



# MMWR<sup>TM</sup>

## Morbidity and Mortality Weekly Report

Weekly

April 9, 2004 / Vol. 53 / No. 13

### Update: West Nile Virus Screening of Blood Donations and Transfusion-Associated Transmission — United States, 2003

In 2002, transfusion-associated transmission (TAT) of West Nile virus (WNV) infection acquired through blood transfusion marked the emergence of a new threat to the U.S. blood supply (1). Although mosquito-borne transmission remains the predominant mode of WNV transmission (2), identification of TAT underscored the need for WNV screening of donated blood. In June 2003, blood-collection agencies (BCAs) implemented investigational WNV nucleic acid-amplification tests (NATs) to screen all blood donations and identify potentially infectious donations for quarantine and retrieval. This screening was performed on approximately 6 million units during June–December 2003, resulting in the removal of at least 818 viremic blood donations from the blood supply. This report summarizes the results of blood-donation screening tests conducted during 2003 and describes six cases of WNV TAT that occurred because of transfusion of components containing low levels of virus not detected by the testing algorithm. These data indicate that blood screening for WNV has improved blood safety. However, a small risk of WNV transfusion-associated transmission remains. To address this risk, changes to screening strategies are planned for 2004.

#### BCA Testing Activities

In June 2003, under the Food and Drug Administration's (FDA) investigational new drug (IND) mechanism, BCAs began screening donations by using NATs from two test-kit manufacturers. Initial screening protocols included NAT performed on mini-pools (MP NAT) of samples from six or 16 donations, depending on the test-kit manufacturer. Donation samples that were part of reactive mini-pools were tested individually. Any reactive samples were retested by individual donation testing (IDT NAT). In certain cases, an alternate sample from the same donation or an alternate NAT might have been used for retesting. In addition, selected blood banks

servicing areas with epidemic activity stopped using this MP NAT screening algorithm and implemented IDT NAT screening during limited periods of the epidemic season. Donors of IDT NAT-reactive samples identified by either screening method were asked to participate in a BCA-directed follow-up study to confirm WNV infection and evaluate for the persistence of WNV RNA in blood samples collected subsequently. Both follow-up samples and the index-donation samples were tested for WNV-specific IgM antibody. Donations that were IDT NAT-reactive were not released for transfusion; these donors were deferred from donating blood again until  $\geq 28$  days after the date of collection for the last NAT-reactive sample and the documented development of WNV-specific antibody.

To determine the sensitivity of the MP NAT-screening algorithm, certain BCAs performed retrospective testing studies in selected areas that experienced high rates of viremic donations. In these studies, individual components of archived MP NAT-negative donation samples were retested by IDT NAT.

#### Surveillance Activities

For surveillance purposes, a donation that was repeatedly reactive on IDT NAT was considered to be from a presumptive viremic donor (PVD). Cooperating local blood centers provided reports of PVDs (including donor age, sex, postal code, and date of donation) to state health departments, which provided reports to ArboNET, the national arbovirus surveillance system.

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

### SUGGESTED CITATION

Centers for Disease Control and Prevention. [Article Title]. *MMWR* 2004;53:[inclusive page numbers].

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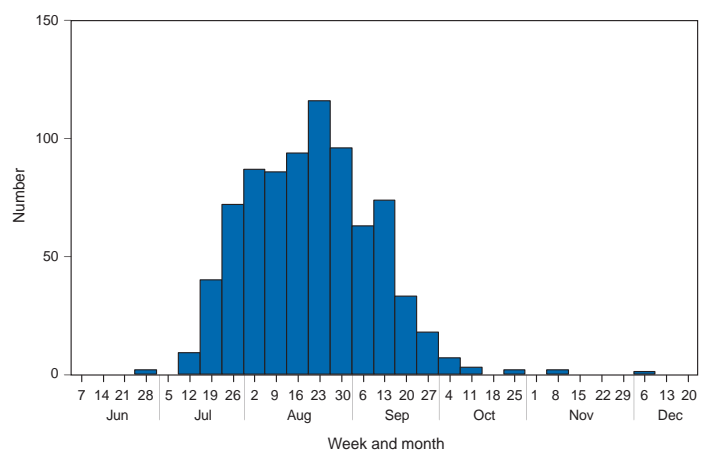
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As of March 31, 2004, state and local health departments had reported 818 PVDs to ArboNET; dates of collection ranged from June 25 to December 2, 2003 (Figure). Complete information was available for 811 (99%) of these PVDs; six (1%) had West Nile viral encephalitis or meningitis subsequent to donation (median age: 45 years, range: 28–76 years), 137 (17%) had West Nile fever (median age: 46 years, range: 17–76 years), and 654 (81%) remained asymptomatic. Of the PVDs reported to ArboNET, 691 (85%) were residents of nine states (Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming). These states experienced WNV epidemics in 2003 and accounted for 60% of reported cases of West Nile viral encephalitis or meningitis.

### WNV Transfusion-Associated Transmission Investigations

Since 2002, public health authorities have been encouraged to investigate reports of WNV illness among patients who had received blood transfusions <4 weeks before illness onset and to report these suspected TAT cases to CDC. A probable TAT was defined as transfusion to a recipient who 1) had a confirmed WNV infection (3) and 2) had received a blood product from a NAT-reactive index donation associated with a donor with WNV-specific IgM antibody in the index donation or a follow-up collection. A confirmed TAT case was defined as meeting the criteria for a probable case and having any one of the following criteria: 1) unlikely mosquito exposure during the 14 days before recipient illness onset; 2) testing of remaining diagnostic samples from the hospitalized transfusion recipient

FIGURE. Number\* of presumed West Nile–viremic blood donors, by week of donation — United States, 2003



\* N = 818.

indicating that WNV infection occurred at the time of transfusion; or 3) transfusion of a co-component of the infectious donation into another recipient who then had a confirmed WNV infection. A case was classified as a noncase if WNV infection could not be confirmed in the recipient <4 weeks after the implicated transfusions, if WNV RNA was not identified in any implicated donation, or if all implicated donors were seronegative for WNV. If samples were not available to satisfy the criteria for probable, confirmed, or noncase classification, the case was considered inconclusive.

