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### Childhood Influenza-Vaccination Coverage — United States, 2002–03 Influenza Season

Children aged <2 years are at increased risk for influenza-related hospitalizations (1–3). Beginning in 2002, the Advisory Committee on Immunization Practices (ACIP) encouraged that, when feasible, all children aged 6–23 months, as well as household contacts and out-of-home caregivers for children aged <2 years, receive influenza vaccinations each influenza season (1). Beginning with the 2004–05 influenza season, ACIP strengthened the encouragement to a recommendation (4). Other children recommended to receive influenza vaccine continue to include those aged 6 months–18 years with certain high-risk medical conditions and those aged 6 months–18 years who are household contacts of persons at high risk for influenza complications (4). This report on childhood influenza-vaccination coverage for the 2002–03 influenza season provides a baseline for the continuing assessment of coverage among children aged 6–23 months. The findings demonstrate that, during the first year of the ACIP encouragement to vaccinate children aged 6–23 months against influenza, vaccination coverage was low, with substantial variability among states and urban areas.

This report is based on data from the 2003 National Immunization Survey (NIS), an ongoing survey that provides estimates of vaccination coverage among noninstitutionalized children aged 19–35 months. Children included in the 2003 NIS were born during January 2000–July 2002. The survey is conducted in all 50 states and 28 selected urban areas (5). In 2003, entire influenza-vaccination histories were obtained for all children.

Two measures of childhood influenza-vaccination coverage are reported: 1) receipt of one or more influenza vaccinations during September–December 2002 and 2) full vaccination (based on ACIP recommendations for 2 doses of influenza vaccine for previously unvaccinated children aged <9 years and 1 dose for previously vaccinated children aged <9 years)

(4). Children were considered fully vaccinated if they had 1) received no doses of influenza vaccine before September 1, 2002, but then received 2 doses from September 1 through either the date of interview or January 31, 2003, or 2) received  $\geq 1$  dose of influenza vaccine before September 1 and then received  $\geq 1$  dose during September–December 2002. Because children aged <6 months are not eligible for vaccination and because the encouragement (and now the recommendation) calls for vaccination of children aged 6–23 months, analyses for both measures included only those children who were aged 6–23 months during the entire span of September–December 2002.

In the 2003 NIS, the overall response rate for eligible households was 62.7%, and 13,831 children (unweighted) met the age criteria for this assessment. Of these, 7.4% ( $\pm 0.7$ ) received one or more influenza vaccinations, and 4.4% ( $\pm 0.5$ ) were fully vaccinated (Table). Substantial variability in influenza coverage was observed among states and selected urban areas. Percentages of children receiving one or more influenza vaccinations ranged from 2.2% ( $\pm 2.1$ ) in El Paso County, Texas, to 26.6% ( $\pm 8.0$ ) in Rhode Island.

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

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**Editorial Note:** The findings in this report indicate that, during the first season in which ACIP encouraged childhood influenza vaccination, coverage was low and varied substantially among states. These first national estimates of childhood influenza-vaccination coverage provide a baseline for assessing implementation of the pediatric influenza-vaccination program recommended by ACIP.

Coverage estimates for other routinely recommended childhood vaccines also vary across states and urban areas (6). Further study is needed to determine the reason for such variation and to identify useful strategies for increasing annual influenza vaccination among all groups of children (and adults) for whom the vaccine is now recommended (4).

During the 2002–03 influenza season, influenza vaccination of healthy children aged 6–23 months was not yet covered by the Vaccines for Children Program (VFC) and also might not have been covered by the majority of private health plans. The ACIP encouragement rather than full recommendation and the lack of VFC coverage both likely contributed to the low coverage observed during the 2002–03 influenza season. However, beginning with the 2003–04 influenza season, ACIP voted to include in the VFC program annual influenza vaccination for all children aged 6–23 months and for household contacts of children aged <2 years. This expansion of VFC coverage for influenza vaccine enables providers to administer free influenza vaccine to the most vulnerable groups of children (i.e., Medicaid enrollees, uninsured children, American Indian/Alaska Native children, and certain children whose health insurance does not cover the cost of vaccination). More doses of influenza vaccine were produced and available than eventually were used for the 2002–03 influenza season, so problems of inadequate vaccine supply were unlikely to have contributed to the low vaccination coverage during that season.

The vaccination rates described in this report might, in part, reflect implementation of the long-standing recommendation to administer influenza vaccine to children aged ≥6 months who have a high-risk condition or who live with a child or adult with a high-risk condition. However, this possibility could not be verified because NIS does not collect information on high-risk medical conditions or household contacts with high-risk conditions. In the United States, an estimated 5.5% of children aged 6–23 months have a high-risk condition for which influenza vaccination is recommended (7). Although national vaccination-coverage data are not available for groups at high risk, studies of specific populations have reported influenza coverage among children at high risk,

**TABLE. Influenza vaccination-coverage levels among children aged 6–23 months\*, by state and selected urban area — National Immunization Survey (NIS), United States, September–December 2002**

State/Urban area	1+FLU†		Fully vaccinated§		State/Urban area	1+FLU		Fully vaccinated	
	%	(95% CI¶)	%	(95% CI)		%	(95% CI)	%	(95% CI)
United States	7.4	(±0.7)	4.4	(±0.5)	Missouri	7.4	(±3.5)	4.1	(±2.5)
Alabama	2.5	(±1.8)	1.2	(±1.2)	Montana	4.4	(±3.1)	2.2	(±2.0)
Jefferson County	3.3	(±2.8)	1.3	(±1.9)	Nebraska	16.8	(±6.1)	10.4	(±4.8)
Alaska	4.7	(±3.3)	4.0	(±3.1)	Nevada	4.8	(±3.5)	0.8	(±1.1)
Arizona	4.8	(±1.8)	2.7	(±1.3)	New Hampshire	7.7	(±4.1)	6.8	(±3.9)
Maricopa County	4.9	(±2.5)	2.3	(±1.6)	New Jersey	6.1	(±4.1)	3.3	(±3.0)
Arkansas	6.8	(±6.7)	1.7	(±1.9)	Newark	4.5	(±3.0)	2.1	(±2.2)
California	6.9	(±2.7)	4.6	(±2.4)	New Mexico	5.0	(±3.7)	2.7	(±3.0)
Los Angeles County	4.0	(±2.9)	2.1	(±2.2)	New York	6.0	(±2.6)	3.6	(±2.0)
San Diego County	7.0	(±4.5)	5.6	(±4.2)	New York City	7.0	(±4.3)	3.7	(±3.2)
Santa Clara County	10.0	(±4.7)	5.9	(±3.8)	North Carolina	9.8	(±4.9)	5.4	(±3.2)
Colorado	13.0	(±5.4)	8.6	(±4.4)	North Dakota	14.3	(±5.5)	9.5	(±4.3)
Connecticut	11.0	(±5.3)	8.0	(±4.1)	Ohio	6.4	(±3.5)	3.8	(±2.5)
Delaware	12.6	(±5.6)	7.4	(±4.6)	Cuyahoga County	7.3	(±6.0)	6.6	(±6.0)
District of Columbia	8.4	(±4.3)	5.7	(±3.6)	Franklin County	9.5	(±5.2)	5.8	(±4.1)
Florida	5.9	(±3.0)	3.9	(±2.7)	Oklahoma	4.1	(±2.4)	2.0	(±1.7)
Miami-Dade County	2.7	(±2.5)	1.9	(±2.2)	Oregon	6.4	(±3.9)	5.2	(±3.6)
Duval County	7.2	(±4.0)	2.9	(±2.1)	Pennsylvania	9.9	(±3.7)	5.8	(±2.9)
Georgia	4.4	(±2.5)	2.7	(±1.5)	Philadelphia	13.1	(±5.8)	5.5	(±3.5)
Fulton/DeKalb counties	12.0	(±5.3)	10.3	(±5.1)	Rhode Island	26.6	(±8.0)	19.2	(±7.3)
Hawaii	5.8	(±3.5)	3.8	(±2.8)	South Carolina	4.6	(±3.4)	3.9	(±3.1)
Idaho	5.1	(±3.7)	3.6	(±3.4)	South Dakota	14.5	(±5.9)	10.3	(±5.1)
Illinois	9.3	(±3.7)	3.8	(±2.1)	Tennessee	7.8	(±3.1)	4.3	(±2.0)
Chicago	7.3	(±5.0)	3.0	(±2.7)	Davidson County	7.9	(±5.0)	5.8	(±4.4)
Indiana	5.7	(±3.1)	4.6	(±2.9)	Shelby County	6.6	(±3.0)	3.5	(±1.9)
Marion County	3.5	(±3.3)	1.0	(±1.4)	Texas	5.6	(±2.1)	2.5	(±1.1)
Iowa	7.3	(±4.6)	6.3	(±4.4)	Bexar County	2.8	(±2.6)	0.6	(±1.2)
Kansas	9.6	(±4.8)	7.1	(±4.3)	City of Houston	4.8	(±3.0)	2.5	(±2.4)
Kentucky	4.6	(±2.6)	3.6	(±2.3)	Dallas County	13.0	(±5.1)	6.7	(±3.8)
Louisiana	7.5	(±3.5)	1.5	(±1.2)	El Paso County	2.2	(±2.1)	1.4	(±1.7)
Orleans Parish	8.6	(±5.0)	2.4	(±2.4)	Utah	8.6	(±4.9)	5.7	(±4.1)
Maine	6.0	(±3.4)	3.8	(±2.9)	Vermont	9.5	(±4.7)	6.1	(±3.8)
Maryland	8.4	(±3.5)	4.4	(±2.5)	Virginia	7.5	(±3.8)	5.4	(±3.5)
Baltimore	9.4	(±5.8)	3.2	(±3.3)	Washington	13.2	(±4.6)	8.9	(±4.1)
Massachusetts	7.7	(±4.1)	6.4	(±3.8)	King County	17.2	(±6.8)	12.9	(±6.2)
Boston	4.8	(±3.8)	3.6	(±3.4)	West Virginia	5.4	(±4.3)	3.6	(±3.5)
Michigan	3.9	(±2.4)	2.1	(±1.7)	Wisconsin	13.8	(±5.2)	6.2	(±3.2)
Detroit	5.6	(±5.2)	0.3	(±0.4)	Milwaukee County	8.9	(±4.5)	6.7	(±3.8)
Minnesota	23.7	(±7.9)	16.4	(±6.3)	Wyoming	3.5	(±2.5)	2.3	(±2.2)
Mississippi	2.5	(±2.3)	0.6	(±1.1)					

\* N = 13,831 (unweighted). These influenza vaccination-coverage measures represent a subset of children included in the 2003 NIS. Only those children who were aged 6–23 months during the entire period of September–December 2002 are included.

† Defined as receipt of one or more influenza vaccinations during September–December 2002.

§ Children were considered fully vaccinated if they had 1) received no doses of influenza vaccine before September 1, 2002, but then received 2 doses from September 1 through either the date of interview or January 31, 2003, or 2) received ≥1 dose of influenza vaccine before September 1, 2002, and then received ≥1 dose during September–December 2002.

¶ Confidence interval.

ranging from 7% to 79% (4,8,9). In the 2004 NIS, information on risk status of children aged 19–35 months at the time of interview and of their household contacts is being collected for a subsample of households. Additional mechanisms are needed to assess coverage among children aged >35 months, including those who have one or more high-risk medical conditions or who live with a person at high risk (e.g., a child aged <2 years).

Two decisions made during analysis might have influenced, in opposite directions, the vaccination-coverage estimates. First, analysis was limited to those vaccinations administered during September–December for the 1+ FLU measure and during September 1, 2002–January 31, 2003 (or date of interview if the interview occurred before January 31) for the fully vaccinated measure, although some vaccines might have been administered after these months and would not have

been counted. This approach possibly reduced both measures of influenza-vaccination coverage reported here, particularly the estimate of fully vaccinated children, because difficulty in scheduling and returning for the second dose of influenza vaccine might delay receipt of the second dose until later in the influenza season. Second, measurement of vaccination coverage was restricted to children aged 6–23 months during the entire influenza-vaccination period of September–December. Children in this age group were eligible for vaccination under the ACIP encouragement for the entire period of assessment, so their caregivers and providers each had an equal amount of time to ensure vaccination. Therefore, this sample of children likely has higher vaccination coverage than children who were aged 6–23 months during only a portion of the 4-month vaccination interval, thereby potentially inflating the coverage estimate.

The findings in this report are subject to at least three limitations. First, NIS is a telephone survey; although statistical adjustments compensate for expected differences in coverage in households without telephones, coverage bias might remain. Second, NIS relies on provider-verified vaccination histories; incomplete records and reporting might result in underestimates of coverage. Finally, because of sampling uncertainty and wide confidence intervals for many state and urban-area estimates from NIS, these estimates should be interpreted with caution.

Influenza-vaccination coverage among children aged 6–23 months was low during the first year of the ACIP encouragement. For the 2004–05 influenza season, an ACIP recommendation replaces the encouragement that was in place previously (10); this change is expected to result in increased vaccination coverage. However, substantial work is needed to fully implement this new recommendation for children aged 6–23 months and household contacts of children aged <2 years and to reduce the number of preventable influenza-related hospitalizations among young children (2).

