michigan, 2003



* N = 66. Limited to patients with known date of rash onset and no history of varicella disease before this outbreak.

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* Totals differ from school census (n = 580) and total cases identified (n = 73) because students with varicella disease history or unknown history before this outbreak were excluded (n = 78) from calculations.
† Limited to 66 patients with no varicella disease history before this outbreak (four had unknown history, and three reported previous history).

and Surveillance Div, National Immunization Program; DK El Reda, DrPH, EIS Officer, CDC.

Editorial Note: Varicella is a highly infectious disease that, in the prevaccine era, resulted in approximately 4 million illnesses, 11,000 hospitalizations, and 100 deaths annually in the United States (*1–3*). In 1995, a live, attenuated varicella vaccine was licensed for use in the United States, and the majority of studies of vaccine performance have demonstrated an overall VE of 70%–90% (*4,5*). Since vaccine licensure, the United States has experienced a steady decline in the incidence of varicella disease, attributed to increasing vaccination coverage (*6*). The findings in this report are consistent with those of recently published studies on VE and the association between longer time since vaccination and breakthrough disease (*5,7*).

Cases of mild disease, not recognized as varicella before detection of the outbreak, might have played an important role in virus transmission in this highly vaccinated population. All patients with chicken pox should be excluded from schools or day care centers until all lesions have crusted. However, breakthrough disease usually is mild and might not include vesicular lesions that crust. To help prevent disease spread in schools and day care centers, health-care providers, school administration, and parents must learn to recognize students with vaccine-modified varicella and exclude them from schools until lesions fade away or no new lesions appear.

Local varicella surveillance consists of passive reporting of aggregate case counts to state health departments. Timely reporting of individual varicella cases and appropriate follow-up might have ensured exclusion of patients from school and reduced the size of this outbreak. As vaccination coverage increases, the proportion of breakthrough cases also will increase. Health departments can begin to evaluate the impact of varicella vaccination programs through case-based surveillance that collects information about age, vaccination status, and severity of disease. These data can help to detect changes in epidemiology of varicella disease over time, such as a potential shift to older age groups or changes in disease severity among breakthrough cases. The Council of State and Territorial Epidemiologists has recommended that states implement case-based surveillance of varicella by 2005 (*8*).

The findings in this report indicate that varicella vaccine was effective (85%) in preventing varicella of any severity and highly effective (98%) in preventing moderate to severe disease. Although longer time since vaccination was identified as a potential risk factor for vaccine failure, prospective follow-up studies are needed to examine the importance of individual risk factors for breakthrough disease, after controlling for the effects of other factors (e.g., risk for exposure). In addition, these findings underscore the importance of continuing to

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George Santayana

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increase vaccination rates nationwide, ensuring that vaccination remains the cornerstone of efforts to control varicella.

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Creutzfeldt-Jakob Disease Not Related to a Common Venue — New Jersey, 1995–2004

On May 7, this report was posted as an MMWR Early Release *on the* MMWR *website* (http://www.cdc.gov/mmwr).

Beginning in June 2003, the New Jersey Department of Health and Senior Services (NJDHSS) and CDC were notified of a suspected cluster of deaths caused by Creutzfeldt-Jakob disease (CJD) in persons reportedly linked to Garden State Racetrack in Cherry Hill, New Jersey. Concerns were raised that these deaths might have resulted from consumption of meat contaminated with the agent causing bovine spongiform encephalopathy (BSE, commonly called "mad cow disease") served at racetrack restaurants during 1988–1992. Consumption of BSE-contaminated cattle products has been linked to a new variant form of CJD (vCJD) in humans. This report summarizes the results of an investigation that determined the deaths were not linked causally to a common source of infection. The findings underscore the need for physicians to arrange for brain autopsies of all patients with clinically suspected or diagnosed CJD.

Available clinical and neuropathologic findings were reviewed for 17 suspected CJD deaths referred to NJDHSS and CDC. To investigate the deaths of these 17 persons, all of whom were reportedly linked to Garden State Racetrack, health-care providers were contacted and relevant medical records obtained by NJDHSS, other state health departments, and CDC. Providers were asked to submit available brain autopsy tissue to the National Prion Disease Pathology Surveillance Center (NPDPSC), a national prion disease diagnostic referral laboratory established by CDC and the American Association of Neuropathologists.

Sufficient demographic and clinical information was available to classify 11 of the 17 deaths as resulting from a definite or probable case of a classic form of CJD*, on the basis of World Health Organization criteria (*1*). Of the remaining six decedents, neuropathologic analyses documented that three deaths resulted from causes unrelated to either vCJD or classic CJD (Table 1). Three deaths reported as resulting from CJD remain under investigation. Excluding the three deaths for which CJD was ruled out, the 14 remaining deaths occurred over a period of approximately 9.25 years (1995–2004); the average number of cases per complete year (i.e., excluding 2004) was 1.44 (range: zero to three cases). Eleven of the 14 decedents were male; median age was 69.5 years (range: 50–83 years). Six of the decedents resided in New Jersey, four in Pennsylvania, and one each in Connecticut, Delaware, Maryland, and Virginia.

Neuropathologic analysis in the five definite cases with available brain tissue specimens was diagnostic of classic CJD; none had the characteristic pathologic findings of vCJD. A genotype at codon 129 of the prion protein gene (a genetic marker associated with specific subtypes of CJD) was determined for three of the five CJD deaths confirmed pathologically (Table 1). None of the decedents had the methionine homozyogosity or the characteristic Western blot pattern present for persons with vCJD. In addition, the reported CJD subtypes differed from one another. For the six deaths without tissue diagnosis, available clinical and diagnostic evidence, including illness duration, electroencephalographic patterns, and presence of protein 14-3-3 (a marker for classic CJD) in cerebrospinal fluid was consistent with a probable diagnosis of classic CJD (Tables 1 and 2). None of the decedents had a diagnosis of vCJD.

For 1995–2002, using CDC's national multiple cause-of-death file (2002 data are preliminary) compiled annually by the National Center for Health Statistics, the annual death rate from CJD in the United States has been stable at approximately one case per 1 million persons per year (Figure 1). The CJD death rate for New Jersey during the same period was similar.

* Those types of CJD that differ from vCJD and usually indicate sporadic CJD.

TABLE 1. Suspected deaths caused by Creutzfeldt-Jakob disease (CJD) reportedly linked to Garden State Racetrack, by diagnosis — New Jersey, 1995–2004*