During 2003, a total of 23 suspected cases of WNV TAT were reported to CDC. Public health authorities reported 15 suspected cases of WNV TAT among patients who had WNV illness after receiving transfusions. Another eight suspected cases were in recipients of components derived from low-level viremic donations that were identified during special retrospective studies of MP-negative blood retested with IDT NAT by two BCAs. Follow-up of these eight cases was performed to determine if WNV infection had resulted from the implicated transfusions. As a result of these 23 investigations, six cases were classified as confirmed or probable WNV TAT, 11 as noncases, and three as inconclusive. As of March 27, 2004, three cases remained under investigation.

In each of these six confirmed or probable cases, the recipient received components from multiple donations; however, only one infectious blood component was found in each case. All six of these infectious donations had been collected during July 29–September 18, 2003, and were not identified in MP screening. The median age of the six recipients was 63 years (range: 13–82 years); four had WNV encephalitis, one had West Nile fever, and one critically ill patient did not have discernible WNV-compatible illness despite confirmed WNV infection. A sufficient index-donation sample was available to estimate the titer of the implicated donor's viremia in four of six cases: the median estimated viremia was 0.11 plaque-forming units per milliliter (pfu/mL) (range: 0.06–0.5 pfu/mL). Two of these six cases were reported previously (4); a description of a third case follows.

On August 31, 2003, a male aged 13 years was admitted to a hospital with multiple injuries. On September 1, he received three units of packed red blood cells. On September 9, after hospital discharge, he had a maculopapular rash. On September 12, he was readmitted to the hospital with fever, headache, vomiting, and diarrhea, consistent with West Nile fever; blood drawn on that day was positive for WNV-specific IgM antibody.

The three transfused blood units had been collected during the second week of August 2003. No donors of this blood

reported symptoms of WNV illness before or after donation. Samples from these donations were nonreactive for WNV RNA by MP NAT performed on six-specimen mini-pools. All other components derived from these three donations were quarantined immediately; there were no co-component recipients. Recalled plasma samples from the three index donations were WNV IgM negative. One donor seroconverted evidenced by development of WNV-specific IgM antibody in serum collected 50 days after donation. Recalled plasma from this donor was reactive when tested by IDT NAT. CDC confirmed results by using polymerase chain reaction; the estimated viral load was 0.09 pfu/mL. The recipient recovered without sequelae.

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**Editorial Note:** Previous studies have documented that an estimated 80% of WNV-infected persons remain asymptomatic but are believed to have viremia lasting a median of 6.5 days (5,6). Asymptomatic WNV-infected persons with viremia likely represent the largest risk group of blood donors. Because symptom screening at the time of blood donation will not identify most viremic donors, screening by NAT was implemented rapidly to identify potentially infectious blood donations by detecting WNV RNA.

Use of blood-donor screening for WNV by NAT under the IND mechanism has enhanced the safety of the blood supply. Despite this enhanced safety, documentation of the six WNV TAT cases in 2003 indicates that blood components containing low levels of virus might escape detection and that at least some of these might be infectious. Virus loads in infectious donations were considerably lower in 2003 than in 2002 (1). In 2002, the estimated viremia levels in implicated donations were 0.8–75 pfu/mL, compared with 0.06–0.5 pfu/mL for TAT cases during 2003. The reasons for this lower range are unclear, and the lower limit of donor viremia that can lead to transfusion-associated infection is unknown.

Data collected during 2003 will be considered by the blood supply community in collaboration with public health authorities when developing screening strategies for 2004, when widespread seasonal transmission of WNV is expected to continue. MP screening will continue to identify most persons who donate during the short viremic period, but prospective IDT might be implemented in regions with high WNV-infection rates (i.e., high MP-screening-test yields). However, the capacity of laboratory equipment and personnel for performing IDT and the availability of reagents are limited, and the higher false-positive rate of IDT (compared with MP screening) could have a negative short-term impact on the availability of blood in these regions.

Approximately 4.5 million persons receive blood or blood products annually. Although persons needing blood transfusions should be aware of the limited risk for WNV infection, the benefits of receiving needed transfusions outweigh the potential risk for WNV infection. In addition, blood donation poses no risk to the donor for acquiring WNV, and the U.S. Public Health Service encourages blood donation. FDA, CDC, and the blood-collection community will continue to evaluate WNV-screening strategies to ensure blood safety.

#### Acknowledgments

This report is based in part on contributions by L Pietrelli, Roche Molecular Systems, Alameda, California. T Gahan, L DesJardin PhD, Univ of Iowa Hygienic Laboratory, Iowa City, Iowa. RS Lanciotti, PhD, A Lambert, A Noga, R Hochbein, Div of Vector-Borne Infectious Diseases, CDC.

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## Update: Influenza Activity — United States, 2003–04 Season

This report summarizes influenza activity in the United States during September 29, 2003–March 27, 2004,\* and updates the previous summary (1). This report also summarizes human infections with avian influenza viruses related to poultry outbreaks in North America. Preliminary data collected through CDC influenza surveillance indicate that national influenza activity peaked during late November–December. The most frequently isolated viruses were influenza A (H3N2), and approximately 87% of these were similar to the drift variant A/Fujian/411/2002.