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## Alcohol-Attributable Deaths and Years of Potential Life Lost — United States, 2001

Excessive alcohol consumption is the third leading preventable cause of death in the United States (1) and is associated with multiple adverse health consequences, including liver cirrhosis, various cancers, unintentional injuries, and violence. To analyze alcohol-related health impacts, CDC estimated the number of alcohol-attributable deaths (AADs) and years of potential life lost (YPLLs) in the United States during 2001. This report summarizes the results of that analysis, which indicated that approximately 75,766 AADs and 2.3 million YPLLs, or approximately 30 years of life lost on average per AAD, were attributable to excessive alcohol use in 2001. These results emphasize the importance of adopting effective strategies\* to reduce excessive drinking, including increasing alcohol excise taxes and screening for alcohol misuse in clinical settings.

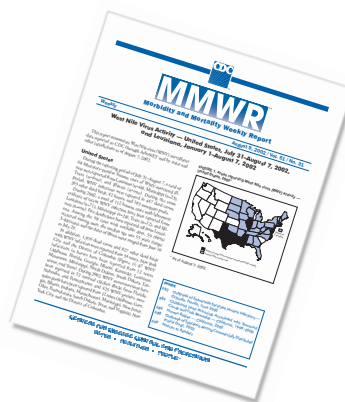
Alcohol-Related Disease Impact (ARDI)\* software was used to estimate the number of AADs and YPLLs. ARDI estimates AADs by multiplying the number of deaths from a particular alcohol-related condition by its alcohol-attributable fraction (AAF). Certain conditions (e.g., alcoholic cirrhosis of the liver) are, by definition, 100% alcohol attributable. For the majority of the chronic conditions profiled in ARDI, the system calculates AAFs by using relative risk estimates from meta-analyses (2,3) and prevalence data on alcohol use from the Behavioral Risk Factor Surveillance System. For some conditions, especially those with an acute onset (e.g., injuries), ARDI includes direct estimates of AAFs. Direct estimates of AAFs are based on studies assessing the proportion of deaths from a particular condition that occurred at or above a specified blood alcohol concentration (BAC) (4,5). For acute conditions, a death is alcohol attributable if the decedent (or, as in the case of motor-vehicle traffic, a driver or non-occupant) had a BAC of  $\geq 0.10$  g/dL. AAFs for motor-vehicle-traffic deaths are

\* Available at <http://www.cdc.gov/alcohol>.

o·rig·i·nal: *adj*

(ə-'rij-ən-'l) 1 : being the first instance or source from which a copy, reproduction, or translation can be made;

see also *MMWR*.



know what matters.



obtained from the Fatality Analysis Reporting System (6). YPLLs, a commonly used measure of premature death, are then calculated by multiplying age- and sex-specific AAD estimates by the corresponding estimate of life expectancy. For chronic conditions, AADs and YPLLs were calculated for decedents aged  $\geq 20$  years; for the majority of acute conditions, they were calculated for decedents aged  $\geq 15$  years. However, ARDI also provides estimates of AADs and YPLLs for persons aged  $< 15$  years who died from motor-vehicle crashes, child maltreatment, or low birthweight. Consistent with World Health Organization recommendations (7), the harmful and beneficial effects of alcohol use are reported separately.

In 2001, an estimated 75,766 AADs and 2.3 million YPLLs were attributable to the harmful effects of excessive alcohol use (Table). Of the 75,766 deaths, 34,833 (46%) resulted from chronic conditions, and 40,933 (54%) resulted from acute conditions. Overall, 54,847 (72%) of all AADs involved males, and 4,554 (6%) involved persons aged  $< 21$  years. Of the deaths among males, 41,202 (75%) involved men aged  $\geq 35$  years; of those deaths, 41,202 (58%) were attributed to chronic conditions. For males and females combined, the leading chronic cause of AADs was alcoholic liver disease (12,201), and the leading acute cause of AADs was injury from motor-vehicle crashes (13,674). In addition, in 2001, an estimated 11 lives were saved because of the potential benefits of excessive alcohol use, all of which were attributable to a reduced risk for death from cholelithiasis (i.e., gall bladder disease).

Of the estimated 2,279,322 YPLLs, 788,005 (35%) resulted from chronic conditions, and 1,491,317 (65%) resulted from acute conditions (Table). Overall, 1,679,414 (74%) of the total YPLLs were among males, and 271,392 (12%) involved persons aged  $< 21$  years. Of all YPLLs among males, 973,214 (58%) involved men aged  $> 35$  years, of which 53% were attributed to chronic conditions. Deaths from alcoholic liver disease resulted in 316,321 YPLLs, and deaths from motor-vehicle-traffic crashes resulted in 579,501 YPLLs.

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**Editorial Note:** In 2001, excessive alcohol use was responsible for approximately 75,000 preventable deaths and 2.3

million YPLLs in the United States. The majority of these deaths involved males (72%), and the majority of the deaths among males involved those aged  $\geq 35$  years (75%). Approximately half of the total deaths and two thirds of the total YPLLs resulted from acute conditions. Moreover, the BAC level used in this analysis for defining an alcohol-attributable injury death ( $\geq 0.10$  g/dL) is higher than the BAC level used by the National Institute for Alcohol Abuse and Alcoholism (8) to define binge drinking ( $\geq 0.08$  g/dL); as a result, all of the injury deaths were attributable to binge alcohol use (i.e.,  $\geq 5$  drinks per occasion for men;  $\geq 4$  drinks per occasion for women).

The findings described in this report are similar to recent estimates of AADs attributable to excessive drinking in the United States (1). In contrast, earlier estimates of alcohol-related deaths (9) were higher than the estimates in this analysis and other recent estimates (1) because they were calculated by using a different methodology and were based on mortality from all levels of alcohol consumption, not just excessive drinking.

The 2.3 million YPLLs for excessive drinking is approximately half of the total YPLLs that were caused by smoking in 1999, the most recent year for which this estimate is available (10), even though mortality attributable to tobacco use is nearly six times higher than that attributable to excessive drinking. This difference exists because many AADs, particularly those caused by injuries, primarily affect youth and young adults, and deaths attributable to tobacco use are uncommon in this population.

The findings in this report are subject to at least six limitations. First, data on alcohol use, which are used to calculate indirect estimates of AAFs, are based on self-reports and might underestimate the true prevalence of excessive alcohol use because of underreporting of alcohol use by survey respondents and sampling noncoverage. Second, the risk estimates used in ARDI were calculated by using average daily alcohol consumption levels that begin at levels greater than those typically used to define excessive drinking in the United States. Third, deaths among former drinkers, who might have discontinued their drinking because of alcohol-related health problems, are not included in the calculation of AAFs, even though some of these deaths might have been alcohol attributable. Fourth, ARDI does not include estimates of AADs for several conditions (e.g., tuberculosis, pneumonia, and hepatitis C) for which alcohol is believed to be an important risk factor but for which suitable pooled risk estimates were not available. Fifth, ARDI exclusively uses the underlying cause of death from vital statistics to identify alcohol-related conditions and does not consider contributing causes of death that

**TABLE. Number of deaths and years of potential life lost (YPLLs) attributable to the harmful effects of excessive alcohol use, by cause and sex — United States, 2001**

Cause	Deaths			YPLLs		
	Male	Female	Total	Male	Female	Total
<b>Chronic conditions</b>						
Acute pancreatitis	370	364	734	7,138	6,054	13,192
Alcohol abuse	1,804	517	2,321	50,375	16,433	66,808
Alcohol cardiomyopathy	443	56	499	10,195	1,552	11,747
Alcohol dependence syndrome	2,770	750	3,520	71,782	22,017	93,799
Alcohol polyneuropathy	3	0	3	86	0	86
Alcohol-induced chronic pancreatitis	224	71	295	6,209	2,135	8,344
Alcoholic gastritis	6	2	8	130	46	176
Alcoholic liver disease	8,927	3,274	12,201	221,369	94,952	316,321
Alcoholic myopathy	2	0	2	49	0	49
Alcoholic psychosis	564	178	742	12,609	3,996	16,605
Breast cancer	N/A*	352	352	N/A	6,786	6,786
Cholelithiasis	0	0	0	0	0	0
Chronic hepatitis	3	3	6	55	63	119
Chronic pancreatitis	126	106	232	2,608	1,952	4,560
Degeneration of nervous system attributable to alcohol	93	21	114	1,668	486	2,154
Epilepsy	96	81	177	2,912	2,235	5,147
Esophageal cancer	394	53	447	6,213	788	7,000
Esophageal varices	50	21	71	1,063	342	1,405
Fetal alcohol syndrome	3	2	5	210	137	347
Fetus and newborn affected by maternal use of alcohol	0	1	1	0	80	80
Gastroesophageal hemorrhage	19	9	28	301	139	440
Hypertension	632	552	1,184	9,458	6,460	15,918
Ischemic heart disease	635	273	908	8,012	2,898	10,909
Laryngeal cancer	203	30	233	3,146	519	3,665
Liver cancer	518	172	690	8,640	2,633	11,273
Liver cirrhosis, unspecified	3,917	2,802	6,719	80,616	54,528	135,144
Low birthweight, prematurity, and intrauterine growth retardation	96	50	146	7,139	3,961	11,100
Oropharyngeal cancer	303	57	360	5,280	889	6,169
Portal hypertension	23	14	37	451	298	750
Prostate cancer	233	N/A	233	2,224	N/A	2,224
Psoriasis	0	0	0	1	1	2
Spontaneous abortion	N/A	0	0	N/A	0	0
Stroke, hemorrhagic	1,399	290	1,690	22,476	4,592	27,068
Stroke, ischemic	520	191	711	5,331	1,853	7,184
Supraventricular cardiac dysrhythmia	73	92	165	639	796	1,435
<b>Total†</b>	<b>24,448</b>	<b>10,385</b>	<b>34,833</b>	<b>548,386</b>	<b>239,619</b>	<b>788,005</b>
<b>Acute conditions</b>						
Air-space transport	122	37	159	3,917	1,404	5,321
Alcohol poisoning	253	78	331	8,798	2,952	11,750
Aspiration	97	99	196	1,865	1,692	3,557
Child maltreatment	100	71	171	7,086	5,386	12,472
Drowning	671	141	812	25,461	4,633	30,093
Excessive blood alcohol concentration	1	1	2	35	26	61
Fall injuries	2,560	2,206	4,766	41,627	24,288	65,914
Fire injuries	702	465	1,167	18,991	11,729	30,720
Firearm injuries	113	18	131	4,434	695	5,129
Homicide	5,963	1,692	7,655	262,379	71,543	333,922
Hypothermia	164	83	247	3,692	1,343	5,035
Motor-vehicle–nontraffic injuries	171	33	204	5,712	1,072	6,784
Motor-vehicle–traffic injuries	10,674	3,000	13,674	442,943	136,558	579,501
Occupational and machine injuries	121	6	127	3,467	151	3,619
Injuries from other road vehicle crashes	178	53	231	6,139	1,709	7,849
Poisoning (not alcohol)	2,782	1,182	3,964	103,917	45,127	149,043
Suicide	5,617	1,352	6,969	186,568	49,297	235,865
Suicide by and exposure to alcohol	21	5	26	777	231	1,008
Water transport	90	10	100	3,220	454	3,674
<b>Total</b>	<b>30,399</b>	<b>10,534</b>	<b>40,933</b>	<b>1,131,028</b>	<b>360,289</b>	<b>1,491,317</b>
<b>Total</b>	<b>54,847</b>	<b>20,918</b>	<b>75,766</b>	<b>1,679,414</b>	<b>599,908</b>	<b>2,279,322</b>

\* Not applicable.

† Because of rounding, numbers might not sum to totals.

*"The important thing is not to stop questioning."*

Albert Einstein

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might be alcohol related. Finally, age-specific estimates of AAFs were only available for motor-vehicle–traffic deaths, even though alcohol involvement varies by age, particularly for acute conditions.

This analysis illustrates the magnitude of the health consequences of excessive alcohol use in the United States. In addition to estimating the national health effects of alcohol use, ARDI software also can produce state estimates of AADs and YPLLs. Such state-specific analyses are needed because the prevalence of excessive alcohol use, particularly binge drinking, is known to vary substantially by location. State-specific results also can focus discussions of effective public health strategies (e.g., increasing alcohol excise taxes and screening for alcohol misuse in clinical settings) to prevent excessive alcohol use and its adverse health and social consequences.

#### Acknowledgment

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## Progress Toward Global Eradication of Dracunculiasis, 2002–2003

In 1986, when the World Health Assembly adopted a resolution calling for the eradication of dracunculiasis (i.e., Guinea worm disease), an estimated 3.5 million cases occurred in 20 countries, and 120 million persons were at risk for the disease (1). This report describes the status of the global dracunculiasis eradication program (DEP)\* as of the end of 2003 (2,3). The findings indicate substantial overall progress towards eradication in 2003 compared with 2002, a major reduction in cases in Sudan, and an increase in cases in Ghana. Further progress will require 1) increased surveillance in all areas in which dracunculiasis is endemic or was previously endemic, 2) access to areas that lack security, and 3) concentrated efforts in Sudan once peace is achieved.