Decedent	Year of death	Age group at death (yrs)	State of residence	Tissue diagnosis† and CJD subtype§ or clinical diagnosis†
Suspected CJD deaths with brain tissue diagnosis				
Variant CJD (vCJD) excluded; classic CJD confirmed				
1	1997	70–74	New Jersey	Definite CJD (VV2, ataxic)
2	1997	65–69	New Jersey	Definite CJD (not further characterized)
3	2002	70–74	New Jersey	Definite CJD [MM2 or MM(MV)1¶]
4	2003	55–59	New Jersey	Definite CJD (MV2)
5	2004	>75	Virginia	Definite CJD (VV, possibly Type 1)
Both vCJD and classic CJD excluded				
6	2000	25–29	Pennsylvania	Non-prion disease, encephalopathy**
7	2004	55–59	Pennsylvania	Non-prion disease, fronto-temporal lobar dementia
8	2004	70–74	New Jersey	Non-prion disease, Lewy body disease
Suspected CJD deaths with no brain tissue diagnosis				
Classic CJD indicated by clinical evidence				
9	1997	55–59	Pennsylvania	Probable CJD [EEG (+); rapidly progressive dementia (duration 6 mos)]
10	2000	>75	New Jersey	Probable CJD [EEG (+); rapidly progressive dementia (duration <4 mos)]
11	2001	50–54	Connecticut	Probable CJD [EEG (+); CSF 14-3-3 (+)††; duration <6 mos]
12	2001	70–74	Maryland	Probable CJD [CSF 14-3-3 (+)††; duration <6 mos]
13	2003	70–74	New Jersey	Probable CJD [CSF 14-3-3 (+)††; duration <4 mos]
14	2003	65–69	Pennsylvania	Probable CJD [CSF 14-3-3 (+)††; duration <6 mos]
Suspected CJD deaths under investigation				
15	1995	70–74	Pennsylvania	Under investigation
16	1995	60–64	Pennsylvania	Under investigation
17	1996	65–69	Delaware	Under investigation

* As of May 2, 2004.
† Cases were classified as definite or probable CJD based on the World Health Organization diagnostic criteria (*1*).
§ Various subtypes of CJD have differing clinical and pathologic phenotypes that correlate with the genotype at codon 129 of the prion protein gene (M=methionine; V=valine) and the size of protease-resistant prion protein (Type 1 or 2). All cases of vCJD to date are homozygous for M at codon 129 and have the Type 2 pattern.
¶ Genotype based on characteristic neuropathology.
** Death certificate included CJD.
†† Protein 14-3-3 is a group of proteins released into the cerebrospinal fluid (CSF) during neuronal death that, in the appropriate clinical setting, can be used as a diagnostic marker for CJD.

In 2001, Garden State Racetrack was closed permanently. The number and ages of all persons visiting or dining at the racetrack is unknown. However, according to New Jersey Racing Commission records, attendance at the racetrack during 1988–1992 was approximately 4.1 million. Based on an annual CJD rate of 3.4 cases per 1 million persons (CDC, unpublished data, 2004) and an overall death rate from all causes of 2.9% for persons aged ≥50 years, the occurrence over approximately 9.25 years (1995–2004) of at least 14 CJD-related deaths among as few as 300,000 persons aged ≥50 years would not be unusual. This number is within the estimated range of the number of persons attending and dining at the racetrack, given the known attendance.

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Editorial Note: CJD is a neurodegenerative disease characterized by rapidly progressive dementia associated with brain pathology marked by diffuse spongiform degeneration; the disease is invariably fatal (*2*). According to the leading hypothesis, CJD is caused by an unconventional transmissible agent, an abnormal protein (i.e., prion) that is able to induce abnormal folding of normal cellular proteins, leading to neuronal death. Prions are believed to cause transmissible spongiform encephalopathies (TSEs) that include scrapie in sheep, BSE in cattle, chronic wasting disease (CWD) in deer and elk, and CJD in humans.

Two major forms of CJD have been recognized, classic and variant (*3*). Classic CJD has been recognized since the early

TABLE 2. Clinical and pathologic characteristics distinguishing variant Creutzfeldt-Jakob disease (vCJD) from classic CJD

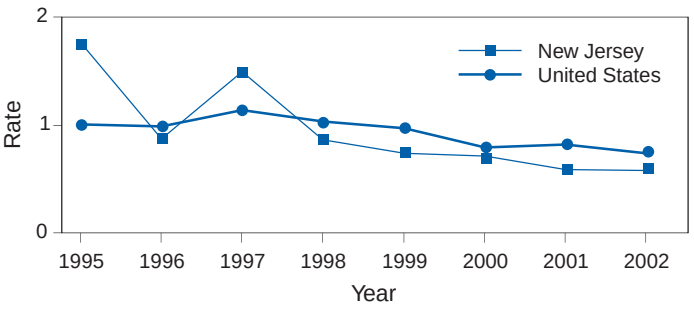
Characteristic	vCJD	Classic CJD
Median age at death	28 yrs	68 yrs
Median duration of illness	13–14 mos	4–5 mos
Clinical signs and symptoms	Prominent psychiatric/behavioral symptoms; painful dysesthesias; delayed neurologic signs	Dementia; early neurologic signs
Periodic sharp waves on electroencephalogram	Absent	Often present
"Pulvinar sign" on MRI*	Present in >75%	Not reported
Presence of "florid plaques" on neuropathology	Present in large numbers	Rare or absent
Immunohistochemical analysis of brain tissue	Marked accumulation of PrP^{res}†	Variable accumulation
Presence of agent in lymphoid tissue	Readily detected	Not readily detected
Increased glycoform ratio on immunoblot analysis of PrP^{res}	Marked accumulation of PrP^{res}	Not reported
Genotype at codon 129 of prion protein	Methionine/methionine	Polymorphic

Source: Adapted from Belay E, Schonberger L. Variant Creutzfeldt-Jakob disease and bovine spongiform encephalopathy. Clin Lab Med 2002;22:849–62.
* An abnormal signal in the posterior thalami on T2- and diffusion-weighted images and fluid-attenuated inversion recovery sequences on brain magnetic resonance imaging (MRI); in the appropriate clinical context, this signal is highly specific for vCJD.
† Protease-resistant prion protein.

1920s and is characterized by certain distinct clinical and diagnostic features (Table 2). The most common form of classic CJD is believed to occur sporadically, caused by the spontaneous transformation of normal prion proteins into abnormal prions. This sporadic disease occurs worldwide at a rate of approximately one case per 1 million population per year, although rates of up to two cases per million are not unusual (*4*). Risk increases with age, and in persons aged ≥50 years, the annual rate is approximately 3.4 cases per million.

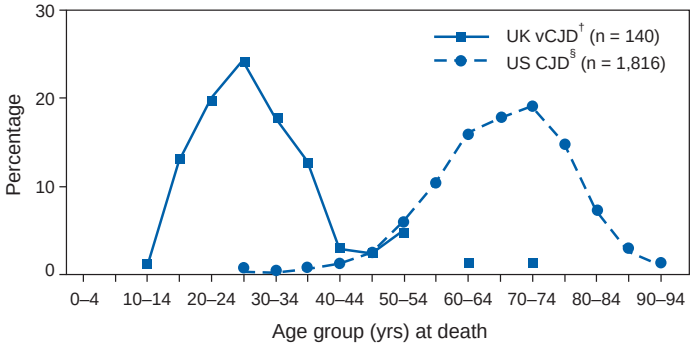
Variant CJD was first described in 1996 in the United Kingdom and has different clinical characteristics than classic CJD (Table 2) (*2,3*). The median age at death for vCJD patients is 28 years, compared with 68 years for patients with classic CJD (Figure 2). In addition, all vCJD cases have neuropathologic findings distinctly different from those of classic CJD (*5*), and all have had a particular genetic profile (i.e., homozygosity for methionine) at codon 129 of the prion protein gene (*4*). Thus, cases of vCJD can be distinguished from classic CJD on the basis of clinical and pathologic data. Epidemiologic and laboratory evidence indicate that the agent causing BSE in cattle can be transmitted to humans via consumption of BSE-contaminated cattle products, causing vCJD (*2,3*). However, this evidence also suggests that the risk is low for having vCJD, even after consumption of contaminated

FIGURE 1. Creutzfeldt-Jakob disease death rates*, by year — New Jersey and United States, 1995–2002†



* Per 1 million persons.
† From CDC's multiple cause-of-death file; 2002 data are preliminary.