### Laboratory Surveillance

As of the week ending March 27, the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System collaborating laboratories had tested (i.e., by using viral culture and reverse transcriptase–polymerase chain reaction) 115,222 specimens for influenza viruses, of which 24,177 (21.0%) were positive. The percentage of specimens testing positive for influenza viruses exceeded 10.0% during the week ending October 25, 2003, and peaked at 35.2% during the week ending November 29. During the four most recent influenza seasons (1999–00, 2000–01, 2001–02, and 2002–03), the peak percentage of specimens testing positive for influenza viruses ranged from 23.9% to 30.9% (2) (CDC, unpublished data, 2003). Of the 24,177 influenza viruses reported during the 2003–04 season, 23,993 (99.2%) were influenza type A, and 184 (0.8%) were influenza type B viruses. Of the 6,875 influenza type A viruses that were subtyped, 6,873 (99.9%) were influenza A (H3N2) viruses, and two (0.1%) were influenza A (H1)<sup>†</sup> viruses.

### Antigenic Characterization

CDC antigenically characterized 863 influenza viruses submitted by U.S. laboratories since October 1, 2003, as follows: 833 influenza A (H3N2) viruses, three influenza A (H1) viruses, and 27 influenza B viruses. Of the 833 influenza A (H3N2) isolates that were characterized, 106 (12.7%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 727 (87.3%) were similar to the drift variant A/Fujian/411/2002 (H3N2). The hemagglutinin proteins of the influenza A (H1) viruses were similar antigenically to the hemagglutinin of the vaccine strain A/New Caledonia/20/99

\* As of April 2, 2004. Reporting is incomplete.

† Includes both the A (H1N1) and A (H1N2) influenza virus subtypes.

trust·wor·thy: *adj*

('trəst-"wər-thē) 1 : worthy of belief

2 : capable of being depended upon;

see also *MMWR*.



know what matters.



(H1N1). Twenty-four of the influenza B viruses belonged to the B/Yamagata lineage and were similar antigenically to B/Sichuan/379/99. Three influenza B viruses belonged to the B/Victoria lineage and were similar antigenically to the vaccine strain B/Hong Kong.

### Influenza-Like Illness Surveillance

During the weeks ending October 4, 2003–March 27, 2004, the weekly percentages of patient visits for influenza-like illness (ILI)<sup>§</sup> to approximately 1,000 sentinel providers ranged from 1.0% to 7.6% and exceeded the national baseline of 2.5%<sup>¶</sup> for 9 consecutive weeks, from the week ending November 15, 2003, through the week ending January 10, 2004. The peak percentage (7.6%) of patient visits for ILI occurred during the week ending December 27. For the week ending March 27, the percentage of patient visits for ILI was 0.9%.

### Activity Reported by State and Territorial Epidemiologists

Regional influenza activity\*\* was reported by state and territorial epidemiologists in at least one state each week during the weeks ending October 11, 2003–February 21, 2004, and widespread activity was first reported for the week ending October 18. During the week ending December 20, widespread influenza activity was reported in 45 states, and regional activity was reported in four additional states. All states reported either regional (eight states) or widespread (42 states) activity during the week ending December 27. Widespread activity was last reported in one state during the week ending January 24, and the last report of regional activity occurred in one state during the week ending February 21. No widespread, regional, or local influenza activity was reported during the week ending March 27.

<sup>§</sup> Temperature of >100.0° F (>37.8° C) and either cough or sore throat in the absence of a known cause other than influenza.

<sup>¶</sup> The national baseline was calculated as the mean percentage of visits for ILI during noninfluenza weeks plus two standard deviations. Wide variability in regional data precludes calculating region-specific baselines and makes it inappropriate to apply the national baseline to regional data.

\*\* Levels of activity are 1) *no activity*; 2) *sporadic*—isolated laboratory-confirmed influenza cases or laboratory-confirmed outbreak in one institution, with no increase in activity; 3) *local*—increased ILI in one region, or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region; virus activity is no greater than sporadic in other regions; 4) *regional*—increased ILI activity or outbreaks (ILI or laboratory-confirmed influenza) in at least two but fewer than half of the regions in the state, and 5) *widespread*—increased ILI activity or outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state.

### Pneumonia and Influenza Mortality Surveillance

During the week ending March 27, 2004, an estimated 7.4% of the deaths reported through the 122 Cities Mortality Reporting System were attributed to pneumonia and influenza (P&I). This percentage was below the epidemic threshold<sup>††</sup> of 8.2% for that week. For 9 consecutive weeks (weeks ending December 20, 2003, through February 14, 2004), the percentage of P&I deaths exceeded the epidemic threshold; the percentage reached a peak of 10.3% during the week ending January 10.

### Influenza-Associated Deaths in Children Aged <18 Years

As of March 27, 2004, CDC had received reports of 142 influenza-associated deaths in U.S. residents aged <18 years occurring in the current season (3). This number represents 21 additional deaths reported since the previous update (1). All patients had evidence of influenza virus infection detected by rapid-antigen testing or other laboratory tests. These data are preliminary and subject to change as more information becomes available.

### Avian Influenza Outbreaks

Since early February 2004, avian influenza outbreaks in poultry have been reported from multiple locations in North America, including British Columbia, Delaware, Maryland, New Jersey, Pennsylvania, and Texas (4). Most outbreaks involved influenza A (H7N2) or A (H7N3) strains with low pathogenicity; however, Texas reported an outbreak of highly pathogenic<sup>§§</sup> avian influenza A (H5N2) among poultry limited to one farm. The farm was quarantined, depopulated, cleaned, and disinfected. Although no confirmed cases of human infection with avian influenza viruses have occurred to date in relation to these outbreaks in the United States, Canadian health authorities have reported two laboratory-confirmed cases of human influenza A (H7) infection in British Columbia associated with a localized influenza A (H7N3) outbreak in poultry (5,6). Both persons were poultry workers

<sup>††</sup> The expected seasonal baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected by using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline (2).