By the end of 2003, annual incidence of dracunculiasis had been reduced >99% from that estimated in 1986, and eight countries in which the disease was previously endemic (Cameroon, Central African Republic, Chad, India, Kenya, Pakistan, Senegal, and Yemen) were free of the disease. Of the remaining 12 countries in which dracunculiasis remains endemic, five reported <100 cases each (Benin, Cote d'Ivoire, Ethiopia, Mauritania, and Uganda) (Figure). During 2002–2003, the number of cases reported worldwide decreased 41% (from 54,683 to 32,193), and the number of villages reporting  $\geq 1$  case decreased 26% (from 6,255 to 4,659). Of the remaining dracunculiasis cases, 89% were reported in Sudan (63%) and Ghana (26%). Of the 143 cases that were exported from one country to another during 2003, a total of 58 were

exported from Ghana, 40 from Sudan, 23 from Mali, eight each from Niger and Togo, four from Nigeria, and two from Cote d'Ivoire (4).

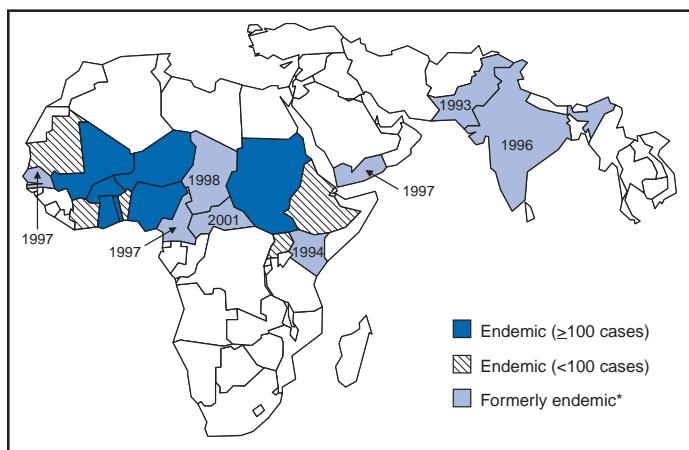
National programs intensified their interventions in most areas during 2003 compared with 2002 (Table). However, the percentage of cases that were reportedly contained in 2003 remained <75% for nine of the 12 countries. A case of dracunculiasis is classified as contained if three conditions are met: 1) the infected person is detected within 24 hours of the emergence of the Guinea worm through the skin, 2) actions (e.g., occlusive bandages, counseling, and care of the patient until the worm is extracted) are taken to prevent the person from contaminating sources of drinking water, and 3) the previous two conditions are confirmed by a health-care provider within 7 days of the occurrence.

Sudan reported 51% fewer cases in 2003 (20,299 cases from 3,407 villages; reporting rate<sup>†</sup>: 66%) than in 2002 (41,493 cases from 4,333 villages; reporting rate<sup>§</sup>: 74%). Sudan's DEP is accessing more villages than ever (approximately 6,200) as a result of the official ceasefire observed since October 2002 as part of peace negotiations to end the civil conflict. This program continues to prepare for intensified activities after a possible peace agreement, but the conflict in southern Sudan remains the greatest impediment to the Sudanese and global eradication campaigns. However, during 2003, the northern states of Sudan reported no indigenous cases for the first time since reporting began, experiencing only imported cases (n = 298) from the south of the country.

Ghana reported 8,290 cases in 2003, a 48% increase compared with 2002 (5,611); of these, 7,879 (95%) were reported in 15 of the country's 110 districts. This increase is attributable to improved surveillance, several unexpected outbreaks, and inadequate interventions in villages where dracunculiasis was known to be endemic during 2002. Increased cases offset substantial reductions in cases in some districts during the latter half of 2003. The top five districts where dracunculiasis is endemic, which reported 26% of all Ghana's cases in 2002, reduced their numbers of cases by 37.5% (from 1,486 to 929) during July–December 2002 and the first 6 months of 2003. However, overall cases in the top 15 districts where dracunculiasis is endemic increased 7.0% during the same period (from 2,327 to 2,491), mainly because of increases in cases of >1,000% in Nkwanta (from 54 to 584) and Savelugu-Nanton (from 15 to 228) districts. During 2002–2003, Ghana reduced by 2% (from 5,611 to 5,508) the number of cases in

\* Major program partners include the ministries of health in 20 countries where dracunculiasis is or was endemic, The Carter Center, United Nations Children's Fund (UNICEF), World Health Organization, Bill and Melinda Gates Foundation, other bilateral donors, U.S. Peace Corps, and CDC.

**FIGURE. Status of dracunculiasis eradication program — worldwide, 2003**



\* Includes year in which most recent indigenous case was reported.

<sup>†</sup> Percentage of villages where dracunculiasis was known to be endemic during 2002–2003 that reported  $\geq 1$  indigenous case in 2003.

<sup>§</sup> Percentage of villages where dracunculiasis was known to be endemic during 2001–2002 that reported  $\geq 1$  indigenous case in 2002.

**TABLE. Number of dracunculiasis cases reported, number of villages where dracunculiasis is endemic, and status of interventions against dracunculiasis, by country — worldwide, 2003**

Country	No. of reported cases (indigenous) in 2003	% of cases contained during 2003	No. of villages/localities where interventions were applied in 2002 and 2003	% change in cases where interventions were applied in 2002 and 2003	Villages/Localities							
					No. reporting $\geq 1$ cases	No. reporting only imported cases	No. reporting indigenous cases	% reporting monthly*	% with filters in all households*	% using ABATE <sup>®</sup> *	% with $\geq 1$ sources of safe water*	% provided with health education*
Sudan	20,299	(18)	4,289	(-57)	3,387	0	3,387	(66)	(67)	(2)	(41)	(91)
Ghana	8,285	(59)	1,200	(-2)	975	330	645	(99)	(100)	(39)	(42)	(100)
Nigeria	1,459	(74)	540	(-67)	280	41	239	(100)	(100)	(45)	(68)	(100)
Mali	824	(54)	178	(-39)	187	2	185	(98)	(85)	(13)	(16)	(100)
Togo	622	(74)	232	(-70)	168	97	71	(100)	(92)	(83)	(44)	(100)
Niger	279	(49)	92	(-45)	78	17	61	(100)	(100)	(28)	(6)	(100)
Burkina Faso	175	(59)	133	(-83)	69	31	38	(82)	(100)	(20)	(70)	(100)
Cote d'Ivoire	42	(48)	26	(-93)	12	0	12	(95)	(84)	(67)	(80)	(77)
Benin	26	(100)	31	(-86)	13	4	9	(89)	(100)	(100)	(92)	(100)
Ethiopia	13	(96)	12	(-46)	12	10	2	(100)	(100)	(100)	(25)	(100)
Uganda	13	(73)	18	(-88)	8	9	1	(100)	(100)	(96)	(100)	(100)
Mauritania	13	(77)	18	(-81)	9	0	9	(98)	(100)	(54)	(86)	(100)
<b>Total</b>	<b>32,050</b>	<b>(34)</b>	<b>6,769</b>	<b>(-53)</b>	<b>5,198</b>	<b>541</b>	<b>4,659</b>	<b>(78)</b>	<b>(78)</b>	<b>(17)</b>	<b>(44)</b>	<b>(94)</b>

\*Percentage is based on the number of villages reporting  $\geq 1$  indigenous case in 2002 and/or 2003 in each country.

the villages where dracunculiasis is known to be endemic in which authorities intervened in 2002.

During 2002–2003, Nigeria and Togo reduced their indigenous cases by 62% (from 3,820 to 1,459) and 58% (from 1,502 to 669), respectively, and increased reported rates of case containment from 66% to 74% and from 62% to 74%, respectively. In Mali and Niger, where lack of security delayed interventions among nomadic Tuareg populations until late 2001 and late 2002, respectively, cases were reduced by 4% (from 861 to 829) and increased by 20% (from 248 to 293). Lack of security remains a critical limiting factor for the programs in Cote d'Ivoire, Ethiopia, Sudan, and Uganda.

**Reported by:** World Health Organization Collaborating Center for Research, Training, and Eradication of Dracunculiasis; The Carter Center, Atlanta, Georgia. Div of Parasitic Diseases, National Center for Infectious Diseases, CDC.

**Editorial Note:** Dracunculiasis is a parasitic infection caused by *Dracunculus medinensis*. Persons become infected by drinking water from ponds contaminated by copepods (water fleas) that contain immature forms of the parasite. One year later, adult worms approximately 1 meter (40 inches) in length emerge through skin lesions, usually on the lower limbs, which frequently develop severe secondary bacterial infections. No effective treatment or vaccine for the disease exists, and infected persons do not become immune to future infections by the parasite. However, dracunculiasis can be prevented by 1) filtering drinking water through a finely woven cloth, 2) treating contaminated water with the larvicide ABATE<sup>®</sup> (temephos), 3) educating persons to avoid entering water sources when Guinea worms are emerging from their bodies, and 4) providing clean water from bore-hole or hand-dug wells (5).

The 12 remaining countries where dracunculiasis is endemic made substantial progress toward eradication in 2003, which reflects intensification of interventions in most areas during 2002. Further improvements in public awareness are expected as a result of targeted mass media campaigns in the three countries with the most cases (Ghana, Nigeria, and Sudan).

In September 2003, a joint program review was held at The Carter Center (Atlanta, Georgia) for the three countries. The delegations included senior ministerial representatives and technical leaders of the eradication programs. All 12 countries developed specific programmatic objectives for 2004; improving interventions remains a key objective. Major obstacles to rapid completion of the campaign include 1) ongoing lack of security in areas of western Africa where dracunculiasis is endemic (e.g., Cote d'Ivoire) and 2) limited funding to meet the challenges of eradicating dracunculiasis in postwar Sudan. All countries should implement daily surveillance in communities where dracunculiasis is known to be endemic to ensure detection and containment as soon as any worm begins to emerge. Moreover, all countries in which dracunculiasis is endemic should implement improved surveillance in large areas in which the disease was previously endemic.

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## Tuberculosis Transmission in a Renal Dialysis Center — Nevada, 2003

Among persons with chronic renal failure, infection with *Mycobacterium tuberculosis* is more likely to progress to tuberculosis (TB) (1,2). Chronic renal failure is an immunocompromising condition associated with cutaneous anergy, which can result in a false-negative tuberculin skin test (TST) result (3–5). In 2003, a health-care worker (HCW) (i.e., a hemodialysis technician) in an outpatient renal dialysis center in Nevada became ill with pulmonary TB, exposing more than 400 patients and other employees. The HCW had a previous positive TST result but never received treatment for TB infection. This report summarizes the results of a contact investigation, which suggested that the HCW had transmitted *M. tuberculosis* to 29 patients and 13 employees. The findings underscore the need for TB screening and treatment of TB infection for all HCWs and patients at high risk.

Before diagnosis in August 2003, the HCW had experienced 6 weeks of cough, fatigue, and a 14-pound weight loss. Microscopic examination of sputum was 4+ positive for acid-fast bacilli (AFB), indicating infectiousness, and sputum culture yielded *M. tuberculosis* susceptible to all first-line anti-TB medications. The HCW was considered infectious for 3 months before TB diagnosis. During the 3-month period, employees and patients in the dialysis center were considered contacts and evaluated. Employee work schedules and patient dialysis schedules were reviewed to quantify the cumulative hours each person had been exposed to the HCW. In September 2003, initial screening of exposed persons included review of medical history, TB symptoms, and previous TST

results. Persons without a previous positive TST result received a TST. All dialysis patients were referred for chest radiographs. Persons with TB symptoms or an abnormal chest radiograph submitted sputum for AFB testing and culture. Persons with a negative TST result (<5 mm induration) during initial testing were retested 12 weeks later. TB disease was defined as clinical signs or symptoms of TB with bacteriologic or radiographic confirmation. Latent TB infection (LTBI) was defined as a positive TST result ( $\geq 5$  mm induration) and exclusion of TB disease by chest radiograph and sputum culture. Patients with a positive TST result who either had a previously documented negative TST result within the preceding 12 months or reported not having a previous positive TST were assumed to be recently infected by the HCW.

As of August 2004, a total of 481 contacts had been identified; 48 (10%) were patients from other jurisdictions who had been referred for evaluation by TB-control programs in their jurisdictions. Of the remaining 433 contacts, 95 (22%) were employees, and 291 (67%) were patients of the dialysis center; an additional 47 (11%) were other contacts\*. Of the 433 contacts, 333 (77%) were evaluated (Table); 36 (11%) had a previous positive TST result. The remaining 297 contacts received a TST; 48 (16%) had a positive TST result. A total of 41 (12%) of the 333 evaluated contacts reported TB symptoms, but TB disease was excluded by chest radiograph and sputum culture.

The dialysis center employees were assumed to be immunocompetent and used as a surrogate group of contacts to evaluate for evidence of TB transmission. Of the 95 employ-

\* Relatives of the HCW, persons who accompanied patients to the dialysis center, and persons with unidentified relationships to the HCW.

**TABLE. Results of tuberculin skin tests (TSTs) of tuberculosis (TB) contacts at an outpatient renal dialysis center — Nevada, 2003**

Category	Employees (n = 95)		Patients (n = 291)		Other* (n = 47)		Total (n = 433)	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>Total evaluated†</b>	<b>80</b>	<b>(84)</b>	<b>212</b>	<b>(73)</b>	<b>41</b>	<b>(87)</b>	<b>333</b>	<b>(77)</b>
Previous positive TST results§	12	(15)	16	(8)	8	(20)	36	(11)
<b>Total tested¶</b>	<b>68</b>	<b>(85)</b>	<b>196</b>	<b>(92)</b>	<b>33</b>	<b>(80)</b>	<b>297</b>	<b>(89)</b>
Positive TST result**	13	(19)	29	(15)	6	(18)	48	(16)
Positive TST result on initial test††	7	(54)	21	(72)	6	(100)	34	(71)
Positive TST result on repeat test§§	6	(46)	8	(28)	0	(0)	14	(29)
TST conversions¶¶	6	(46)	1	(3)	0	(0)	7	(15)

\* Other includes relatives of the health-care worker (HCW) with TB (n = two), persons who accompanied patients to the dialysis center (n = 38), and persons with unidentified relationships to the HCW (n = seven).