FIGURE 2. Percentage distribution of noniatrogenic* deaths from variant Creutzfeldt-Jakob disease (vCJD) in the United Kingdom (UK) and from classic CJD in the United States (US), by age group, 1995–2003



* Excludes blood transfusion–associated vCJD and pituitary hormone- or dural graft–associated CJD.
† Includes UK-related nonresident cases; data for 1995–2003 (R.G. Will, M.D., National CJD Surveillance Unit, Western General Hospital, Edinburgh, Scotland, personal communication, 2004).
§ Data for 1995–2001.

product. In 1996, because of the emergence of vCJD in the United Kingdom, CDC enhanced its surveillance for CJD in the United States (*6*).

No evidence has indicated that any of the 17 reported deaths resulted from vCJD. The CJD subtypes were determined in four decedents, and the subtype in each differed from the others; this heterogeneity provides scientific evidence against a common etiology for these cases. Although one study reported that BSE-infected mice expressing methionine homozygosity at codon 129 produced prions with a molecular phenotype consistent with a subtype of classic CJD (*7*), these animal data cannot be reliably extrapolated to humans in the absence of other supporting evidence. In 2003, the Spongiform Encephalopathy Advisory Committee of the United Kingdom concluded that these data did "not provide strong evidence to support" the hypothesis that exposure to BSE can produce a sporadic CJD-like phenotype in humans (*8*). In the United Kingdom, where the largest epidemic of BSE has occurred and an unusually large proportion of the population has been exposed to the BSE agent, the absence of an unusually high incidence of classic CJD patients or an elevated proportion of CJD patients with methionine homozygosity at codon 129 (*9*) supports the lack of association between BSE and sporadic CJD. In the United Kingdom, prion disease experts have looked specifically for evidence of BSE-related disease other than vCJD among classic CJD cases. No evidence of a new phenotype has been uncovered (R.G. Will, M.D., National CJD Surveillance Unit, Western General Hospital, Edinburgh, Scotland, personal communication, 2004).

Neuropathologic evaluation, particularly by immunohistochemistry or Western blot, is the most definitive method to 1) diagnose human prion diseases, 2) monitor for vCJD and various subtypes of CJD, and 3) detect the possible emergence of new prion diseases in the United States. Although not all decedents in this investigation had pathologic specimens available for review, demonstration of the absence of a classic CJD or vCJD diagnosis in certain patients and diagnosis of classic CJD in others indicated these patients did not die from BSE-related disease. This investigation underscores the need for physicians to pursue autopsies of all decedents with clinically suspected and diagnosed CJD and to use the TSE diagnostic services provided free of charge by NPDPSC. Information regarding this surveillance center is available at http://www.cjdsurveillance.com or by telephone, 404-639-3091.

CDC will continue to work with and support state health officials in New Jersey and nationally to conduct surveillance for CJD. Better defining the normal occurrence of subtypes of sporadic CJD and other TSEs will facilitate earlier recognition of vCJD or any other human prion disease that might emerge in the United States.

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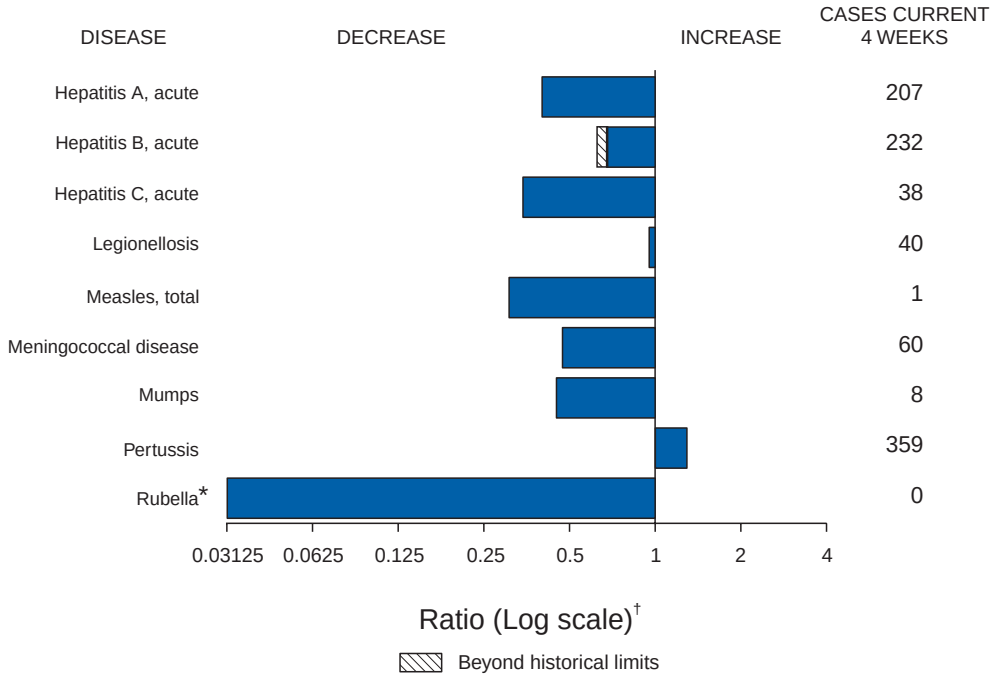
Erratum: Vol. 49, No. RR-10