<sup>§§</sup> Avian influenza (AI) viruses are classified into low pathogenic (LPAI) and high pathogenic (HPAI) forms on the basis of genetic sequence and the severity of illness they cause in infected birds. Most AI virus strains are LPAI and typically cause little or no clinical signs in infected birds; however, some LPAI virus strains can mutate under field conditions into HPAI viruses. Additional information is available at [http://www.aphis.usda.gov/lpa/issues/ai\\_us/ai\\_us.html](http://www.aphis.usda.gov/lpa/issues/ai_us/ai_us.html).

who had separate and known exposure to infected poultry. One person exhibited conjunctivitis and upper respiratory symptoms; the second person had conjunctivitis and headache. Both were treated with oseltamivir and made full recoveries. To date, no human-to-human transmission of H7 influenza A has occurred in Canada.

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**Editorial Note:** During the 2003–2004 season, influenza activity in the United States appeared earlier than usual (October 2003), peaked during late November–December, and declined rapidly during January–February 2004. Influenza A (H3N2) viruses predominated, with influenza B viruses isolated sporadically. Preliminary data from national influenza surveillance systems indicate that the current season was more severe than the previous three seasons but was within the range expected for a typical A (H3N2) season (2).

Influenza-associated pediatric deaths received considerable attention this season, and CDC requested that state and local health departments report influenza-associated deaths in persons aged <18 years (3). The number of new reported deaths has declined as influenza activity has decreased, with only five new deaths occurring since January 26. Further data collection regarding these reports is ongoing, and efforts are under way to track national pediatric influenza-associated deaths annually.

The avian influenza viruses isolated from the North American poultry outbreaks in 2004 are unrelated to the A (H5N1) epizootic in southeast Asia (4). Influenza A (H7) viruses cause outbreaks among poultry, but do not typically infect humans. In 2002, Virginia experienced an outbreak of avian influenza A (H7N2) in which 4.7 million turkeys and chickens were destroyed. One culler had upper respiratory symptoms and was tested subsequently and found to have antibodies to avian influenza A (H7N2) (7). In 2003, the Netherlands reported outbreaks of avian influenza A (H7N7) in poultry on several farms (8). In that report, a total of 89 persons had confirmed H7N7 influenza virus infection associated with this outbreak, accounting for 83 cases of conjunctivitis, seven cases of ILI, and one death. Since that time, additional H7N7 infections among humans have not been reported. In response to the avian influenza outbreaks in poultry in the United States, CDC has issued interim recommendations for persons with possible exposure to avian influenza. Those recommendations

are available at <http://www.cdc.gov/flu/han022404.htm>. More information regarding human H7 cases in North America is available at <http://www.cdc.gov/flu/avian/interim-report.htm>.

Influenza surveillance reports for the United States are published weekly during October–May. These reports are available at <http://www.cdc.gov/flu/weekly/fluactivity.htm> and through CDC's voice (telephone 888-232-3228) and fax (telephone 888-232-3299, document number 361100) information systems.

### Acknowledgments

This report is based on data contributed by participating state and territorial epidemiologists and state public health laboratory directors, World Health Organization collaborating laboratories, National Respiratory and Enteric Virus Surveillance System collaborating laboratories, the U.S. Influenza Sentinel Provider Surveillance System, and Div of Public Health Surveillance and Informatics, Epidemiology Program Office, CDC.

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### Notice to Readers

#### Manufacturer's Recall of Human Rabies Vaccine — April 2, 2004

On April 2, this notice was posted as an MMWR Dispatch on the MMWR website (<http://www.cdc.gov/mmwr>).

CDC and the Food and Drug Administration (FDA) have been notified that a recent quality-assurance test of IMOVAX<sup>®</sup> Rabies Vaccine (Aventis Pasteur, Swiftwater, Pennsylvania) identified the presence of noninactivated Pitman-Moore virus (the attenuated vaccine strain) in a single product lot.

*"Learning is like rowing upstream; not to advance is to fall back."*

### Chinese Proverb

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IMOVAX<sup>®</sup> is an inactivated viral vaccine and should not contain live virus. The vaccine lot containing noninactivated virus was not distributed.

As a precautionary measure, Aventis Pasteur initiated a voluntary recall of lot numbers X0667-2, X0667-3, W1419-2, and W1419-3, which were produced during the same period as the lot that contained noninactivated Pitman-Moore virus. These four lots, which were distributed in the United States from September 23, 2003 through April 2, 2004, passed all FDA-approved release tests, including testing to confirm the absence of live virus. These test results suggest that any potential risk to those vaccinated with recalled vaccine is likely to be low. No unusual adverse events associated with the recalled vaccine have been reported.

The manufacturer has indicated that additional lots of recalled vaccine were distributed internationally. These lots also passed all release tests, including testing to confirm the absence of live virus. The manufacturer is working with regulatory authorities to determine lot numbers of vaccine and countries that might have received recalled lots. More information about these internationally distributed lots will be provided as it becomes available.

Aventis Pasteur is providing additional detailed information to all distributors and providers. Health-care providers should contact persons who received recalled vaccine to implement the recommendations outlined in this notice (see Recommendations for Persons Who Received Recalled Vaccine). In addition, persons who know they received rabies vaccine between September 23, 2003, and April 2, 2004, should contact their health-care providers to determine whether they received vaccine from one of the four lots being recalled and, if so, whether they should be treated as outlined below. Vaccine distributors and health-care providers who have any remaining doses of the recalled lots should not use them and should contact Aventis Pasteur regarding their disposition. Information about this recall is available from the Aventis Pasteur Medical Information Services Department, telephone 800-835-3587, or at <http://www.vaccineshoppe.com>.

All persons who have begun a rabies vaccination series (whether for pre- or postexposure prophylaxis) must complete that vaccination series on time, using nonrecalled vaccine. Information about human rabies prevention based on current recommendations of the Advisory Committee on Immunization Practices (ACIP) is available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056176.htm>.



## Recommendations for Persons Who Received Recalled Rabies Vaccine

Most persons receiving rabies vaccine do so because of exposure to a rabid animal, and treatment is needed to prevent fatal illness. Thus, persons who are receiving postexposure prophylaxis (PEP) must not omit or delay receiving any remaining injections; injections needed to complete the series should use nonrecalled vaccine. Recalled vaccine is considered fully immunogenic, and previously administered doses can be considered a dose in a PEP regimen.