† Persons who underwent review of medical history, TB symptoms, and previous TST results.

§ Persons evaluated who reported or had a previously documented positive TST result.

¶ Persons who received a TST during this contact investigation.

\*\* Persons with a TST result of  $\geq 5$  mm induration.

†† Persons who received a TST immediately after TB was diagnosed in the HCW.

§§ TST was repeated 12 weeks later on all persons with a negative TST result (<5 mm induration) during the initial screening.

¶¶ Documented induration increase of  $\geq 10$  mm compared with a routine TST obtained during the 2-year period before the exposure among persons with a positive TST result.

ees identified as contacts, 80 (84%) were evaluated; of these, 12 (15%) had a previously documented positive TST result. The remaining 68 employees received a TST; 13 (19%) had a positive TST result. Employees with positive TST results had chest radiographs that were normal. The 13 employees with a positive TST result were similar to the 55 employees with a negative TST result (i.e., by hours of exposure to the HCW, national origin, race/ethnicity, and age). Six (46%) of the 13 employees with a positive TST result had documented TST conversion (i.e., induration increase of  $\geq 10$  mm compared with a routine TST obtained during the 2-year period before exposure); four worked on the same shift as the HCW.

No routine TB screening program had been conducted for patients at the dialysis center. One patient had a documented negative TST result before the exposure; 16 patients reported a previous positive TST result. Of the 291 patients identified as contacts, 212 (73%) were evaluated; 196 (92%) received a TST. A total of 76 (26%) had chest radiographs; five (7%) had abnormal radiographs, and TB disease was excluded subsequently by sputum culture. A total of 29 (15%) patients had a positive TST result. Patients with a positive TST result were older (median age: 65 years; range: 44–88 years) than those with a negative TST result (median age: 60 years; range: 11–95 years) ( $p = 0.01$ , Wilcoxon rank-sum). The median

time of exposure to the HCW was the same (16 hours) for patients with positive and negative TST results. Of the 196 patients, 72 (37%) received direct care from the HCW; of these, nine (13%) had a positive TST result. Among the 72 patients, the median time of exposure was not different for those with a positive TST result compared with those with a negative TST result.

Employees with a positive TST result and exposed patients were offered a twice-weekly 9-month regimen of isoniazid. As of September 10, six employees and six patients had completed treatment for LTBI, and two patients had died of unrelated causes while receiving treatment. Two patients are continuing LTBI treatment. No secondary cases have been identified.

**Reported by:** *L Hickstein, C McPherson, MD, D Kwalick, MD, V DeFriez, R Todd, DrPH, Nevada State Health Div. K Ijaz, MD, I González, MD, M Haddad, MSN, P Tribble, MA, Div of Tuberculosis Elimination, National Center for HIV, STD, and TB Prevention; M Arduino, DrPH, Div of Healthcare Quality Promotion, National Center for Infectious Diseases; S Wei, Div of Applied Public Health Training, Epidemiology Program Office; J Miller, MD, EIS Officer, CDC.*

**Editorial Note:** In this report, TST conversions among six immunocompetent employees suggest that *M. tuberculosis* transmission occurred within the renal dialysis center. Only

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one patient had a previously documented TST result for comparison; therefore, all 29 patients with a positive TST result were considered recently infected. Because exposure duration did not differ between the employees with positive TST results and those with negative TST results, no minimum level of exposure was associated with risk for infection with *M. tuberculosis*.

The findings in this report are subject to at least one limitation. The majority of persons with chronic renal failure have impaired delayed-type hypersensitivity, which might result in false-negative TST results (3–5). The positive TST results from this investigation likely underestimated the true prevalence of LTBI among these patients.

CDC recommends that after a known exposure to infectious TB disease, immunocompromised persons should receive treatment for presumptive LTBI, regardless of TST result (2). LTBI treatment was offered to all patients exposed to the HCW, even if their TST remained negative after repeat screening. However, convincing these high-risk contacts of the benefits of treating LTBI often was unsuccessful even after repeat counseling. Therefore, this investigation fell short of the national health objective for 2010 that 85% of TB contacts and other persons at high risk complete a course of treatment for LTBI (6). Because recently infected contacts are at high risk for having TB disease, the local health department is training the dialysis center employees to detect signs and symptoms of TB disease and ensure that anyone with TB symptoms is identified and treated promptly. If dialysis patients have TB disease diagnosed, maintenance dialysis in airborne isolation is required until they have completed enough anti-TB therapy to demonstrate clinical improvement and have negative *M. tuberculosis* sputum cultures.

TB infection has a higher risk for progression to TB disease among renal dialysis patients because of their older age and immunocompromised status associated with chronic renal failure and other illnesses (7). Studies in New Jersey and California have documented TB disease rates six to 11 times greater among hemodialysis patients than among the overall state populations (8,9). Because these patients spend more time in health-care settings, when *M. tuberculosis* infection progresses to TB disease, they can expose other persons who also are at greater risk for disease. Therefore, despite the limitations of TST in this population, early detection and treatment of LTBI is imperative (2). All dialysis patients should be tested at least once for a baseline TST result and rescreened if TB exposure is detected (2,10).

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## West Nile Virus Activity — United States, September 15–21, 2004

During September 15–21, a total of 218 cases of human West Nile virus (WNV) illness were reported from 21 states (Arizona, California, Florida, Illinois, Indiana, Kansas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wisconsin, and Wyoming).

During 2004, a total of 39 states have reported 1,604 cases of human WNV illness to CDC through ArboNET (Table, Figure). Of these, 507 (32%) cases were reported from California, 355 (22%) from Arizona, and 225 (14%) from Colorado. A total of 897 (58%) of the 1,541 cases for which all data were available occurred in males; the median age of patients was 51 years (range: 1 month–99 years). Illness onset ranged from April 23 to September 14; a total of 48 cases were fatal.

A total of 143 presumptive West Nile viremic blood donors (PVDs) have been reported to ArboNET in 2004. Of these, 51 (36%) were reported from California; 37 (26%) from Arizona; 15 from Texas; 12 from New Mexico; five from Colorado; four from Georgia; three each from Florida, Oklahoma, and South Dakota; two each from Missouri and Wisconsin; and one each from Iowa, Louisiana, Minnesota, Nebraska, North Dakota, and Pennsylvania. Of the 143 PVDs, three persons aged 35, 69, and 77 years subsequently had neuroinvasive illness, and 32 persons (median age: 55 years; range: 17–73 years) subsequently had West Nile fever.

**TABLE. Number of human cases of West Nile virus (WNV) illness, by state — United States, 2004\***

State	Neuroinvasive disease†	West Nile fever§	Other clinical/unspecified¶	Total reported to CDC**	Deaths
Alabama	9	0	0	9	0
Arizona	122	65	168	355	5
Arkansas	5	6	0	11	0
California	117	181	209	507	15
Colorado	32	193	0	225	2
Connecticut	0	1	0	1	0
Florida	26	5	0	31	1
Georgia	4	3	1	8	0
Idaho	0	0	2	2	0
Illinois	14	14	1	29	1
Indiana	2	0	1	3	1
Iowa	3	4	2	9	1
Kansas	25	0	0	25	1
Kentucky	0	3	0	3	0
Louisiana	30	4	0	34	3
Maryland	4	3	1	8	0
Michigan	5	0	0	5	0
Minnesota	9	13	0	22	2
Mississippi	13	6	1	20	2
Missouri	16	2	1	19	1
Montana	1	3	0	4	0
Nebraska	0	16	0	16	0
Nevada	21	15	0	36	0
New Mexico	22	36	4	62	3
New York	3	2	0	5	0
North Carolina	2	0	0	2	0
North Dakota	2	17	0	19	1
Ohio	2	1	0	3	1
Oklahoma	4	1	0	5	1
Oregon	0	1	0	1	0
Pennsylvania	2	2	0	4	0
South Carolina	0	1	0	1	0
South Dakota	5	33	0	38	1
Tennessee	5	1	0	6	0
Texas	42	10	0	52	5
Utah	4	2	0	6	0
Virginia	2	0	1	3	0
Wisconsin	4	4	0	8	1
Wyoming	2	4	1	7	0
<b>Total</b>	<b>559</b>	<b>652</b>	<b>393</b>	<b>1,604</b>	<b>48</b>

\* As of September 21, 2004.

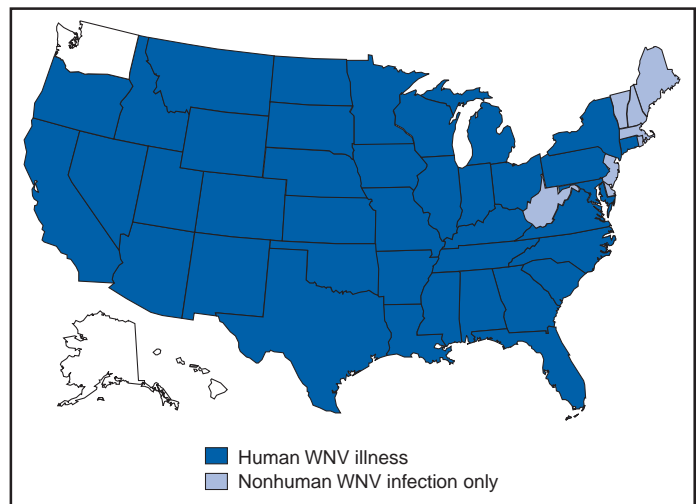
† Cases with neurologic manifestations (i.e., West Nile meningitis, West Nile encephalitis, and West Nile myelitis).

§ Cases with no evidence of neuroinvasion.

¶ Illnesses for which sufficient clinical information was not provided.

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

In addition, during 2004, a total of 4,188 dead corvids and 987 other dead birds with WNV infection have been reported from 44 states and New York City. WNV infections have been reported in horses from 34 states (Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, Wisconsin,

**FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004\***

\* As of 3 a.m., Mountain Standard Time, September 21, 2004.

West Virginia, and Wyoming) and in five dogs from Nevada and New Mexico. Three squirrels with WNV infection were reported from Arizona. Six unidentified animal species with WNV infection were reported from Arizona, Idaho, Illinois, Iowa, Missouri, and Nevada. WNV seroconversions have been reported in 799 sentinel chicken flocks from 13 states (Alabama, Arizona, Arkansas, California, Delaware, Florida, Iowa, Louisiana, Nebraska, Nevada, Pennsylvania, South Dakota, and Utah) and in seven wild hatchling birds from Missouri and Ohio. Three seropositive sentinel horses were reported from Puerto Rico. A total of 5,707 WNV-positive mosquito pools have been reported from 34 states and New York City.

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

## Outbreak of Cyclosporiasis Associated with Snow Peas — Pennsylvania, 2004

On September 17, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

During June–July 2004, public health officials in Pennsylvania were notified of cases of the parasitic disease cyclosporiasis (1,2) among persons associated with a residential facility (e.g., residents, staff, and volunteers). CDC confirmed the diagnosis of *Cyclospora cayetanensis* infection (1) by examining stool specimens from multiple patients. By early July, local public health officials had been notified of approximately 50 poten-

tial cases of cyclosporiasis associated with the facility; onsets of illness were from early June through early July. This report describes the findings of the epidemiologic and traceback investigations, which determined the cases were linked to consumption of raw Guatemalan snow peas at five special events, for which food was prepared by the facility staff, from late May through late June (Table). This is the first documented outbreak of cyclosporiasis linked to snow peas. The Food and Drug Administration (FDA) and CDC are working with Guatemalan officials to determine the sources of the snow peas and possible modes of contamination.

A case of cyclosporiasis was defined as onset of illness 1–14 days after consumption of food or beverages served at one or more of the five special events. Persons with laboratory-confirmed cases had infection confirmed by CDC by examining stool specimens for *Cyclospora* (*I*), and at least one gastrointestinal (GI) symptom (i.e., diarrhea [loose or watery stool], nausea, vomiting, abdominal cramps, loss of appetite, or unintentional weight loss) or constitutional symptom (i.e., fever, chills, muscle aches, joint aches, generalized body aches, headache, or fatigue). Persons with probable (clinically defined) cases of infection either had 1) three or more loose or watery stools during a 24-hour period and at least one other symptom or 2) five or more symptoms, including at least three GI symptoms.

Of the 349 persons associated with the facility who were in the population potentially at risk for infection, 315 (90%) persons were interviewed to ascertain exposure (e.g., event attendance) and illness status; 215 (68%) of the 315 interviewed had attended at least one event. Of the 215 persons, 96 (45%) had illness that was consistent with one of the case definitions; 40 cases were laboratory confirmed, and 56 were probable. All of the cases were associated with special events (i.e., none were attributable to other meals at the facility, which were prepared by the same staff and in the same kitchen), and each of the five events was associated with laboratory-confirmed cases. Therefore, the investigation focused on identifying an item served at all five events, but not at other meals.