In the *MMWR Recommendations and Reports*, "Guidelines for Preventing Opportunistic Infections Among Hematopoietic Stem Cell Transplant Recipients: Recommendations of CDC, the Infectious Diseases Society of America, and the American Society of Blood and Marrow Transplantation," an error occurred on page 33 in the text and footnote. The text should read, "Dolls that are used to demonstrate medical procedures (e.g., insertion of BROVIAC® catheters) to children to lessen their fears should be disassembled upon completion of play and washed with a nontoxic FDA- or EPA-registered disinfectant (*246,247*), rinsed with tap water, and allowed to air dry before other children are allowed to play with them (BIII)." The footnote is deleted.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals May 8, 2004, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 18 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending May 8, 2004 (18th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	19	36
Botulism:	-	-	HIV infection, pediatric†§	52	86
foodborne	5	6	Measles, total	7¶	20**
infant	21	25	Mumps	54	75
other (wound & unspecified	3	6	Plague	-	-
Brucellosis†	24	29	Poliomyelitis, paralytic	-	-
Chancroid	10	22	Psittacosis†	2	4
Cholera	2	1	Q fever†	9	21
Cyclosporiasis†	40	14	Rabies, human	-	-
Diphtheria	-	-	Rubella	14	3
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	12	20	SARS-associated coronavirus disease† ††	-	5
human monocytic (HME)†	14	14	Smallpox† §§	-	NA
human, other and unspecified	-	5	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† §§	4	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† §§	-	NA
eastern equine†	-	-	Streptococcal toxic-shock syndrome†	37	77
Powassan†	-	-	Tetanus	3	1
St. Louis†	2	-	Toxic-shock syndrome	40	51
western equine†	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	24	28	Tularemia†	7	4
Hantavirus pulmonary syndrome†	3	5	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 26, 2004.
¶ Of seven cases reported, four were indigenous, and three were imported from another country.
** Of 20 cases reported, 14 were indigenous, and six were imported from another country.
†† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
§§ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	8,910	15,303	266,346	295,075	1,548	1,170	790	637	5	-
NEW ENGLAND	311	499	9,275	9,547	-	-	43	42	-	-
Maine	5	23	564	653	N	N	8	2	-	-
N.H.	11	12	562	541	-	-	12	5	-	-
Vt.	7	6	357	362	-	-	6	7	-	-
Mass.	84	226	4,571	3,616	-	-	11	21	-	-
R.I.	32	38	1,165	1,123	-	-	1	5	-	-
Conn.	172	194	2,056	3,252	N	N	5	2	-	-
MID. ATLANTIC	1,283	3,326	36,010	35,783	-	-	128	100	-	-
Upstate N.Y.	134	182	7,458	6,289	N	N	30	23	-	-
N.Y. City	380	1,627	10,555	12,274	-	-	29	37	-	-
N.J.	386	595	4,404	4,983	-	-	7	3	-	-
Pa.	383	922	13,593	12,237	N	N	62	37	-	-
E.N. CENTRAL	806	1,389	45,946	54,151	5	2	182	146	1	-
Ohio	229	228	10,293	14,966	-	-	49	20	1	-
Ind.	117	223	5,828	5,821	N	N	26	11	-	-
Ill.	279	595	12,028	16,846	-	-	13	24	-	-
Mich.	132	277	13,422	10,574	5	2	48	27	-	-
Wis.	49	66	4,375	5,944	-	-	46	64	-	-
W.N. CENTRAL	228	288	15,827	16,975	4	1	91	59	1	-
Minn.	48	56	2,921	3,760	N	N	40	30	-	-
Iowa	11	34	1,087	1,694	N	N	13	8	-	-
Mo.	107	139	6,422	6,197	3	1	15	6	1	-
N. Dak.	10	-	369	468	N	N	-	2	-	-
S. Dak.	-	6	849	836	-	-	10	10	-	-
Nebr.¶	6	22	1,683	1,568	1	-	3	2	-	-
Kans.	46	31	2,496	2,452	N	N	10	1	-	-
S. ATLANTIC	3,510	4,482	48,936	54,353	-	1	167	89	2	-
Del.	42	80	1,025	2,164	N	N	-	1	-	-
Md.	343	411	6,410	5,535	-	1	9	8	-	-
D.C.	149	476	1,206	1,188	-	-	2	-	-	-
Va.	141	421	7,430	6,085	-	-	21	9	-	-
W. Va.	30	32	930	855	N	N	2	-	-	-
N.C.	243	504	9,037	7,866	N	N	31	10	-	-
S.C.¶	204	311	6,182	4,428	-	-	5	2	2	-
Ga.	509	609	2,945	11,886	-	-	54	32	-	-
Fla.	1,849	1,638	13,771	14,346	N	N	43	27	-	-
E.S. CENTRAL	446	621	16,275	19,199	N	N	35	40	-	-
Ky.	42	67	1,908	2,876	N	N	9	9	-	-
Tenn.	187	269	7,279	6,535	N	N	12	12	-	-
Ala.	127	144	3,622	5,220	-	-	9	16	-	-
Miss.	90	141	3,466	4,568	N	N	5	3	-	-
W.S. CENTRAL	1,307	1,632	34,662	36,651	1	-	22	14	1	-
Ark.	43	47	2,668	2,376	1	-	8	2	-	-
La.	281	192	8,215	6,436	N	N	-	1	1	-
Okla.	37	74	3,429	3,631	N	N	7	3	-	-
Tex.	946	1,319	20,350	24,208	-	-	7	8	-	-
MOUNTAIN	257	586	13,517	17,919	965	822	39	28	-	-
Mont.	-	8	423	784	N	N	4	4	-	-
Idaho	2	10	981	915	N	N	4	6	-	-
Wyo.	2	4	378	354	-	-	2	1	-	-
Colo.	48	127	2,653	4,545	N	N	20	6	-	-
N. Mex.	20	42	1,538	2,655	7	1	1	1	-	-
Ariz.	109	274	5,271	5,407	928	805	6	2	-	-
Utah	17	29	845	1,150	10	2	1	6	-	-
Nev.	59	92	1,428	2,109	20	14	1	2	-	-
PACIFIC	762	2,480	45,898	50,497	571	344	83	119	-	-
Wash.	127	178	6,061	5,358	N	N	9	12	-	-
Oreg.	53	108	1,979	2,647	-	-	11	13	-	-
Calif.	543	2,152	36,100	39,347	571	344	62	94	-	-
Alaska	8	9	1,332	1,270	-	-	-	-	-	-
Hawaii	31	33	426	1,875	-	-	1	-	-	-
Guam	1	1	-	-	-	-	-	-	-	-
P.R.	143	437	553	760	N	N	N	N	-	-
V.I.	2	13	20	117	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	32	U	-	U	-	U	-	U