Although unlikely, a theoretical possibility exists that persons who received vaccine from a recalled lot could have been exposed to the noninactivated Pitman-Moore vaccine strain of rabies virus. Even in the event of such an exposure, the timely administration of treatment, as described here, will help to ensure negligible risk to persons who have received vaccine from a recalled lot. Persons who received recalled vaccine should receive treatment equivalent to PEP, similar to published guidelines, as follows:

### Persons who were vaccinated with recalled vaccine as part of a course of PEP for a possible rabies exposure.

- **Not previously immune (i.e., persons who had not received at least 3 doses of vaccine at some time before the possible rabies exposure).** Persons without prior immunity who have a possible rabies exposure routinely receive a 5-dose postexposure immunization series. If this postexposure series has not already been completed, such persons should complete the full postexposure series, *using nonrecalled vaccine* to complete the series. Doses that have been administered already as part of the 5-dose series need not be repeated, even if recalled vaccine was used. In addition, if rabies immune globulin (RIG)\* was not administered with the first dose of vaccine and it has been <7 days since the first dose of vaccine, RIG should be administered at this time. Once PEP is completed, per-

\*Where available (including the United States), Human Rabies Immune Globulin (HRIG) is preferred and is administered in a dose of 20 IU/kg. Where HRIG is not available, Equine Rabies Immune Globulin may be used in a dose of 40 IU/kg. These dosages are applicable for all age groups, including children. For persons receiving RIG after having received recalled vaccine administered as part of PEP, as much of the dose as is anatomically feasible should be infiltrated at the site of the original rabies exposure (e.g., a wound), and as much of the remaining dose as is anatomically feasible should be infiltrated at the site(s) where the recalled vaccine was injected. If any RIG remains, it should be administered intramuscularly at an anatomically distant site. Persons receiving RIG for recalled vaccine administered as part of a preexposure vaccination series should have as much of the dose as is anatomically feasible infiltrated at the site(s) where recalled vaccine was administered, and the rest should be administered intramuscularly at an anatomically distant site. RIG should never be administered in the same syringe as vaccine, or into the same anatomical site used for concomitant vaccination. Because RIG might partially suppress active production of antibody, no more than the recommended dose should be administered.

sons are considered fully vaccinated against both the original rabies exposure and any possible exposure to noninactivated virus in the recalled vaccine.

- **Previously immune (i.e., persons who had received at least 3 doses of vaccine at some time before the possible rabies exposure).** Persons with preexisting immunity (i.e., who have completed a full preexposure or postexposure vaccination series) who then have a possible rabies exposure routinely receive 2 booster doses of rabies vaccine. If one or both doses already were administered using recalled vaccine, such persons should receive 2 more doses, *using nonrecalled vaccine*. RIG is not recommended.

### Persons who were vaccinated with recalled vaccine for reasons other than a possible rabies exposure.

- **Not previously immune (i.e., persons who had not received at least 3 doses of vaccine at some previous time).** Persons without prior immunity who received recalled vaccine as part of a 3-dose preexposure vaccination series should receive additional doses *using nonrecalled vaccine* for a total of 5 doses (dosing intervals should follow the PEP schedule as closely as possible). RIG\* is recommended if <7 days have elapsed since administration of the first dose of vaccine.
- **Previously immune (i.e., persons who had received at least 3 doses of vaccine at some previous time).** Persons with preexisting immunity (i.e., who have completed a full preexposure or postexposure vaccination series before they received recalled vaccine) who received recalled vaccine as a routine booster dose should receive 2 additional doses *of nonrecalled vaccine*. RIG is not recommended.

All clinically significant adverse events following receipt of rabies vaccine should be reported to 1) Aventis Pasteur, telephone 800-835-3587 and 2) the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.org>, or telephone 800-822-7967. Additional information about rabies and its prevention is available from CDC, telephone 404-639-1050, or at <http://www.cdc.gov/ncidod/dvrd/rabies>.

### Notice to Readers

#### Sexual Assault Awareness Month, April 2004

April is Sexual Assault Awareness Month (SAAM). During this month, 59 state and territorial rape prevention and education programs, other partners, and CDC will highlight activities that increase awareness about sexual violence. One of six U.S. women and one of 33 U.S. men have been victims of rape or attempted rape as a child or as an adult (1).

This year's theme for SAAM is "Decide to End Sexual Violence." Materials, including posters, postcards, pins, and stickers, are available from the National Sexual Violence Resource Center. Additional information is available from the center, 123 North Enola Drive, Enola, Pennsylvania 17025, telephone 877-739-3895, at <http://www.nsvrc.org>, and from CDC at <http://www.cdc.gov/injury>.

#### Reference

1. Tjaden P, Thoennes N. Full report of the prevalence, incidence, and consequences of violence against women: findings from the National Violence Against Women Survey. Washington, DC: National Institute of Justice, CDC, 2000 (NCJ publication no. 183781).

#### Notice to Readers

### **National Infant Immunization Week, April 25–May 1, 2004**

National Infant Immunization Week (NIIW) is April 25–May 1, 2004. This year's theme is "Vaccination: an Act of Love. Love Them. Protect Them. Immunize Them." This event emphasizes the importance of timely infant and childhood vaccination. Vaccination is one of the most effective ways to protect children, especially infants and young children, from potentially serious diseases.

Because of increased vaccination efforts in the United States, incidences of the majority of vaccine-preventable diseases have decreased approximately 99% from peak prevaccine levels (1). In 2003, a total of 42 measles cases, one diphtheria case, and no wild poliovirus cases were reported (2,3). Approximately 11,000 infants are born each day in the United States; they need approximately 20 doses of vaccine before age 2 years to protect them from 11 vaccine-preventable diseases (4). Although vaccination coverage levels are high for children of preschool age, approximately 1 million children aged 2 years are missing  $\geq 1$  recommended vaccine dose (5).