Only pasta salad met these criteria. In addition, pasta salad was the only food item statistically significantly associated with illness in retrospective cohort studies, which were conducted among persons who attended the two most recent events (events D and E) (Table); data for 77 attendees were included in analyses. The summary relative risk for these two events (i.e., for the association between pasta salad and illness) was 32 (95% confidence interval: 5–219;  $p < 0.001$ ). Specifically, 90% (38 of 42) of the persons who ate the salad had cases of cyclosporiasis, compared with 3% (one of 35) of the persons who did not eat the salad. The median incubation periods for illness associated with events D and E were 8 days (range: 1–13 days) and 7 days (range: 1–10 days), respectively.

The pasta salad included multiple types of raw produce, none of which were implicated in investigations of previous outbreaks of cyclosporiasis (*I*). Of the produce used in the salad (Table), only snow peas met all of the following criteria: 1) were included in all three batches of the salad served at the five events, 2) were from the same “lot” (i.e., from one container, purchased on 1 day, and from one supplier), and 3) were not served at other meals except the five events. Event A on May 31 (Table) was the first occasion in 2004 at which pasta salad or snow peas were served by the facility.

All of the snow peas used by the facility came from the same 4.5-kg container, which was purchased on May 21 and refrigerated thereafter. On June 22, after the last (third) batch of salad was prepared (Table), the residual snow peas were discarded; none were available for testing for *Cyclospora* oocysts or DNA when the investigation was initiated. In an investigation conducted by FDA, the snow peas were traced to an exporter in Guatemala.

The snow peas were handled only on days when batches of salad were prepared (Table). For each batch, a handful of peas (approximately 1 kg) was removed from the container, washed in municipal water, and added to the salad. None of the food handlers who prepared or served the salad had symptoms consistent with cyclosporiasis before the onset of the outbreak or on the days the first two batches were prepared or served (Table). One person who helped prepare the third batch had

**TABLE. Characteristics of five special events associated with cases of cyclosporiasis in a residential facility — Pennsylvania, 2004**

Characteristic	Event				
	A	B	C	D	E
Date of event	May 31	June 3	June 23	June 24	June 24
No. of batch of pasta salad served*	First	Second	Third	Third	Third
Date batch prepared	May 29	June 2	June 22	June 22	June 22
Retrospective cohort study conducted	No	No	No	Yes	Yes

\* Raw produce in the pasta salad, which varied among the batches, included snow peas, Vidalia onions, red peppers, tomatoes, broccoli, celery, green peppers, and carrots. However, Vidalia onions and red peppers were included in only one and two batches, respectively; different types of tomatoes were used in different batches; different “lots” of broccoli and celery, from different suppliers, were used in the various batches; and green peppers and carrots were also served raw at other meals, besides the five events.

a probable case of cyclosporiasis after eating salad from the first two batches.

**Reported by:** A Crist, PhD, York Hospital, York; C Morningstar, R Chambers, T Fitzgerald, D Stoops, M Deffley, Y Reyes, T Hiden, J Sullivan, D Hawk, MD, York City Health Bur; P Lurie, MD, M Moll, MD, Div Infectious Disease Epidemiology; S Yeager, L Lind, MPH, J Burkee, K Warren, MPH, M Marcus, J Reeser, H Davidson, S Thomas, Bur of Community Health Systems, Pennsylvania Dept of Health. Food and Drug Administration, College Park and Rockville, Maryland. BL Herwaldt, MD, M Hlavsa, MPH, SP Johnston, MS, H Bishop, A daSilva, PhD, A Hightower, MS, Div Parasitic Diseases, National Center for Infectious Diseases; DK El Reda, DrPH, N Flowers, MD, EIS officers, CDC.

**Editorial Note:** The findings of this investigation indicate that raw Guatemalan snow peas were linked to this outbreak of cyclosporiasis in Pennsylvania. No evidence of ongoing transmission has been obtained, despite heightened surveillance for cases of cyclosporiasis. This is the first investigation in which snow peas have been implicated as the vehicle of an outbreak of cyclosporiasis. Several other types of fresh produce (e.g., raspberries, basil, and mesclun lettuce), from various countries, have previously been implicated as vehicles of U.S. cyclosporiasis outbreaks (1).

FDA and CDC are working with Guatemalan officials to determine the sources of the snow peas (e.g., farms or cooperatives) and possible modes of contamination. The modes of contamination of implicated vehicles have not been definitively determined for any previous foodborne outbreak of cyclosporiasis (1); better understanding of the biology and epidemiology of the parasite is needed. For imported vehicles of infection, international collaboration is critical to the success of investigations and to the identification of appropriate prevention and control measures. Produce should be thoroughly washed before it is eaten. This practice might decrease but not eliminate the risk for transmission of *Cyclospora* (1,3).

Health-care providers should consider the diagnosis of *Cyclospora* infection in persons with prolonged or relapsing-diarrheal illness and specifically request testing of stool specimens for this parasite (1); such testing is not routinely conducted by most laboratories. Trimethoprim/sulfamethoxazole (TMP/SMX) has been shown in a placebo-controlled trial to be effective treatment for *Cyclospora* infection (4). Adults should receive TMP 160 mg plus SMX 800 mg (one double-strength tablet) orally, twice a day for 7 days. Some patients might benefit from longer courses of therapy. Alternative treatments for persons allergic to sulfa drugs have not yet been identified (1).

Newly identified clusters of cases of cyclosporiasis should be investigated to identify the vehicles of infection and their sources and modes of contamination. Although cases of

cyclosporiasis are not yet reportable in all U.S. states and territories, such cases are nationally notifiable. Clinicians and laboratorians who identify cases of cyclosporiasis, especially ones unrelated to foreign travel, are encouraged to inform the appropriate local public health officials, who are encouraged to contact CDC's Division of Parasitic Diseases, National Center for Infectious Diseases. To report cases and potential outbreaks, contact CDC, telephone 770-488-7319; for questions about laboratory diagnosis of infection, 770-488-4474; for clinical questions, 770-488-7775. Additional information about cyclosporiasis is available at <http://www.cdc.gov/ncidod/dpd/parasites/cyclospora/default.htm>.

#### Acknowledgments

This report is based in part on contributions by W Ness, MBA, D German, S Leyland, community partners, Pennsylvania. R Klein, PhD, Medical Entomology Research and Training Unit/Guatemala City, Guatemala; C Bern, MD, M Bartlett, Div Parasitic Diseases, National Center for Infectious Diseases, CDC.

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#### Notice to Readers

### Supplemental Recommendations About the Timing of Influenza Vaccination, 2004-05 Season

In early August 2004, discussion with the Food and Drug Administration (FDA) and influenza vaccine manufacturers indicated that production of vaccine for the 2004-05 influenza season was proceeding satisfactorily. However, on August 26, Chiron Corporation announced that, in conducting final internal release procedures for its inactivated influenza vaccine, Fluvirin<sup>®</sup>, the company's quality-assurance systems had identified a small number of lots that did not meet product sterility specifications; these lots will not be distributed. In recent discussions with CDC, the company stated that laboratory testing determined the problem was localized. After the company completes its quality-assurance testing, all remaining lots that have met sterility specifications will be available for distribution. Chiron expects to distribute 46-48 million doses during this influenza season, with 42-44



million doses distributed in October and the remaining doses distributed in early November. Total influenza-vaccine production from all manufacturers who will supply the U.S. market during the 2004–05 influenza season is estimated at 100 million doses, which is approximately 13 million more doses than was produced for the 2003–04 influenza season.

CDC is recommending that influenza vaccination proceed for all recommended persons as soon as vaccine is available, recognizing that availability might be limited in early October. Some delay might occur for customers receiving influenza-vaccine doses purchased from Chiron, which might result in a need to reschedule planned clinics and other vaccination campaigns. The optimal time to vaccinate against influenza is October and November, and the Advisory Committee on Immunization Practices (ACIP) recommends that persons planning substantial organized vaccination campaigns consider scheduling those events after mid-October because availability of vaccine in any one location cannot be ensured consistently in early fall. Aventis Pasteur, Inc. expects to distribute approximately 52 million doses of inactivated influenza vaccine (Fluzone<sup>®</sup>) this season. MedImmune Vaccines, Inc., expects to distribute approximately 1.5 million doses of live attenuated influenza vaccine (FluMist<sup>™</sup>). No delays in the timing of distribution of vaccine from these two manufacturers of influenza vaccine are expected.

The annual pre-season assessment of each year's projected vaccine supply was requested by ACIP to help address vaccine shortages first experienced in 2000. The committee recommended that mass vaccination campaigns for the 2000–01 season be delayed until the availability of supply was ensured (1,2). ACIP issued similar recommendations for the 2001–02 influenza season (3) and incorporated into its annual influenza recommendations the possible use of prioritized timing

of vaccine administration when necessary because of vaccine shortages or delays (4). No delays occurred in vaccination campaigns during either the 2002–03 or the 2003–04 (5) seasons.

CDC also will purchase 4.5 million doses of inactivated influenza vaccine, which will be held in a stockpile to ensure sufficient supply in the event of increased demand like that experienced last winter. CDC has legislative authority through the Vaccines for Children program to purchase influenza vaccine for a national stockpile program for children aged  $\leq 18$  years. Additional information about influenza and influenza vaccination is available from CDC at <http://www.cdc.gov>.

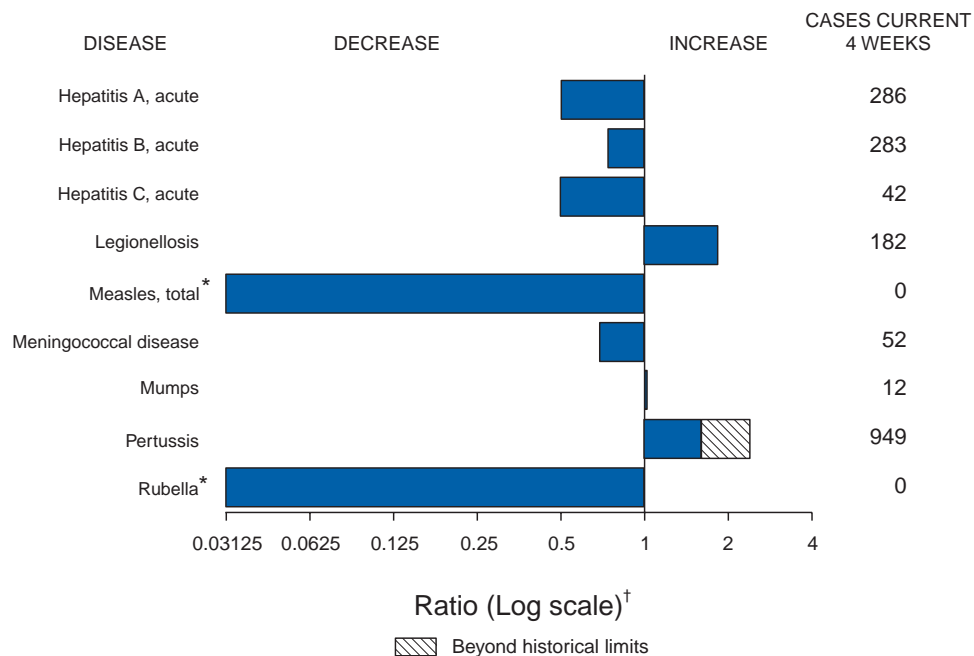
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#### Erratum: Vol. 53, No. 34

In the report, "Suspension of Rotavirus Vaccine After Reports of Intussusception — United States, 1999," first paragraph, second sentence, the date for when rhesus-human rotavirus reassortant-tetavalent vaccine was licensed was incorrect. The date should be *August 31, 1998*.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 18, 2004, with historical data**



\* No Rubella cases were reported for the current 4-week period yielding a ratio for week 37 of zero (0).

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

**TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending September 18, 2004 (37th Week)\***

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	92	108
Botulism:	-	-	HIV infection, pediatric <sup>†¶</sup>	113	144
foodborne	10	8	Measles, total	23**	51 <sup>††</sup>
infant	52	49	Mumps	142	156
other (wound & unspecified)	7	17	Plague	1	1
Brucellosis <sup>†</sup>	78	68	Poliomyelitis, paralytic	-	-
Chancroid	28	43	Psittacosis <sup>†</sup>	6	9
Cholera	4	1	Q fever <sup>†</sup>	52	54
Cyclosporiasis <sup>†</sup>	187	58	Rabies, human	3	1
Diphtheria	-	-	Rubella	15	6
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE) <sup>†</sup>	190	231	SARS-associated coronavirus disease <sup>† §§</sup>	-	8
human monocytic (HME) <sup>†</sup>	175	175	Smallpox <sup>† ¶¶</sup>	-	NA
human, other and unspecified	18	37	<i>Staphylococcus aureus</i> :	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA) <sup>† ¶¶</sup>	4	NA
California serogroup viral <sup>† §</sup>	44	91	Vancomycin-resistant (VRSA) <sup>† ¶¶</sup>	1	NA
eastern equine <sup>† §</sup>	2	13	Streptococcal toxic-shock syndrome <sup>†</sup>	79	126
Powassan <sup>† §</sup>	-	-	Tetanus	10	14
St. Louis <sup>† §</sup>	5	33	Toxic-shock syndrome	92	90
western equine <sup>† §</sup>	-	-	Trichinosis	5	1
Hansen disease (leprosy) <sup>†</sup>	61	62	Tularemia <sup>†</sup>	55	60
Hantavirus pulmonary syndrome <sup>†</sup>	16	17	Yellow fever	-	-

-: No reported cases.

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

<sup>†</sup> Not notifiable in all states.

<sup>§</sup> Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

<sup>¶</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.