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

* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 26, 2004.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	339	348	41	66	38	28	4,812	5,150	92,771	109,770
NEW ENGLAND	23	18	2	10	7	2	419	388	2,199	2,423
Maine	-	3	-	-	-	-	43	38	90	63
N.H.	4	5	1	1	-	-	13	18	43	44
Vt.	-	-	-	-	-	-	31	26	26	31
Mass.	7	4	-	4	7	2	218	196	1,065	919
R.I.	2	1	-	-	-	-	33	42	324	337
Conn.	10	5	1	5	-	-	81	68	651	1,029
MID. ATLANTIC	25	41	2	3	9	8	1,074	1,080	11,568	13,991
Upstate N.Y.	8	12	2	1	3	4	352	259	2,484	2,407
N.Y. City	4	3	-	-	-	-	324	408	3,357	4,668
N.J.	2	5	-	-	2	-	91	152	1,711	3,081
Pa.	11	21	-	2	4	4	307	261	4,016	3,835
E.N. CENTRAL	61	91	10	15	4	5	594	927	18,558	23,580
Ohio	19	18	-	9	4	5	248	261	5,053	7,655
Ind.	8	11	-	-	-	-	-	-	2,039	2,210
Ill.	11	20	-	1	-	-	84	287	4,999	7,208
Mich.	10	17	2	-	-	-	179	221	5,246	4,462
Wis.	13	25	8	5	-	-	83	158	1,221	2,045
W.N. CENTRAL	60	47	7	7	7	6	594	502	5,140	5,648
Minn.	23	17	3	6	-	-	205	163	1,089	921
Iowa	9	5	-	-	-	-	83	70	160	364
Mo.	8	16	4	1	2	-	165	156	2,598	2,912
N. Dak.	2	1	-	-	3	1	11	14	39	23
S. Dak.	2	2	-	-	-	-	19	15	90	59
Nebr.	8	5	-	-	-	-	53	45	327	493
Kans.	8	1	-	-	2	5	58	39	837	876
S. ATLANTIC	36	24	15	20	4	1	802	771	22,006	26,316
Del.	-	-	N	N	N	N	34	15	338	848
Md.	3	1	-	-	-	1	30	38	2,734	2,609
D.C.	1	1	-	-	-	-	23	13	781	843
Va.	1	4	5	-	-	-	126	77	2,983	2,804
W. Va.	1	1	-	-	-	-	9	9	270	286
N.C.	-	-	4	9	-	-	N	N	4,905	4,304
S.C.	1	-	-	-	-	-	16	39	2,848	2,590
Ga.	13	6	3	2	-	-	207	253	1,510	5,713
Fla.	16	11	3	9	4	-	357	327	5,637	6,319
E.S. CENTRAL	12	19	1	-	5	3	94	101	7,294	9,359
Ky.	5	8	1	-	3	3	N	N	804	1,197
Tenn.	3	8	-	-	2	-	42	46	2,609	2,753
Ala.	1	2	-	-	-	-	52	55	2,072	3,104
Miss.	3	1	-	-	-	-	-	-	1,809	2,305
W.S. CENTRAL	20	16	-	2	1	-	81	76	12,862	14,644
Ark.	2	2	-	-	-	-	36	42	1,241	1,268
La.	-	1	-	-	-	-	8	6	3,729	3,658
Okla.	4	2	-	-	-	-	37	28	1,496	1,382
Tex.	14	11	-	2	1	-	-	-	6,396	8,336
MOUNTAIN	54	38	3	7	1	3	398	409	3,274	3,743
Mont.	2	1	-	-	-	-	11	16	14	49
Idaho	10	9	1	4	-	-	55	50	26	30
Wyo.	-	1	-	-	-	-	4	5	20	17
Colo.	24	14	1	1	1	3	133	122	836	1,022
N. Mex.	3	1	-	2	-	-	18	17	189	438
Ariz.	4	8	N	N	N	N	70	69	1,487	1,418
Utah	6	3	-	-	-	-	76	89	102	101
Nev.	5	1	1	-	-	-	31	41	600	668
PACIFIC	48	54	1	2	-	-	756	896	9,870	10,066
Wash.	11	17	-	1	-	-	85	68	863	1,002
Oreg.	8	8	1	1	-	-	134	102	248	327
Calif.	23	28	-	-	-	-	485	665	8,432	8,189
Alaska	1	1	-	-	-	-	23	28	228	188
Hawaii	5	-	-	-	-	-	29	33	99	360
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	-	7	37	52	80
V.I.	-	-	-	-	-	-	-	-	4	35
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype b		Non-serotype b		Unknown serotype		A	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	728	645	6	9	39	49	77	77	1,813	2,156
NEW ENGLAND	59	48	1	1	3	3	2	3	321	79
Maine	6	2	-	-	-	-	-	1	8	1
N.H.	12	5	-	-	2	-	-	-	6	5
Vt.	4	6	-	-	-	-	-	-	5	3
Mass.	25	23	1	1	-	3	2	1	271	39
R.I.	1	2	-	-	-	-	-	1	6	9
Conn.	11	10	-	-	1	-	-	-	25	22
MID. ATLANTIC	142	107	-	-	3	1	20	14	205	449
Upstate N.Y.	52	32	-	-	3	1	2	3	30	34
N.Y. City	25	18	-	-	-	-	6	4	69	163
N.J.	25	23	-	-	-	-	2	2	42	76
Pa.	40	34	-	-	-	-	10	5	64	176
E.N. CENTRAL	111	105	-	1	10	4	16	21	160	212
Ohio	53	25	-	-	2	-	9	5	17	36
Ind.	18	18	-	-	4	2	1	-	9	13
Ill.	19	45	-	-	-	-	5	13	59	67
Mich.	9	7	-	1	4	2	-	-	59	70
Wis.	12	10	-	-	-	-	1	3	16	26
W.N. CENTRAL	35	44	1	-	2	5	2	4	59	57
Minn.	14	18	-	-	2	5	-	-	10	14
Iowa	1	-	1	-	-	-	-	-	17	13
Mo.	10	16	-	-	-	-	1	4	18	14
N. Dak.	2	1	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	4	-	-	-	-	-	-	-	7	3
Kans.	4	8	-	-	-	-	1	-	4	13
S. ATLANTIC	196	130	-	-	7	5	16	8	355	504
Del.	10	-	-	-	-	-	4	-	6	4
Md.	34	31	-	-	2	4	-	-	56	49
D.C.	-	-	-	-	-	-	-	-	3	14
Va.	15	12	-	-	-	-	-	2	27	31
W. Va.	8	3	-	-	-	-	3	-	2	5
N.C.	19	10	-	-	1	-	-	-	22	26
S.C.	-	2	-	-	-	-	-	-	12	22
Ga.	64	27	-	-	-	-	9	4	140	207
Fla.	46	45	-	-	4	1	-	2	87	146
E.S. CENTRAL	24	39	-	1	-	2	5	4	55	60
Ky.	-	3	-	-	-	1	-	-	9	10
Tenn.	16	20	-	-	-	1	4	3	31	31
Ala.	8	16	-	1	-	-	1	1	5	9
Miss.	-	-	-	-	-	-	-	-	10	10
W.S. CENTRAL	26	35	-	-	3	4	-	3	120	211
Ark.	-	4	-	-	-	1	-	-	30	12
La.	3	12	-	-	-	1	-	3	2	19
Okla.	23	19	-	-	3	2	-	-	15	4
Tex.	-	-	-	-	-	-	-	-	73	176
MOUNTAIN	102	83	2	4	11	13	12	10	175	135
Mont.	-	-	-	-	-	-	-	-	3	1
Idaho	3	-	-	-	-	-	1	-	9	6
Wyo.	-	-	-	-	-	-	-	-	1	1
Colo.	30	15	-	-	-	-	5	4	26	18
N. Mex.	18	12	-	-	4	3	3	1	4	8
Ariz.	39	45	-	4	6	6	1	3	105	76
Utah	6	7	2	-	-	2	1	2	22	9
Nev.	6	4	-	-	1	2	1	-	5	16
PACIFIC	33	54	2	2	-	12	4	10	363	449
Wash.	3	3	2	-	-	2	1	1	21	22
Oreg.	21	15	-	-	-	-	-	2	26	28
Calif.	3	32	-	2	-	10	2	7	306	392
Alaska	1	-	-	-	-	-	1	-	3	4