During NIIW, states and approximately 500 communities in the United States will sponsor activities highlighting the need to achieve and maintain high childhood vaccination coverage rates. Special events, including provider education activities, media events, and immunization clinics also are planned along the United States–Mexico border in collaboration with the United States–Mexico Border Health Commission. In addition, CDC and its partners will debut a new public service campaign consisting of a 30-second public service announcement (PSA) in English and Spanish, a Spanish video news release, Spanish and English text for live radio PSAs, and posters and print ads in Spanish and English. NIIW is being held in con-

junction with Vaccination Week in the Americas, scheduled for April 24–30. That event, sponsored by the Pan American Health Organization (PAHO), will promote childhood immunization and access to health services concurrently in all countries in the Western Hemisphere. Additional information about NIIW and childhood vaccinations is available from CDC's National Immunization Program at <http://www.cdc.gov/nip> or the National Immunization Information Hotline, telephone 800-232-2522 (English) or 800-232-0233 (Spanish). Information on Vaccination Week in the Americas is available from PAHO at <http://www.paho.org>.

#### References

1. CDC. Table 2. Baseline 20th century annual morbidity and 1998 provisional morbidity from nine diseases with vaccines recommended before 1990 for universal use in children—United States. MMWR 1999;48:245.
2. CDC. Table I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending December 27, 2003 (52nd week). MMWR 2004;52:1267.
3. CDC. Table II. Provisional cases of selected notifiable diseases, United States, weeks ending December 27, 2003 and December 28, 2002 (52nd week). MMWR 2004;52:1268–74.
4. CDC. Recommended childhood and adolescent immunization schedule—United States, January–June 2004. MMWR 2004;53:Q1–Q4.
5. CDC. National, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 2001. MMWR 2002;51:664–6.

#### Notice to Readers

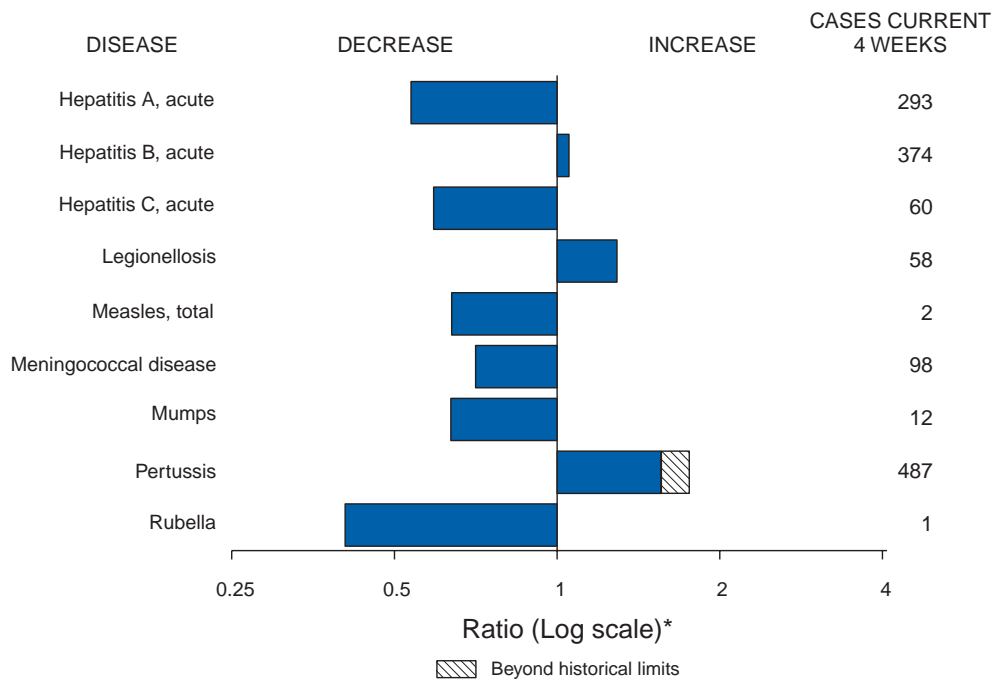
### **Epi Info: A Course for Developers of Public Health Information Systems**

CDC and Emory University's Rollins School of Public Health will cosponsor a course, "Developing Public Health Software Applications Using Epi Info," May 11–13, 2004, at Emory University in Atlanta, Georgia. The course is designed for public health practitioners of epidemiology, with intermediate to advanced skills in computing, who wish to develop software applications by using Epi Info for Windows 98, NT, 2000, and XP.

The 3-day course covers hands-on experience with operating the new Windows version of Epi Info, programming Epi Info software at the intermediate level, and using computerized interactive exercises for developing public health information systems. Tuition charges apply. Deadline for applications is May 1 or until filled.

Additional information and applications are available from Emory University, Rollins School of Public Health, International Health Department, 1518 Clifton Road NE, Room 746, Atlanta, Georgia 30322; by fax 404-727-4590; by e-mail [pvaleri@sph.emory.edu](mailto:pvaleri@sph.emory.edu); or at <http://www.sph.emory.edu/epicourses>.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 3, 2004, with historical data**