\*\* Of 23 cases reported, 10 were indigenous, and 13 were imported from another country.

<sup>††</sup> Of 51 cases reported, 31 were indigenous, and 20 were imported from another country.

<sup>§§</sup> Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).

<sup>¶¶</sup> Not previously notifiable.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 18, 2004, and September 13, 2003 (37th Week)\***

Reporting area	AIDS		Chlamydia <sup>†</sup>		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile <sup>§</sup>	
	Cum. 2004 <sup>††</sup>	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	27,094	29,932	617,924	606,309	4,145	2,514	2,231	2,144	556	2,416
NEW ENGLAND	873	989	21,593	19,436	-	-	123	137	-	19
Maine	15	49	1,449	1,397	N	N	16	14	-	-
N.H.	30	24	1,204	1,102	-	-	24	16	-	1
Vt.	13	13	710	731	-	-	21	23	-	-
Mass.	289	408	9,630	7,696	-	-	39	61	-	11
R.I.	98	79	2,405	2,086	-	-	4	12	-	2
Conn.	428	416	6,195	6,424	N	N	19	11	-	5
MID. ATLANTIC	5,955	6,691	76,530	75,308	-	-	294	274	5	161
Upstate N.Y.	683	671	15,724	13,704	N	N	78	74	1	-
N.Y. City	3,288	3,395	23,537	24,513	-	-	58	78	2	40
N.J.	1,014	1,152	11,389	11,162	-	-	22	13	-	17
Pa.	970	1,473	25,880	25,929	N	N	136	109	2	104
E.N. CENTRAL	2,398	2,918	105,292	109,742	12	7	651	648	27	87
Ohio	487	554	24,942	29,986	N	N	179	77	2	49
Ind.	276	378	12,954	12,215	N	N	67	62	2	10
Ill.	1,126	1,341	28,523	33,840	-	-	69	68	14	16
Mich.	386	509	26,753	21,747	12	7	115	87	5	7
Wis.	123	136	12,120	11,954	-	-	221	354	4	5
W.N. CENTRAL	597	567	36,679	35,084	5	2	278	326	57	613
Minn.	149	110	6,856	7,649	N	N	96	99	9	42
Iowa	47	63	3,642	3,666	N	N	60	54	-	70
Mo.	263	268	14,376	12,691	3	1	45	25	16	27
N. Dak.	14	3	1,086	1,110	N	N	9	11	2	93
S. Dak.	7	8	1,788	1,785	-	-	23	30	5	139
Nebr.**	33	38	3,626	3,251	2	1	23	10	-	176
Kans.	84	77	5,305	4,932	N	N	22	97	25	66
S. ATLANTIC	8,434	8,476	122,595	114,284	-	3	373	246	38	126
Del.	108	173	2,013	2,123	N	N	-	3	-	7
Md.	991	989	13,463	11,480	-	3	14	15	4	37
D.C.	523	764	2,237	2,239	-	-	11	8	-	3
Va.	481	653	15,268	13,452	-	-	42	32	2	14
W. Va.	57	60	2,004	1,792	N	N	4	4	-	1
N.C.	427	851	20,812	18,594	N	N	55	27	2	13
S.C.**	509	544	14,299	9,778	-	-	14	5	-	2
Ga.	1,185	1,375	22,933	25,088	-	-	139	86	4	13
Fla.	4,153	3,067	29,566	29,738	N	N	94	66	26	36
E.S. CENTRAL	1,336	1,303	40,121	39,544	4	1	95	97	27	66
Ky.	160	111	4,014	5,794	N	N	28	20	-	7
Tenn.**	533	570	15,776	14,359	N	N	28	32	5	13
Ala.	316	310	8,622	10,369	-	-	18	35	9	21
Miss.	327	312	11,709	9,022	4	1	21	10	13	25
W.S. CENTRAL	3,181	3,086	76,810	75,497	2	-	56	73	81	507
Ark.	134	126	5,180	5,577	1	-	14	9	5	15
La.	655	415	15,926	14,727	1	-	-	2	30	73
Okla.	133	154	7,926	8,141	N	N	16	9	4	39
Tex.**	2,259	2,391	47,778	47,052	-	-	26	53	42	380
MOUNTAIN	973	1,141	34,406	34,643	2,637	1,677	129	92	204	837
Mont.	5	11	1,574	1,383	N	N	34	17	1	73
Idaho	15	18	1,991	1,768	N	N	19	20	-	-
Wyo.	15	5	761	700	2	1	3	3	2	91
Colo.	166	295	8,262	9,119	N	N	43	23	32	601
N. Mex.	140	88	4,212	5,264	13	6	8	7	22	67
Ariz.	385	484	11,424	9,832	2,553	1,637	17	4	122	3
Utah	54	47	2,416	2,637	25	6	3	12	4	-
Nev.	193	193	3,766	3,940	44	27	2	6	21	2
PACIFIC	3,347	4,761	103,898	102,771	1,485	824	232	251	117	-
Wash.	291	309	12,470	11,469	N	N	26	25	-	-
Oreg.	219	184	5,778	5,092	-	-	28	29	-	-
Calif.	2,727	4,184	81,075	79,697	1,485	824	176	197	117	-
Alaska	37	13	2,580	2,711	-	-	-	-	-	-
Hawaii	73	71	1,995	3,802	-	-	2	-	-	-
Guam	2	5	-	450	-	-	-	-	-	-
P.R.	403	787	2,368	1,707	N	N	N	N	-	-
V.I.	10	25	143	288	-	-	-	-	-	-
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).

<sup>†</sup> Chlamydia refers to genital infections caused by *C. trachomatis*.

<sup>§</sup> Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

<sup>††</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 29, 2004.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 18, 2004, and September 13, 2003 (37th Week)\*

Reporting area	<i>Escherichia coli</i> , Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003				
UNITED STATES	1,674	1,624	161	172	113	104	12,118	12,688	217,719	231,265
NEW ENGLAND	111	104	37	32	20	11	1,083	1,010	5,078	4,975
Maine	8	8	-	-	-	-	92	116	164	139
N.H.	14	13	5	3	-	-	27	27	91	85
Vt.	10	13	-	-	-	-	121	84	62	59
Mass.	49	42	10	8	20	11	485	500	2,267	1,956
R.I.	6	1	1	-	-	-	91	82	608	680
Conn.	24	27	21	21	-	-	267	201	1,886	2,056
MID. ATLANTIC	186	185	22	18	23	24	2,592	2,544	24,536	29,029
Upstate N.Y.	87	65	11	9	9	11	917	670	5,120	5,374
N.Y. City	30	6	-	-	-	-	692	836	7,526	9,581
N.J.	29	26	3	2	5	-	263	366	4,369	5,822
Pa.	40	88	8	7	9	13	720	672	7,521	8,252
E.N. CENTRAL	308	370	32	27	17	14	1,670	2,208	43,412	48,873
Ohio	76	69	9	14	13	14	568	607	12,514	15,732
Ind.	40	60	-	-	-	-	-	-	4,689	4,664
Ill.	49	75	1	2	1	-	338	666	12,452	15,146
Mich.	59	58	5	-	3	-	489	506	10,658	9,343
Wis.	84	108	17	11	-	-	275	429	3,099	3,988
W.N. CENTRAL	375	269	25	33	15	16	1,400	1,331	11,688	12,240
Minn.	88	94	13	16	1	1	537	495	2,171	2,102
Iowa	103	58	-	-	-	-	211	175	649	911
Mo.	62	55	12	9	6	1	340	351	6,099	6,112
N. Dak.	12	8	-	3	6	6	18	28	74	56
S. Dak.	27	17	-	3	-	-	42	49	199	153
Nebr.	56	17	-	2	-	-	102	97	715	1,070
Kans.	27	20	-	-	2	8	150	136	1,781	1,836
S. ATLANTIC	123	109	26	35	29	25	1,959	1,819	55,427	56,889
Del.	2	5	N	N	N	N	35	30	630	835
Md.	20	12	3	2	1	1	86	75	5,762	5,426
D.C.	1	1	-	-	-	-	45	36	1,678	1,738
Va.	27	30	9	9	-	-	356	236	6,150	6,276
W. Va.	2	3	-	-	-	-	27	28	665	609
N.C.	-	-	-	-	19	20	N	N	11,035	10,741
S.C.	6	1	-	-	-	-	39	84	7,007	5,748
Ga.	20	22	10	5	-	-	587	594	9,950	12,423
Fla.	45	35	4	19	9	4	784	736	12,550	13,093
E.S. CENTRAL	69	56	1	1	8	5	255	250	17,454	19,549
Ky.	20	18	1	1	5	5	N	N	1,777	2,555
Tenn.	30	24	-	-	3	-	139	116	5,878	5,889
Ala.	12	11	-	-	-	-	116	134	5,265	6,573
Miss.	7	3	-	-	-	-	-	-	4,534	4,532
W.S. CENTRAL	58	67	2	4	1	4	214	212	29,284	31,192
Ark.	10	8	1	-	-	-	80	111	2,530	2,992
La.	2	3	-	-	-	-	31	9	7,330	8,346
Okla.	15	20	-	-	-	-	100	92	3,361	3,254
Tex.	31	36	1	4	1	4	3	-	16,063	16,600
MOUNTAIN	168	197	14	19	-	5	1,068	1,069	7,313	7,360
Mont.	12	12	-	-	-	-	47	75	49	75
Idaho	37	44	7	14	-	-	126	133	60	54
Wyo.	6	2	1	-	-	-	17	16	44	32
Colo.	43	50	2	3	-	5	373	304	1,839	2,035
N. Mex.	8	9	1	2	-	-	52	35	574	867
Ariz.	16	24	N	N	N	N	136	184	2,693	2,697
Utah	31	38	2	-	-	-	235	231	365	256
Nev.	15	18	1	-	-	-	82	91	1,689	1,344
PACIFIC	276	267	2	3	-	-	1,877	2,245	23,527	21,158
Wash.	96	65	-	1	-	-	248	220	1,824	1,928
Oreg.	50	71	2	2	-	-	320	298	808	671
Calif.	120	125	-	-	-	-	1,199	1,606	19,993	17,353
Alaska	1	2	-	-	-	-	54	58	400	382
Hawaii	9	4	-	-	-	-	56	63	502	824
Guam	N	N	-	-	-	-	-	2	-	47
P.R.	-	1	-	-	-	-	62	195	175	189
V.I.	-	-	-	-	-	-	-	-	49	62
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 September 18, 2004, and September 13, 2003 (37th Week)\*