Hawaii	5	4	-	-	-	-	-	-	7	3
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	7	30
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,909	2,200	382	381	328	340	131	163	2,199	2,599
NEW ENGLAND	77	116	1	-	5	13	5	7	185	274
Maine	1	-	-	-	-	-	1	-	30	-
N.H.	17	5	-	-	-	1	1	2	11	5
Vt.	1	1	1	-	-	1	-	-	9	3
Mass.	57	82	-	-	2	6	-	3	67	140
R.I.	1	3	-	-	1	1	1	-	18	66
Conn.	-	25	U	U	2	4	2	2	50	60
MID. ATLANTIC	269	300	40	45	74	67	30	31	1,691	1,950
Upstate N.Y.	30	24	4	7	17	21	10	7	649	618
N.Y. City	23	106	-	-	3	8	3	7	-	3
N.J.	117	81	-	-	18	5	7	6	348	464
Pa.	99	89	36	38	36	33	10	11	694	865
E.N. CENTRAL	133	164	22	60	75	76	16	19	35	67
Ohio	50	48	2	4	37	30	8	2	29	10
Ind.	8	10	1	-	5	4	1	1	-	4
Ill.	-	-	2	11	2	13	-	5	-	1
Mich.	75	84	17	43	29	23	6	7	-	-
Wis.	-	22	-	2	2	6	1	4	6	52
W.N. CENTRAL	141	102	168	86	8	12	4	4	35	26
Minn.	12	9	1	1	-	2	2	2	12	16
Iowa	4	4	-	-	2	4	1	-	5	4
Mo.	110	70	167	85	4	3	1	-	16	5
N. Dak.	1	-	-	-	1	1	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-
Nebr.	8	11	-	-	-	1	-	2	1	-
Kans.	6	7	-	-	-	1	-	-	1	1
S. ATLANTIC	641	585	64	62	87	96	22	38	215	204
Del.	15	3	-	-	6	-	N	N	35	41
Md.	57	40	6	5	11	16	4	4	113	121
D.C.	6	1	1	-	1	1	-	-	2	3
Va.	67	37	9	-	6	6	1	4	8	10
W. Va.	2	7	3	1	2	-	1	1	1	-
N.C.	57	50	5	3	8	9	4	7	33	17
S.C.	33	58	1	17	1	4	-	2	1	1
Ga.	217	178	7	5	8	10	6	10	1	4
Fla.	187	211	32	31	44	50	6	10	21	7
E.S. CENTRAL	198	133	28	33	11	14	6	5	5	13
Ky.	16	26	12	7	2	3	2	-	2	2
Tenn.	54	43	6	4	7	7	4	1	2	5
Ala.	18	29	-	4	2	2	-	3	-	-
Miss.	110	35	10	18	-	2	-	1	1	6
W.S. CENTRAL	33	327	30	59	21	20	11	20	2	35
Ark.	15	34	-	3	-	-	-	-	-	-
La.	8	54	11	38	1	1	-	1	-	4
Okla.	10	16	2	-	2	2	-	1	-	-
Tex.	-	223	17	18	18	17	11	18	2	31
MOUNTAIN	167	194	14	11	22	20	6	11	5	3
Mont.	-	8	2	1	-	-	-	1	-	-
Idaho	4	2	-	1	1	2	1	-	-	1
Wyo.	3	9	-	-	4	1	-	-	1	-
Colo.	25	32	4	3	3	4	1	4	-	-
N. Mex.	5	13	-	-	-	2	-	2	-	-
Ariz.	86	95	2	3	5	6	-	4	1	-
Utah	17	12	-	-	8	3	-	-	3	1
Nev.	27	23	6	3	1	2	4	-	-	1
PACIFIC	250	279	15	25	25	22	31	28	26	27
Wash.	22	26	4	5	5	2	5	1	3	-
Oreg.	31	-	4	3	N	N	4	1	8	6
Calif.	185	244	5	16	20	20	22	26	15	20
Alaska	11	3	-	-	-	-	-	-	-	1
Hawaii	1	6	2	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	9	52	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	313	339	608	724	2,673	2,177	1,246	2,362	157	106
NEW ENGLAND	25	8	26	34	618	230	149	138	6	-
Maine	1	1	7	5	-	1	13	11	-	-
N.H.	-	2	3	3	20	14	6	6	-	-
Vt.	1	-	1	-	22	26	6	10	-	-
Mass.	16	5	15	20	558	173	61	56	6	-
R.I.	2	-	-	2	9	1	10	15	-	-
Conn.	5	-	-	4	9	15	53	40	-	-
MID. ATLANTIC	62	79	75	80	729	205	127	277	13	10
Upstate N.Y.	13	15	19	13	554	78	98	94	1	-
N.Y. City	24	42	13	17	-	25	-	2	2	4
N.J.	10	8	15	11	61	35	-	62	2	4
Pa.	15	14	28	39	114	67	29	119	8	2
E.N. CENTRAL	19	36	85	115	302	155	7	11	9	2
Ohio	7	6	34	29	149	79	3	4	6	1
Ind.	-	-	10	16	22	20	2	2	1	-
Ill.	2	17	8	35	-	-	1	1	-	-
Mich.	5	10	27	20	33	15	1	4	2	1
Wis.	5	3	6	15	98	41	-	-	-	-
W.N. CENTRAL	21	13	34	54	142	102	122	224	5	4
Minn.	9	8	9	13	28	33	17	10	-	-
Iowa	1	2	7	9	21	33	18	24	-	1
Mo.	3	-	9	22	71	23	3	2	5	3
N. Dak.	2	-	-	-	5	1	20	18	-	-
S. Dak.	1	-	1	1	7	2	10	44	-	-
Nebr.	1	-	1	5	-	1	15	47	-	-
Kans.	4	3	7	4	10	9	39	79	-	-
S. ATLANTIC	103	84	118	133	160	148	672	974	91	80
Del.	4	-	2	7	6	1	18	16	-	-
Md.	26	24	5	12	34	16	50	128	7	13
D.C.	4	5	4	1	1	-	-	-	-	-
Va.	8	7	7	6	39	33	121	184	-	1
W. Va.	-	2	3	1	2	1	23	23	-	-
N.C.	5	6	15	16	29	54	223	247	76	47
S.C.	5	1	9	10	10	7	55	58	2	8
Ga.	14	12	14	16	18	14	98	130	4	8
Fla.	37	27	59	64	21	22	84	188	2	3
E.S. CENTRAL	7	8	25	31	30	40	39	72	18	8
Ky.	1	1	3	3	7	8	7	10	-	-
Tenn.	1	3	9	8	15	19	13	55	10	4
Ala.	4	2	6	8	4	9	17	6	2	-
Miss.	1	2	7	12	4	4	2	1	6	4
W.S. CENTRAL	25	42	56	94	83	105	58	576	10	1
Ark.	1	3	12	8	6	6	17	25	-	-
La.	2	2	12	27	2	4	-	-	-	-
Okla.	1	2	3	8	12	4	41	87	10	-
Tex.	21	35	29	51	63	91	-	464	-	1
MOUNTAIN	13	11	33	34	332	391	29	30	1	1
Mont.	-	-	1	2	8	-	4	3	-	-
Idaho	1	1	4	2	15	9	-	1	-	-
Wyo.	-	-	2	2	3	117	-	-	-	1
Colo.	5	8	14	5	187	139	1	-	1	-
N. Mex.	1	-	4	3	38	22	-	2	-	-
Ariz.	1	1	5	16	55	72	24	24	-	-
Utah	3	1	3	-	22	25	-	-	-	-
Nev.	2	-	-	4	4	7	-	-	-	-
PACIFIC	38	58	156	149	277	801	43	60	4	-
Wash.	2	8	12	13	137	129	-	-	-	-
Oreg.	7	5	34	28	97	97	-	1	2	-
Calif.	28	45	105	100	35	573	35	54	2	-
Alaska	-	-	1	2	3	-	8	5	-	-
Hawaii	1	-	4	6	5	2	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	2	5	1	-	16	24	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	8,078	8,888	3,103	6,637	1,907	2,652	1,046	1,032	182	229
NEW ENGLAND	357	435	67	102	79	259	12	43	4	1
Maine	22	24	1	4	3	13	-	-	-	-
N.H.	24	30	3	2	9	15	-	-	N	N
Vt.	17	12	1	3	4	11	6	5	1	1
Mass.	209	247	45	66	58	118	N	N	N	N