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

**TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 3, 2004 (13th Week)\***

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal <sup>†</sup>	12	32
Botulism:	-	-	HIV infection, pediatric <sup>‡§</sup>	-	74
foodborne	3	4	Measles, total	6 <sup>¶</sup>	5 <sup>**</sup>
infant	16	19	Mumps	39	59
other (wound & unspecified)	4	5	Plague	-	-
Brucellosis <sup>†</sup>	15	25	Poliomyelitis, paralytic	-	-
Chancroid	7	15	Psittacosis <sup>†</sup>	2	6
Cholera	1	-	Q fever <sup>†</sup>	5	14
Cyclosporiasis <sup>†</sup>	15	22	Rabies, human	-	-
Diphtheria	-	-	Rubella	11	1
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE) <sup>†</sup>	5	21	SARS-associated coronavirus disease <sup>† ††</sup>	-	4
human monocytic (HME) <sup>†</sup>	8	20	Smallpox <sup>† §§</sup>	-	NA
human, other and unspecified	-	1	<i>Staphylococcus aureus</i> :	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA) <sup>† §§</sup>	4	NA
California serogroup viral <sup>†</sup>	-	-	Vancomycin-resistant (VRSA) <sup>† §§</sup>	-	NA
eastern equine <sup>†</sup>	-	2	Streptococcal toxic-shock syndrome <sup>†</sup>	27	60
Powassan <sup>†</sup>	-	-	Tetanus	3	4
St. Louis <sup>†</sup>	1	2	Toxic-shock syndrome	33	32
western equine <sup>†</sup>	-	-	Trichinosis	2	-
Hansen disease (leprosy) <sup>†</sup>	13	27	Tularemia <sup>†</sup>	3	4
Hantavirus pulmonary syndrome <sup>†</sup>	2	5	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 monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 28, 2003.  
<sup>¶</sup> Of six cases reported, five were indigenous, and one was imported from another country.  
<sup>\*\*</sup> Of five cases reported, two were indigenous, and three 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 April 3, 2004, and March 29, 2003 (13th Week)\***

Reporting area	AIDS		Chlamydia†		Coccidiomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	-	11,724	187,015	208,415	1,213	939	599	557	7	57
NEW ENGLAND	-	415	7,102	6,812	-	-	34	33	-	-
Maine	-	8	391	473	N	N	5	2	-	-
N.H.	-	7	437	388	-	-	9	3	-	-
Vt.	-	5	288	278	-	-	4	5	-	-
Mass.	-	185	3,591	2,579	-	-	10	18	-	-
R.I.	-	21	876	760	-	-	1	3	-	-
Conn.	-	189	1,519	2,334	N	N	5	2	-	-
MID. ATLANTIC	-	2,694	26,654	24,261	-	-	107	65	2	-
Upstate N.Y.	-	141	5,232	4,136	N	N	23	12	-	-
N.Y. City	-	1,426	7,972	8,300	-	-	22	25	-	-
N.J.	-	423	3,383	3,623	-	-	7	2	-	-
Pa.	-	704	10,067	8,202	N	N	55	26	2	-
E.N. CENTRAL	-	891	30,293	38,595	4	2	117	98	-	-
Ohio	-	153	5,877	10,901	-	-	40	14	-	-
Ind.	-	119	4,041	4,260	N	N	18	6	-	-
Ill.	-	365	7,818	12,371	-	-	8	16	-	-
Mich.	-	202	9,575	6,828	4	2	29	22	-	-
Wis.	-	52	2,982	4,235	-	-	22	40	-	-
W.N. CENTRAL	-	164	10,402	12,189	2	1	66	38	1	-
Minn.	-	41	2,032	2,722	N	N	25	21	-	-
Iowa	-	23	-	1,250	N	N	9	5	-	-
Mo.	-	82	4,377	4,397	1	1	14	2	1	-
N. Dak.	-	-	287	316	N	N	-	1	-	-
S. Dak.	-	4	611	586	-	-	5	7	-	-
Nebr.†	-	6	1,237	1,109	1	-	-	2	-	-
Kans.	-	8	1,858	1,809	N	N	13	-	-	-
S. ATLANTIC	-	3,491	30,536	37,823	-	1	131	179	3	57
Del.	-	58	754	748	N	N	-	1	-	-
Md.	-	193	4,993	3,975	-	1	7	6	-	-
D.C.	-	380	810	845	-	-	1	-	-	-
Va.	-	297	1,245	3,905	-	-	14	7	-	-
W. Va.	-	20	706	608	N	N	2	-	-	-
N.C.	-	437	7,233	6,028	N	N	25	9	-	-
S.C.†	-	211	4,266	3,570	-	-	3	1	2	-
Ga.	-	417	1,008	7,908	-	-	45	26	-	-
Fla.	-	1,478	9,521	10,236	N	N	34	129	1	57
E.S. CENTRAL	-	428	12,443	13,770	N	N	30	30	-	-
Ky.	-	40	1,368	2,121	N	N	6	7	-	-
Tenn.	-	220	5,393	4,760	N	N	12	11	-	-
Ala.	-	64	3,077	3,573	-	-	8	10	-	-
Miss.	-	104	2,605	3,316	N	N	4	2	-	-
W.S. CENTRAL	-	1,283	25,721	25,575	1	1	20	9	1	-
Ark.	-	35	1,970	1,551	1	-	8	2	-	-
La.	-	136	6,355	4,842	N	N	-	-	1	-
Okla.	-	50	2,255	2,238	N	N	8	1	-	-
Tex.	-	1,062	15,141	16,944	-	1	4	6	-	-
MOUNTAIN	-	409	11,004	12,986	734	675	31	19	-	-
Mont.	-	7	263	527	N	N	3	2	-	-
Idaho	-	5	793	662	N	N	1	4	-	-
Wyo.	-	3	265	253	-	-	-	-	-	-
Colo.	-	72	1,984	3,275	N	N	18	4	-	-
N. Mex.	-	27	1,245	2,010	6	-	1	-	-	-
Ariz.	-	216	4,605	4,047	707	664	5	2	-	-
Utah	-	21	653	678	4	1	-	5	-	-
Nev.	-	58	1,196	1,534	17	10	1	2	-	-
PACIFIC	-	1,949	32,860	36,404	470	259	63	86	-	-
Wash.	-	120	4,217	3,860	N	N	4	-	-	-
Oreg.	-	85	1,449	1,776	-	-	7	7	-	-
Calif.	-	1,703	26,312	28,592	470	259	51	79	-	-
Alaska	-	9	871	860	-	-	-	-	-	-
Hawaii	-	32	11	1,316	-	-	1	-	-	-
Guam	-	1	-	-	-	-	-	-	-	-
P.R.	-	325	298	562	N	N	N	N	-	-
V.I.	-	6	20	88	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	32	U	-	U	-	U	-	U