Reporting area	<i>Haemophilus influenzae</i> , invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years						A	
	All serotypes		Serotype b		Non-serotype b		Unknown serotype			
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,374	1,361	10	20	67	89	139	146	3,981	4,550
NEW ENGLAND	117	97	1	2	5	5	3	3	740	224
Maine	12	4	-	-	-	-	-	1	10	8
N.H.	14	11	-	1	2	-	-	-	17	13
Vt.	5	7	-	-	-	-	1	-	8	6
Mass.	48	45	1	1	-	5	2	1	628	123
R.I.	3	5	-	-	-	-	-	1	19	11
Conn.	35	25	-	-	3	-	-	-	58	63
MID. ATLANTIC	278	291	-	1	4	3	31	35	458	940
Upstate N.Y.	93	104	-	1	4	3	5	8	66	83
N.Y. City	59	50	-	-	-	-	11	9	178	341
N.J.	57	56	-	-	-	-	3	8	93	152
Pa.	69	81	-	-	-	-	12	10	121	364
E.N. CENTRAL	216	226	-	3	6	3	34	41	384	437
Ohio	80	57	-	-	2	-	14	10	38	76
Ind.	38	36	-	-	4	-	1	4	73	44
Ill.	50	82	-	-	-	-	11	20	132	135
Mich.	17	19	-	3	-	3	6	1	118	143
Wis.	31	32	-	-	-	-	2	6	23	39
W.N. CENTRAL	86	86	2	-	3	6	9	11	140	129
Minn.	36	34	1	-	3	6	-	2	28	37
Iowa	1	-	1	-	-	-	-	-	38	19
Mo.	31	35	-	-	-	-	6	9	43	42
N. Dak.	3	2	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	3	-
Nebr.	8	1	-	-	-	-	1	-	8	10
Kans.	7	13	-	-	-	-	2	-	19	21
S. ATLANTIC	346	296	-	1	18	12	27	16	778	1,025
Del.	-	-	-	-	-	-	-	-	5	6
Md.	48	67	-	-	4	5	-	-	86	108
D.C.	-	1	-	-	-	-	-	-	5	29
Va.	28	39	-	-	-	-	1	5	92	62
W. Va.	13	14	-	-	-	-	3	-	4	12
N.C.	44	32	-	-	5	3	1	1	71	58
S.C.	4	5	-	-	-	-	-	1	23	26
Ga.	121	53	-	-	-	-	20	6	277	438
Fla.	88	85	-	1	9	4	2	3	215	286
E.S. CENTRAL	57	56	1	1	-	2	7	5	130	126
Ky.	5	5	-	-	-	1	-	-	29	23
Tenn.	37	31	-	-	-	1	5	3	74	75
Ala.	12	18	1	1	-	-	2	2	6	14
Miss.	3	2	-	-	-	-	-	-	21	14
W.S. CENTRAL	56	63	1	2	6	10	1	4	283	454
Ark.	2	5	-	-	-	1	-	-	53	23
La.	10	19	-	-	-	2	1	4	31	37
Okla.	43	36	-	-	6	7	-	-	19	9
Tex.	1	3	1	2	-	-	-	-	180	385
MOUNTAIN	152	129	3	6	18	22	21	13	349	348
Mont.	-	-	-	-	-	-	-	-	5	7
Idaho	5	4	-	-	-	-	2	1	16	11
Wyo.	1	1	-	-	-	-	1	-	4	1
Colo.	38	25	-	-	-	-	5	5	43	54
N. Mex.	29	15	-	-	5	4	5	1	16	17
Ariz.	56	64	-	6	8	9	4	4	213	194
Utah	12	10	2	-	2	5	3	2	41	24
Nev.	11	10	1	-	3	4	1	-	11	40
PACIFIC	66	117	2	4	7	26	6	18	719	867
Wash.	3	9	2	-	-	6	1	2	42	43
Oreg.	34	29	-	-	-	-	2	2	51	45
Calif.	17	52	-	4	7	20	1	9	603	761
Alaska	4	18	-	-	-	-	1	5	5	8
Hawaii	8	9	-	-	-	-	1	-	18	10
Guam	-	-	-	-	-	-	-	-	-	2
P.R.	-	-	-	-	-	-	-	-	19	61
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 September 18, 2004, and September 13, 2003 (37th 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	4,547	4,922	745	746	1,252	1,438	444	469	11,745	14,861
NEW ENGLAND	250	249	7	5	36	74	26	35	1,395	2,873
Maine	1	1	-	-	-	2	5	6	53	106
N.H.	27	12	-	-	5	7	4	3	155	101
Vt.	3	3	3	5	3	5	1	-	39	32
Mass.	137	161	3	-	5	41	3	14	372	1,325
R.I.	5	8	-	-	8	3	1	-	148	402
Conn.	77	64	1	-	15	16	12	12	628	907
MID. ATLANTIC	879	549	87	86	339	417	105	97	8,057	9,822
Upstate N.Y.	64	60	9	10	68	103	34	23	2,602	2,925
N.Y. City	76	151	-	-	26	48	14	16	-	181
N.J.	521	135	-	-	66	60	18	20	2,252	2,442
Pa.	218	203	78	76	179	206	39	38	3,203	4,274
E.N. CENTRAL	404	347	80	112	345	295	77	66	820	777
Ohio	90	91	5	7	161	164	33	18	67	45
Ind.	33	25	7	7	56	19	16	5	74	17
Ill.	63	51	11	16	18	35	5	18	-	62
Mich.	195	146	57	77	103	62	21	17	20	3
Wis.	23	34	-	5	7	15	2	8	659	650
W.N. CENTRAL	269	231	178	153	36	51	9	12	345	264
Minn.	39	28	15	7	6	3	3	3	255	184
Iowa	13	8	-	1	4	9	1	-	30	37
Mo.	172	158	163	143	17	25	3	5	50	38
N. Dak.	4	2	-	-	2	1	-	-	-	-
S. Dak.	-	2	-	-	3	2	-	-	-	-
Nebr.	28	19	-	2	1	3	2	3	6	2
Kans.	13	14	-	-	3	8	-	1	4	3
S. ATLANTIC	1,403	1,396	129	114	270	372	75	91	942	913
Del.	26	6	-	-	9	19	N	N	111	168
Md.	116	90	13	6	55	88	10	15	556	558
D.C.	15	7	1	-	8	10	-	1	5	5
Va.	187	128	16	6	36	69	14	9	103	62
W. Va.	27	20	19	1	6	13	2	5	15	17
N.C.	138	110	10	10	27	26	16	14	87	62
S.C.	60	114	7	24	3	6	1	2	8	2
Ga.	487	474	15	9	36	29	14	23	9	10
Fla.	347	447	48	58	90	112	18	22	48	29
E.S. CENTRAL	330	323	76	57	63	85	20	21	40	47
Ky.	45	51	23	10	25	34	4	5	13	10
Tenn.	161	138	29	15	26	28	10	5	17	13
Ala.	53	68	4	5	11	18	4	9	2	6
Miss.	71	66	20	27	1	5	2	2	8	18
W.S. CENTRAL	190	779	91	132	47	48	27	40	48	83
Ark.	55	62	2	3	-	2	2	1	8	-
La.	43	93	48	86	4	1	2	2	3	6
Okla.	43	45	3	2	3	5	-	2	-	-
Tex.	49	579	38	41	40	40	23	35	37	77
MOUNTAIN	342	429	40	38	64	44	18	26	26	11
Mont.	2	13	2	1	1	2	-	2	-	-
Idaho	10	7	-	1	7	3	1	2	6	3
Wyo.	7	27	2	-	5	2	-	-	2	1
Colo.	41	59	8	9	16	8	8	9	3	-
N. Mex.	11	30	7	-	2	2	-	2	-	1
Ariz.	184	194	5	7	11	9	-	7	6	1
Utah	33	38	4	-	18	13	2	2	9	2
Nev.	54	61	12	20	4	5	7	2	-	3
PACIFIC	480	619	57	49	52	52	87	81	72	71
Wash.	39	52	17	16	9	8	8	4	10	2
Oreg.	85	84	13	9	N	N	5	4	26	12
Calif.	337	460	23	22	43	44	70	69	34	54
Alaska	14	4	-	-	-	-	-	-	2	3
Hawaii	5	19	4	2	-	-	4	4	N	N
Guam	-	9	-	3	-	-	-	-	-	-
P.R.	41	95	-	-	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 September 18, 2004, and September 13, 2003 (37th 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	894	899	978	1,224	9,538	5,713	3,636	5,111	990	561
NEW ENGLAND	54	45	51	55	1,056	750	445	421	17	7
Maine	5	2	8	5	2	12	35	43	-	-
N.H.	4	5	4	3	46	67	20	17	-	-
Vt.	4	1	2	1	60	56	19	27	-	-
Mass.	25	22	30	35	914	564	192	156	15	7
R.I.	3	1	1	2	22	14	28	49	1	-
Conn.	13	14	6	9	12	37	151	129	1	-
MID. ATLANTIC	208	233	122	147	2,004	627	406	666	61	36
Upstate N.Y.	32	38	28	33	1,405	272	372	299	2	-
N.Y. City	89	122	21	34	92	88	5	6	13	12
N.J.	47	46	28	19	167	97	-	62	22	16
Pa.	40	27	45	61	340	170	29	299	24	8
E.N. CENTRAL	79	82	137	193	2,127	564	119	120	47	14
Ohio	24	14	53	47	399	176	58	41	15	6
Ind.	11	2	21	36	85	44	8	14	26	1
Ill.	17	37	12	50	318	61	37	18	2	4
Mich.	17	20	41	35	153	83	15	37	4	3
Wis.	10	9	10	25	1,172	200	1	10	-	-
W.N. CENTRAL	51	37	72	90	1,231	283	372	525	89	53
Minn.	18	20	21	20	193	106	63	26	-	1
Iowa	3	4	12	18	80	74	83	88	-	2
Mo.	17	3	20	36	216	58	33	24	72	43
N. Dak.	3	1	2	1	635	6	48	47	-	-
S. Dak.	1	2	2	1	18	3	10	111	4	4
Nebr.	2	-	4	6	25	7	53	90	12	2
Kans.	7	7	11	8	64	29	82	139	1	1
S. ATLANTIC	241	229	178	220	465	444	1,063	1,999	453	299
Del.	4	2	4	8	7	7	9	43	-	1
Md.	52	53	9	24	84	63	157	266	54	79
D.C.	11	8	4	4	3	-	-	-	-	-
Va.	36	28	14	19	135	77	8	393	22	20
W. Va.	-	4	5	4	17	6	50	67	4	5
N.C.	14	18	26	30	62	90	460	591	318	120
S.C.	9	3	11	20	40	90	110	171	13	15
Ga.	45	52	20	24	30	26	265	280	25	52
Fla.	70	61	85	87	87	85	4	188	17	7
E.S. CENTRAL	27	22	44	62	216	120	103	165	139	93
Ky.	4	5	8	14	50	37	19	29	1	1
Tenn.	7	4	13	15	130	58	31	94	78	50
Ala.	11	7	11	17	25	16	44	41	31	16
Miss.	5	6	12	16	11	9	9	1	29	26
W.S. CENTRAL	81	99	86	138	429	464	847	905	158	51
Ark.	7	4	14	13	49	39	38	25	80	-
La.	3	4	26	34	10	8	-	2	4	-
Okla.	7	4	7	13	17	57	85	157	70	39
Tex.	64	87	39	78	353	360	724	721	4	12
MOUNTAIN	35	28	53	65	941	709	150	142	21	7
Mont.	-	-	3	3	35	4	21	20	3	1
Idaho	1	1	6	6	26	61	3	13	3	2
Wyo.	-	1	3	2	17	123	4	4	4	2
Colo.	12	13	12	18	462	245	37	33	1	2
N. Mex.	2	1	6	8	108	52	4	5	2	-
Ariz.	10	7	12	21	153	117	71	54	2	-
Utah	6	4	4	-	128	81	7	9	6	-
Nev.	4	1	7	7	12	26	3	4	-	-
PACIFIC	118	124	235	254	1,069	1,752	131	168	5	1
Wash.	13	19	24	25	495	462	-	-	-	-
Oreg.	15	9	49	39	313	372	5	6	3	-
Calif.	88	91	156	175	238	908	118	154	2	1
Alaska	-	-	2	4	8	1	8	8	-	-
Hawaii	2	5	4	11	15	9	-	-	-	-
Guam	-	1	-	-	-	1	-	-	-	-
P.R.	-	1	5	8	4	2	43	54	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 September 18, 2004, and September 13, 2003 (37th Week)\*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		<i>Streptococcus pneumoniae</i> , invasive			
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Drug resistant, all ages		Age <5 years	
							Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	27,697	29,186	8,096	16,408	3,604	4,432	1,619	1,494	483	507
NEW ENGLAND	1,505	1,532	203	235	152	389	22	75	54	6
Maine	69	98	2	6	8	23	2	-	3	-
N.H.	105	107	6	6	16	27	-	-	N	N
Vt.	41	50	2	6	8	17	7	6	1	3
Mass.	863	908	133	163	103	172	N	N	43	N
R.I.	91	86	13	10	17	11	13	10	7	3
Conn.	336	283	47	44	-	139	-	59	U	U
MID. ATLANTIC	3,983	3,441	849	1,774	573	773	104	96	82	75
Upstate N.Y.	873	765	352	289	189	291	43	53	56	55
N.Y. City	885	940	255	299	74	112	U	U	U	U
N.J.	638	592	164	293	136	149	-	-	6	2
Pa.	1,587	1,144	78	893	174	221	61	43	20	18
E.N. CENTRAL	3,669	4,102	712	1,413	701	1,066	361	332	115	218
Ohio	963	1,014	128	247	185	252	254	219	60	77
Ind.	422	399	155	113	81	103	107	113	25	21
Ill.	1,072	1,428	251	756	152	270	-	-	-	81
Mich.	623	577	87	193	241	307	N	N	N	N
Wis.	589	684	91	104	42	134	N	N	30	39
W.N. CENTRAL	1,745	1,694	322	542	235	269	13	11	71	57
Minn.	429	373	46	70	120	130	-	-	50	40
Iowa	353	260	60	48	N	N	N	N	N	N
Mo.	462	641	125	278	49	60	8	7	9	2
N. Dak.	30	27	3	6	10	13	-	3	2	4
S. Dak.	75	79	9	13	12	20	5	1	-	-
Nebr.	117	106	22	68	12	22	-	-	5	5
Kans.	279	208	57	59	32	24	N	N	5	6
S. ATLANTIC	7,535	6,922	2,028	4,978	772	738	858	807	39	15
Del.	82	74	7	153	3	6	4	1	N	N
Md.	625	580	112	479	130	180	-	14	28	-
D.C.	43	31	29	57	7	7	5	-	3	5
Va.	849	717	112	298	60	89	N	N	N	N
W. Va.	170	96	5	-	19	31	87	57	8	10
N.C.	1,065	847	225	673	95	86	N	N	U	U
S.C.	622	440	266	326	37	36	65	116	N	N
Ga.	1,376	1,323	515	928	248	144	251	174	N	N
Fla.	2,703	2,814	757	2,064	173	159	446	445	N	N
E.S. CENTRAL	1,764	1,984	575	665	174	155	109	106	2	-
Ky.	251	298	53	76	51	39	23	14	N	N
Tenn.	452	533	295	236	123	116	85	92	N	N
Ala.	481	478	186	213	-	-	-	-	N	N
Miss.	580	675	41	140	-	-	1	-	2	-
W.S. CENTRAL	2,141	4,380	1,746	4,193	210	210	45	59	84	81
Ark.	350	520	50	84	16	6	6	19	7	5
La.	433	612	204	336	2	1	39	40	16	16
Okla.	289	315	339	602	51	66	N	N	33	41
Tex.	1,069	2,933	1,153	3,171	141	137	N	N	28	19
MOUNTAIN	1,727	1,528	570	780	393	369	28	4	36	55
Mont.	136	77	4	2	-	1	-	-	-	-
Idaho	124	131	9	24	8	18	N	N	N	N
Wyo.	42	67	4	5	7	2	9	3	-	-
Colo.	430	358	119	180	107	105	-	-	33	43
N. Mex.	185	184	81	160	65	90	5	-	-	8
Ariz.	531	433	288	331	170	127	N	N	N	N
Utah	162	154	32	35	34	24	12	1	3	4
Nev.	117	124	33	43	2	2	2	-	-	-
PACIFIC	3,628	3,603	1,091	1,828	394	463	79	4	-	-
Wash.	391	389	82	125	50	41	-	-	N	N
Oreg.	312	316	55	182	N	N	N	N	N	N
Calif.	2,628	2,696	909	1,479	273	332	N	N	N	N
Alaska	43	53	5	7	-	-	-	-	N	N
Hawaii	254	149	40	35	71	90	79	4	-	-
Guam	-	35	-	28	-	-	-	-	-	-
P.R.	163	476	6	19	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 September 18, 2004, and September 13, 2003 (37th Week)\*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	5,174	4,951	242	318	7,246	8,712	194	265	13,193	11,245
NEW ENGLAND	138	149	4	-	263	291	18	23	591	2,265
Maine	2	6	-	-	-	18	-	-	180	642
N.H.	3	15	3	-	9	11	-	2	-	-
Vt.	-	-	-	-	-	7	-	-	411	504
Mass.	89	96	-	-	169	147	13	13	-	124
R.I.	18	15	-	-	23	39	1	2	-	3
Conn.	26	17	1	-	62	69	4	6	-	992
MID. ATLANTIC	694	593	34	49	1,490	1,545	41	58	70	25
Upstate N.Y.	71	31	1	8	186	195	6	10	-	-
N.Y. City	417	329	11	27	764	804	12	28	-	-
N.J.	114	118	21	14	299	302	12	16	-	-
Pa.	92	115	1	-	241	244	11	4	70	25
E.N. CENTRAL	581	670	43	52	834	807	15	29	4,067	3,884
Ohio	159	154	1	3	141	143	5	2	1,045	946
Ind.	42	34	8	10	89	94	-	4	-	-
Ill.	226	278	10	18	367	377	-	15	-	-
Mich.	133	189	24	21	176	148	8	8	2,630	2,321
Wis.	21	15	-	-	61	45	2	-	392	617
W.N. CENTRAL	116	111	3	4	308	326	8	6	123	42
Minn.	15	34	1	-	118	134	4	2	-	-
Iowa	5	8	-	-	23	21	-	2	N	N
Mo.	71	40	1	4	74	78	2	1	5	-
N. Dak.	-	2	-	-	3	-	-	-	75	42
S. Dak.	-	1	-	-	8	16	-	-	43	-
Nebr.	5	5	-	-	25	15	2	1	-	-
Kans.	20	21	1	-	57	62	-	-	-	-
S. ATLANTIC	1,346	1,309	35	64	1,426	1,663	33	37	1,728	1,615
Del.	6	4	1	-	-	-	-	-	4	21
Md.	262	222	5	10	183	159	10	8	-	-
D.C.	58	37	1	-	63	-	1	-	20	22
Va.	70	63	2	1	162	180	3	12	466	441
W. Va.	2	2	-	-	14	12	-	-	993	944
N.C.	135	115	8	16	202	217	5	6	N	N
S.C.	90	78	6	6	131	110	-	-	245	187
Ga.	213	349	1	13	11	374	6	5	-	-
Fla.	510	439	11	18	660	611	8	6	-	-
E. S. CENTRAL	287	228	16	11	397	468	6	5	-	-
Ky.	30	29	1	1	76	83	2	-	-	-
Tenn.	93	94	7	2	144	163	4	2	-	-
Ala.	126	83	6	6	144	147	-	3	-	-
Miss.	38	22	2	2	33	75	-	-	-	-
W. S. CENTRAL	836	638	39	57	643	1,338	12	26	4,865	3,012
Ark.	32	39	-	2	83	66	-	-	-	-
La.	191	97	-	1	-	-	-	-	45	10
Okla.	19	44	2	1	108	106	1	-	-	-
Tex.	594	458	37	53	452	1,166	11	26	4,820	3,002
MOUNTAIN	261	223	43	28	331	313	5	4	1,749	402
Mont.	-	-	-	-	4	5	-	-	-	-
Idaho	15	4	2	2	4	5	-	-	-	-
Wyo.	1	-	-	-	2	3	-	-	26	39
Colo.	25	26	-	3	67	67	1	3	1,334	-
N. Mex.	46	40	1	5	16	35	-	-	68	1
Ariz.	145	138	40	18	156	148	2	1	-	-
Utah	4	5	-	-	29	28	1	-	321	362
Nev.	25	10	-	-	53	22	1	-	-	-
PACIFIC	915	1,030	25	53	1,554	1,961	56	77	-	-
Wash.	92	55	-	-	157	180	4	3	-	-
Oreg.	20	30	-	-	58	79	2	3	-	-
Calif.	799	938	25	52	1,235	1,578	44	70	-	-
Alaska	-	1	-	-	28	45	-	-	-	-
Hawaii	4	6	-	1	76	79	6	1	-	-
Guam	-	1	-	-	-	38	-	-	-	94
P.R.	93	142	5	13	60	75	-	-	207	418
V.I.	4	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 September 18, 2004 (37th Week)

Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total	Reporting Area	All causes, by age (years)							P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	537	378	104	39	11	5	55	S. ATLANTIC	1,293	774	327	112	41	39	55		
Boston, Mass.	120	76	26	11	6	1	13	Atlanta, Ga.	130	75	32	16	6	1	4		
Bridgeport, Conn.	34	30	2	2	-	-	3	Baltimore, Md.	163	88	42	21	7	5	9		
Cambridge, Mass.	25	22	2	-	1	-	2	Charlotte, N.C.	101	55	31	8	2	5	3		
Fall River, Mass.	23	18	3	1	-	1	7	Jacksonville, Fla.	161	98	49	9	1	4	6		
Hartford, Conn.	53	33	16	4	-	-	2	Miami, Fla.	78	48	20	6	2	2	4		
Lowell, Mass.	21	17	2	1	-	1	7	Norfolk, Va.	66	44	13	-	5	4	2		
Lynn, Mass.	11	8	1	2	-	-	-	Richmond, Va.	72	33	25	13	1	-	-		
New Bedford, Mass.	25	20	3	2	-	-	5	Savannah, Ga.	45	28	10	2	1	4	2		
New Haven, Conn.	36	23	10	1	2	-	5	St. Petersburg, Fla.	60	46	8	4	2	-	1		
Providence, R.I.	70	49	16	4	-	1	3	Tampa, Fla.	196	132	40	13	5	6	17		
Somerville, Mass.	2	1	-	1	-	-	-	Washington, D.C.	200	113	52	19	8	8	3		
Springfield, Mass.	32	21	6	3	1	1	3	Wilmington, Del.	21	14	5	1	1	-	4		
Waterbury, Conn.	26	18	4	4	-	-	2	E.S. CENTRAL	629	375	181	43	23	7	36		
Worcester, Mass.	59	42	13	3	1	-	3	Birmingham, Ala.	76	45	22	5	4	-	7		
MID. ATLANTIC	1,969	1,321	444	134	40	30	100	Chattanooga, Tenn.	94	64	25	4	-	1	11		
Albany, N.Y.	39	28	7	1	-	3	1	Knoxville, Tenn.	87	53	25	4	4	1	6		
Allentown, Pa.	15	10	5	-	-	-	-	Lexington, Ky.	74	43	18	7	4	2	4		
Buffalo, N.Y.	106	76	18	9	1	2	7	Memphis, Tenn.	117	64	36	11	5	1	-		
Camden, N.J.	23	8	7	5	1	2	-	Mobile, Ala.	22	15	5	-	2	-	2		
Elizabeth, N.J.	18	9	8	1	-	-	-	Montgomery, Ala.	24	17	6	-	1	-	2		
Erie, Pa.	45	34	10	1	-	-	2	Nashville, Tenn.	135	74	44	12	3	2	4		
Jersey City, N.J.	32	19	9	4	-	-	-	W.S. CENTRAL	1,243	746	329	100	38	30	61		
New York City, N.Y.	1,073	730	238	69	25	11	43	Austin, Tex.	84	48	26	6	2	2	5		
Newark, N.J.	59	33	16	7	1	2	4	Baton Rouge, La.	23	13	5	3	2	-	-		
Paterson, N.J.	20	12	5	-	1	2	3	Corpus Christi, Tex.	58	42	14	1	-	1	5		
Philadelphia, Pa.	179	94	54	21	6	4	9	Dallas, Tex.	169	95	42	17	8	7	9		
Pittsburgh, Pa. <sup>‡</sup>	22	13	5	3	1	-	1	El Paso, Tex.	84	62	12	7	2	1	1		
Reading, Pa.	17	11	4	1	1	-	1	Ft. Worth, Tex.	118	76	22	8	6	6	3		
Rochester, N.Y.	117	92	19	6	-	-	14	Houston, Tex.	403	225	127	35	8	8	29		
Schenectady, N.Y.	27	23	3	1	-	-	3	Little Rock, Ark.	69	40	20	4	2	3	1		
Scranton, Pa.	25	18	5	-	2	-	-	New Orleans, La.	51	28	16	3	2	2	-		
Syracuse, N.Y.	98	68	22	4	-	4	8	San Antonio, Tex.	U	U	U	U	U	U	U		
Trenton, N.J.	12	8	4	-	-	-	-	Shreveport, La.	67	48	14	5	-	-	2		
Utica, N.Y.	19	16	3	-	-	-	3	Tulsa, Okla.	117	69	31	11	6	-	6		
Yonkers, N.Y.	23	19	2	1	1	-	1	MOUNTAIN	876	617	177	51	16	13	49		
E.N. CENTRAL	2,021	1,351	448	120	56	40	126	Albuquerque, N.M.	105	80	15	6	3	1	10		
Akron, Ohio	44	31	8	1	2	2	3	Boise, Idaho	41	30	8	2	-	1	6		
Canton, Ohio	41	31	9	1	-	-	5	Colo. Springs, Colo.	67	47	12	4	2	2	2		
Chicago, Ill.	329	189	98	22	8	6	17	Denver, Colo.	U	U	U	U	U	U	U		
Cincinnati, Ohio	78	54	14	6	2	2	7	Las Vegas, Nev.	211	139	51	11	8	2	13		
Cleveland, Ohio	200	145	42	10	2	1	11	Ogden, Utah	18	15	2	1	-	-	1		
Columbus, Ohio	206	153	37	7	3	6	20	Phoenix, Ariz.	118	74	31	9	1	1	5		
Dayton, Ohio	135	89	30	8	5	3	11	Pueblo, Colo.	29	21	7	-	1	-	1		
Detroit, Mich.	185	94	52	20	13	6	11	Salt Lake City, Utah	136	100	24	9	-	3	7		
Evansville, Ind.	33	26	7	-	-	-	3	Tucson, Ariz.	151	111	27	9	1	3	4		
Fort Wayne, Ind.	47	35	10	1	-	1	3	PACIFIC	1,648	1,126	339	98	52	31	142		
Gary, Ind.	12	5	6	1	-	-	-	Berkeley, Calif.	9	5	2	1	-	1	1		
Grand Rapids, Mich.	56	40	11	2	-	3	2	Fresno, Calif.	140	102	25	7	3	3	11		
Indianapolis, Ind.	194	116	47	17	8	6	12	Glendale, Calif.	11	6	5	-	-	-	2		
Lansing, Mich.	75	58	12	3	2	-	3	Honolulu, Hawaii	71	56	12	1	1	1	4		
Milwaukee, Wis.	87	65	17	4	-	1	3	Long Beach, Calif.	45	29	10	3	2	1	5		
Peoria, Ill.	61	42	10	2	6	1	4	Los Angeles, Calif.	273	178	59	18	13	5	24		
Rockford, Ill.	38	31	4	2	1	-	2	Pasadena, Calif.	12	10	2	-	-	-	2		
South Bend, Ind.	49	35	8	3	2	1	3	Portland, Oreg.	122	87	21	4	6	4	12		
Toledo, Ohio	82	58	17	5	1	1	3	Sacramento, Calif.	211	148	42	14	4	3	17		
Youngstown, Ohio	69	54	9	5	1	-	3	San Diego, Calif.	178	120	41	9	5	3	15		
W.N. CENTRAL	660	444	137	48	11	20	46	San Francisco, Calif.	125	78	33	9	3	2	15		
Des Moines, Iowa	72	51	15	5	1	-	12	San Jose, Calif.	168	120	31	13	3	1	16		
Duluth, Minn.	28	19	7	2	-	-	1	Santa Cruz, Calif.	U	U	U	U	U	U	U		
Kansas City, Kans.	46	30	9	6	-	1	4	Seattle, Wash.	112	64	26	12	8	2	10		
Kansas City, Mo.	101	60	22	7	2	10	2	Spokane, Wash.	63	42	13	1	2	3	3		
Lincoln, Nebr.	29	23	5	-	1	-	1	Tacoma, Wash.	108	81	17	6	2	2	5		
Minneapolis, Minn.	65	38	15	4	2	6	4	TOTAL	10,876 <sup>†</sup>	7,132	2,486	745	288	215	670		
Omaha, Nebr.	78	56	20	1	-	1	8										
St. Louis, Mo.	82	56	17	5	2	2	5										
St. Paul, Minn.	75	49	12	11	3	-	5										
Wichita, Kans.	84	62	15	7	-	-	4										

U: Unavailable. -:No reported cases.

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

† Pneumonia and influenza.

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

§ Total includes unknown ages.



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