R.I.	25	25	3	3	5	1	6	-	3	-
Conn.	60	97	14	24	-	101	-	38	U	U
MID. ATLANTIC	1,044	1,119	375	548	290	442	70	57	42	40
Upstate N.Y.	262	210	166	98	111	160	33	25	30	28
N.Y. City	285	345	104	142	38	62	U	U	U	U
N.J.	171	188	61	132	45	96	N	N	N	N
Pa.	326	376	44	176	96	124	37	32	12	12
E.N. CENTRAL	1,149	1,252	248	524	323	673	231	215	61	85
Ohio	309	367	57	91	118	147	176	144	39	50
Ind.	107	105	44	37	35	55	55	71	15	11
Ill.	308	425	86	279	32	189	-	-	-	-
Mich.	222	169	34	76	126	191	N	N	N	N
Wis.	203	186	27	41	12	91	N	N	7	24
W.N. CENTRAL	578	480	113	226	154	167	96	91	21	18
Minn.	144	136	16	30	73	79	-	-	18	15
Iowa	108	98	29	18	N	N	N	N	N	N
Mo.	163	123	32	80	35	34	5	6	3	1
N. Dak.	13	12	1	3	6	8	-	3	-	2
S. Dak.	23	22	6	8	8	14	1	-	-	-
Nebr.	45	37	7	60	8	17	-	-	N	N
Kans.	82	52	22	27	24	15	90	82	N	N
S. ATLANTIC	1,946	2,075	993	2,124	461	414	521	498	4	5
Del.	24	27	6	110	4	4	6	-	N	N
Md.	154	207	34	190	85	121	-	4	-	-
D.C.	13	11	19	21	3	3	3	-	3	-
Va.	208	187	30	88	28	36	N	N	N	N
W. Va.	35	18	-	-	12	16	46	27	1	5
N.C.	234	319	126	226	48	36	N	N	U	U
S.C.	102	123	132	94	23	15	31	75	N	N
Ga.	382	284	233	456	167	91	175	131	N	N
Fla.	794	899	413	939	91	92	260	261	N	N
E.S. CENTRAL	417	513	168	346	88	84	57	66	-	-
Ky.	83	91	26	43	30	21	16	6	N	N
Tenn.	122	174	65	120	58	63	41	60	N	N
Ala.	131	152	56	116	-	-	-	-	N	N
Miss.	81	96	21	67	-	-	-	-	-	-
W.S. CENTRAL	548	894	507	1,667	90	129	25	45	44	52
Ark.	78	92	15	20	4	3	5	15	4	4
La.	36	158	34	177	-	1	20	30	6	12
Okla.	77	70	127	226	25	34	N	N	21	20
Tex.	357	574	331	1,244	61	91	N	N	13	16
MOUNTAIN	691	575	246	300	237	222	14	15	6	28
Mont.	50	33	3	1	-	1	-	-	-	-
Idaho	49	61	5	7	4	10	N	N	N	N
Wyo.	20	9	1	1	5	-	4	2	-	-
Colo.	169	163	52	50	75	65	-	-	4	26
N. Mex.	56	50	36	62	36	53	5	13	-	-
Ariz.	229	161	118	149	101	88	-	-	N	N
Utah	67	58	13	15	15	4	3	-	2	2
Nev.	51	40	18	15	1	1	2	-	-	-
PACIFIC	1,348	1,545	386	800	185	262	20	2	-	-
Wash.	108	151	25	71	24	26	-	-	N	N
Oreg.	99	141	18	24	N	N	N	N	N	N
Calif.	1,019	1,164	327	691	129	195	N	N	N	N
Alaska	31	32	3	4	-	-	-	-	N	N
Hawaii	91	57	13	10	32	41	20	2	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	40	207	1	2	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 8, 2004, and May 3, 2003 (18th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	2,148	2,452	74	166	2,490	3,820	77	101	6,027	6,444
NEW ENGLAND	40	65	1	-	96	105	8	9	328	1,543
Maine	-	3	-	-	-	4	-	-	43	481
N.H.	1	8	-	-	6	4	-	-	-	-
Vt.	-	-	-	-	-	3	-	-	285	328
Mass.	29	43	-	-	70	47	8	4	-	80
R.I.	2	4	-	-	10	14	-	2	-	2
Conn.	8	7	1	-	10	33	-	3	-	652
MID. ATLANTIC	286	274	10	26	586	673	17	17	20	8
Upstate N.Y.	32	6	1	1	62	75	2	3	-	-
N.Y. City	141	153	6	16	304	365	5	9	-	-
N.J.	57	59	3	9	125	116	5	4	-	-
Pa.	56	56	-	-	95	117	5	1	20	8
E.N. CENTRAL	226	342	27	33	271	318	3	12	2,720	2,515
Ohio	70	74	1	2	59	54	1	-	749	592
Ind.	16	15	7	6	13	42	-	2	-	-
Ill.	75	132	1	11	170	146	-	5	-	-
Mich.	57	111	18	14	8	61	2	5	1,859	1,518
Wis.	8	10	-	-	21	15	-	-	112	405
W.N. CENTRAL	47	74	-	3	111	155	2	1	109	16
Minn.	6	22	-	-	44	58	1	1	-	-
Iowa	2	6	-	-	13	10	-	-	N	N
Mo.	22	25	-	3	27	46	1	-	2	-
N. Dak.	-	-	-	-	2	-	-	-	67	16
S. Dak.	-	-	-	-	4	9	-	-	40	-
Nebr.	4	1	-	-	6	4	-	-	-	-
Kans.	13	20	-	-	15	28	-	-	-	-
S. ATLANTIC	605	635	10	32	469	716	11	23	943	960
Del.	2	8	-	-	-	-	-	-	7	7
Md.	109	98	2	6	69	66	2	5	-	-
D.C.	25	12	-	-	-	-	-	-	16	7
Va.	16	29	1	1	56	68	4	10	285	229
W. Va.	1	1	-	-	7	7	-	-	506	643
N.C.	48	60	1	5	63	76	2	4	-	-
S.C.	42	43	-	4	60	44	-	-	129	74
Ga.	95	156	-	6	11	169	1	2	-	-
Fla.	267	228	6	10	203	286	2	2	-	-
E.S. CENTRAL	110	118	3	7	162	228	2	2	2	-
Ky.	20	18	-	1	24	37	-	-	-	-
Tenn.	47	46	1	1	42	76	2	1	-	-
Ala.	34	45	1	4	63	84	-	1	-	-
Miss.	9	9	1	1	33	31	-	-	2	-
W.S. CENTRAL	353	288	16	23	162	636	6	4	722	1,274
Ark.	15	13	-	1	43	37	-	-	-	-
La.	75	34	-	-	-	-	-	-	3	7
Okla.	7	17	2	-	44	43	-	-	-	-
Tex.	256	224	14	22	75	556	6	4	719	1,267
MOUNTAIN	123	109	7	18	94	99	6	4	1,183	128
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	8	4	-	-	-	1	-	-	-	-
Wyo.	1	-	-	-	1	2	-	-	14	15
Colo.	7	12	-	3	30	27	3	3	926	-
N. Mex.	20	22	1	4	-	6	-	-	29	-
Ariz.	80	65	6	11	49	46	1	1	-	-
Utah	3	1	-	-	14	9	1	-	214	113
Nev.	4	5	-	-	-	8	1	-	-	-
PACIFIC	358	547	-	24	539	890	22	29	-	-
Wash.	26	23	-	-	68	82	1	-	-	-
Oreg.	9	15	-	-	21	29	1	1	-	-
Calif.	322	503	-	24	406	721	15	28	-	-
Alaska	-	-	-	-	8	21	-	-	-	-
Hawaii	1	6	-	-	36	37	5	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	44	67	-	8	14	33	-	-	97	234
V.I.	-	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending May 8, 2004 (18th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	462	309	106	31	8	8	33
Boston, Mass.	147	87	39	13	2	6	17
Bridgeport, Conn.	33	24	7	2	-	-	3
Cambridge, Mass.	17	14	2	1	-	-	-
Fall River, Mass.	21	17	3	1	-	-	2
Hartford, Conn.	45	31	10	3	1	-	6
Lowell, Mass.	26	20	5	-	-	1	-
Lynn, Mass.	8	4	2	2	-	-	-
New Bedford, Mass.	U	U	U	U	U	U	U
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	58	46	10	1	-	1	1
Somerville, Mass.	3	2	1	-	-	-	-
Springfield, Mass.	48	28	14	3	3	-	3
Waterbury, Conn.	U	U	U	U	U	U	U
Worcester, Mass.	56	36	13	5	2	-	1
MID. ATLANTIC	1,864	1,328	365	109	33	25	92
Albany, N.Y.	38	24	9	3	-	2	1
Allentown, Pa.	17	14	3	-	-	-	2
Buffalo, N.Y.	104	60	29	9	2	4	6
Camden, N.J.	U	U	U	U	U	U	U
Elizabeth, N.J.	U	U	U	U	U	U	U
Erie, Pa.	35	28	4	2	1	-	4
Jersey City, N.J.	48	34	11	2	1	-	-
New York City, N.Y.	1,191	844	233	75	21	14	54
Newark, N.J.	46	26	14	5	1	-	2
Paterson, N.J.	15	7	4	1	1	2	-
Philadelphia, Pa.	U	U	U	U	U	U	U
Pittsburgh, Pa.§	28	22	6	-	-	-	2
Reading, Pa.	23	18	3	2	-	-	1
Rochester, N.Y.	131	101	20	4	4	2	5
Schenectady, N.Y.	21	16	5	-	-	-	2
Scranton, Pa.	25	24	1	-	-	-	3
Syracuse, N.Y.	73	63	8	-	1	1	6
Trenton, N.J.	28	16	7	5	-	-	2
Utica, N.Y.	18	14	3	1	-	-	-
Yonkers, N.Y.	23	17	5	-	1	-	2
E.N. CENTRAL	1,676	1,093	406	106	39	31	84
Akron, Ohio	27	19	6	2	-	-	6
Canton, Ohio	33	20	12	1	-	-	2
Chicago, Ill.	351	196	108	27	9	10	21
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	222	160	41	12	6	3	7
Columbus, Ohio	165	108	33	13	5	6	9
Dayton, Ohio	126	86	36	4	-	-	3
Detroit, Mich.	180	105	49	15	5	6	5
Evansville, Ind.	46	36	8	-	2	-	5
Fort Wayne, Ind.	74	46	17	5	5	1	2
Gary, Ind.	12	4	5	1	2	-	-
Grand Rapids, Mich.	U	U	U	U	U	U	U
Indianapolis, Ind.	U	U	U	U	U	U	U
Lansing, Mich.	56	40	10	6	-	-	3
Milwaukee, Wis.	93	64	19	5	2	3	3
Peoria, Ill.	46	29	11	4	1	1	1
Rockford, Ill.	57	35	16	5	1	-	4
South Bend, Ind.	29	21	7	1	-	-	2
Toledo, Ohio	91	67	18	4	1	1	3
Youngstown, Ohio	68	57	10	1	-	-	8
W.N. CENTRAL	548	360	118	29	22	19	39
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	38	29	4	4	-	1	4
Kansas City, Kans.	30	22	7	1	-	-	2
Kansas City, Mo.	74	50	14	3	3	4	5
Lincoln, Nebr.	44	33	7	-	3	1	3
Minneapolis, Minn.	65	41	15	5	1	3	8
Omaha, Nebr.	63	45	11	1	4	2	9
St. Louis, Mo.	66	37	20	6	-	3	4
St. Paul, Minn.	65	43	14	1	7	-	3
Wichita, Kans.	103	60	26	8	4	5	1
S. ATLANTIC	965	607	215	75	36	32	46
Atlanta, Ga.	117	69	26	13	6	3	6
Baltimore, Md.	191	105	53	14	7	12	12
Charlotte, N.C.	98	60	23	8	3	4	8
Jacksonville, Fla.	157	109	26	10	9	3	3
Miami, Fla.	19	14	3	2	-	-	-
Norfolk, Va.	51	30	12	4	2	3	1
Richmond, Va.	48	27	13	5	-	3	-
Savannah, Ga.	U	U	U	U	U	U	U
St. Petersburg, Fla.	74	55	10	5	3	1	5
Tampa, Fla.	183	118	44	13	5	3	10
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, Del.	27	20	5	1	1	-	1
E.S. CENTRAL	870	555	216	58	21	20	62
Birmingham, Ala.	179	116	52	9	-	2	28
Chattanooga, Tenn.	79	59	16	1	2	1	5
Knoxville, Tenn.	86	53	20	8	3	2	-
Lexington, Ky.	62	36	18	5	3	-	4
Memphis, Tenn.	175	113	37	19	3	3	5
Mobile, Ala.	102	65	23	5	4	5	1
Montgomery, Ala.	52	30	15	3	2	2	8
Nashville, Tenn.	135	83	35	8	4	5	11
W.S. CENTRAL	827	531	184	64	25	23	62
Austin, Tex.	87	57	18	6	3	3	10
Baton Rouge, La.	U	U	U	U	U	U	U
Corpus Christi, Tex.	46	30	11	1	4	-	6
Dallas, Tex.	146	80	31	22	6	7	13
El Paso, Tex.	U	U	U	U	U	U	U
Ft. Worth, Tex.	101	56	27	10	2	6	5
Houston, Tex.	U	U	U	U	U	U	U
Little Rock, Ark.	66	43	17	3	-	3	2
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	244	169	52	13	8	2	17
Shreveport, La.	37	24	10	2	1	-	4
Tulsa, Okla.	100	72	18	7	1	2	5
MOUNTAIN	841	582	166	46	32	14	52
Albuquerque, N.M.	135	98	24	9	4	-	9
Boise, Idaho	46	38	4	-	3	1	1
Colo. Springs, Colo.	52	45	3	1	1	2	1
Denver, Colo.	97	55	25	4	6	7	5
Las Vegas, Nev.	236	154	54	19	8	1	17
Ogden, Utah	27	17	7	2	1	-	2
Phoenix, Ariz.	78	55	14	2	3	3	2
Pueblo, Colo.	32	27	5	-	-	-	4
Salt Lake City, Utah	138	93	30	9	6	-	11
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	1,421	1,004	271	78	42	26	126
Berkeley, Calif.	12	7	3	1	1	-	1
Fresno, Calif.	107	72	19	9	5	2	5
Glendale, Calif.	12	10	1	1	-	-	2
Honolulu, Hawaii	89	70	16	1	-	2	9
Long Beach, Calif.	63	47	9	4	2	1	4
Los Angeles, Calif.	254	173	53	17	7	4	47
Pasadena, Calif.	34	24	5	4	-	1	8
Portland, Oreg.	117	84	22	5	5	1	10
Sacramento, Calif.	162	118	29	12	1	2	10
San Diego, Calif.	168	115	32	6	7	8	14
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	205	148	41	8	6	2	9
Santa Cruz, Calif.	37	24	10	-	3	-	-
Seattle, Wash.	U	U	U	U	U	U	U
Spokane, Wash.	60	41	12	4	1	2	1
Tacoma, Wash.	101	71	19	6	4	1	6
TOTAL	9,474¶	6,369	2,047	596	258	198	596

U: Unavailable. -:No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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