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

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

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

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 28, 2003.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 3, 2004, and March 29, 2003 (13th 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	217	272	31	66	28	24	3,434	4,599	65,275	79,649
NEW ENGLAND	15	11	1	7	3	3	321	260	1,688	1,755
Maine	-	-	-	-	-	-	28	21	67	37
N.H.	2	3	-	1	-	-	11	15	28	31
Vt.	-	-	-	-	-	-	19	20	18	26
Mass.	2	3	-	2	3	3	159	139	830	658
R.I.	1	1	-	-	-	-	23	21	233	240
Conn.	10	4	1	4	-	-	81	44	512	763
MID. ATLANTIC	18	29	1	1	7	4	733	788	8,691	9,797
Upstate N.Y.	6	7	1	-	3	2	224	170	1,771	1,637
N.Y. City	4	3	-	-	-	-	237	325	2,598	3,276
N.J.	-	4	-	-	2	-	60	104	1,307	2,190
Pa.	8	15	-	1	2	2	212	189	3,015	2,694
E.N. CENTRAL	42	59	7	11	4	2	418	642	11,912	17,423
Ohio	12	14	-	8	4	2	188	193	2,757	5,604
Ind.	9	7	-	-	-	-	-	-	1,448	1,620
Ill.	5	10	-	-	-	-	59	191	3,044	5,471
Mich.	8	11	1	-	-	-	127	158	3,803	3,229
Wis.	8	17	6	3	-	-	44	100	860	1,499
W.N. CENTRAL	39	33	7	5	6	3	373	377	3,579	4,166
Minn.	19	13	3	4	-	-	129	117	788	684
Iowa	4	3	-	-	-	-	50	49	-	252
Mo.	5	9	4	1	1	-	106	123	1,788	2,146
N. Dak.	2	1	-	-	3	1	6	12	34	12
S. Dak.	-	2	-	-	-	-	14	11	64	36
Nebr.	4	4	-	-	-	-	33	38	268	356
Kans.	5	1	-	-	2	2	35	27	637	680
S. ATLANTIC	16	53	10	33	3	10	577	1,449	14,173	19,002
Del.	-	-	N	N	N	N	13	13	262	337
Md.	2	-	-	-	-	-	25	28	2,178	1,950
D.C.	-	-	-	-	-	-	14	6	527	622
Va.	-	3	4	-	-	-	82	51	472	1,974
W. Va.	1	-	-	-	-	-	9	5	214	201
N.C.	-	-	3	6	-	-	N	N	3,951	3,374
S.C.	-	-	-	-	-	-	14	23	1,962	2,085
Ga.	6	3	2	2	-	-	144	187	652	3,850
Fla.	7	47	1	25	3	10	276	1,136	3,955	4,609
E.S. CENTRAL	8	11	1	-	4	-	69	69	5,698	6,952
Ky.	4	1	1	-	4	-	N	N	589	878
Tenn.	2	6	-	-	-	-	25	31	1,992	2,120
Ala.	1	3	-	-	-	-	44	38	1,783	2,245
Miss.	1	1	-	-	-	-	-	-	1,334	1,709
W.S. CENTRAL	12	14	-	2	-	2	65	48	9,609	10,528
Ark.	1	2	-	-	-	-	33	29	909	893
La.	-	-	-	-	-	-	7	3	2,995	2,734
Okla.	3	-	-	-	-	-	25	16	993	909
Tex.	8	12	-	2	-	2	-	-	4,712	5,992
MOUNTAIN	39	23	3	6	1	-	317	302	2,728	2,772
Mont.	2	-	-	-	-	-	6	9	11	33
Idaho	5	6	1	3	-	-	46	40	16	20
Wyo.	-	-	-	-	-	-	1	3	13	12
Colo.	20	7	1	2	1	-	93	81	642	761
N. Mex.	3	-	-	1	-	-	15	13	152	327
Ariz.	2	8	N	N	N	N	68	59	1,313	1,104
Utah	3	2	-	-	-	-	57	65	73	55
Nev.	4	-	1	-	-	-	31	32	508	460
PACIFIC	28	39	1	1	-	-	561	664	7,197	7,254
Wash.	6	12	-	-	-	-	55	48	689	716
Oreg.	2	5	1	1	-	-	93	74	179	225
Calif.	15	22	-	-	-	-	384	501	6,181	5,931
Alaska	1	-	-	-	-	-	11	17	147	137
Hawaii	4	-	-	-	-	-	18	24	1	245
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	18	2	18	24	68
V.I.	-	-	-	-	-	-	-	-	4	27
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 April 3, 2004, and March 29, 2003 (13th 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.	Cum.
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	2004	2003
UNITED STATES	511	520	5	6	29	33	52	61	1,359	1,806
NEW ENGLAND	49	35	1	1	2	2	2	1	251	43
Maine	5	2	-	-	-	-	-	1	8	1
N.H.	9	4	-	-	1	-	-	-	6	3
Vt.	4	6	-	-	-	-	-	-	5	2
Mass.	19	16	1	1	-	2	2	-	202	25
R.I.	1	-	-	-	-	-	-	-	5	2
Conn.	11	7	-	-	1	-	-	-	25	10
MID. ATLANTIC	99	78	-	-	1	1	15	11	160	283
Upstate N.Y.	34	25	-	-	1	1	3	4	20	23
N.Y. City	14	13	-	-	-	-	4	3	53	105
N.J.	20	13	-	-	-	-	2	1	34	50
Pa.	31	27	-	-	-	-	6	3	53	105
E.N. CENTRAL	66	62	-	1	9	2	6	13	112	168
Ohio	35	16	-	-	2	-	4	4	16	29
Ind.	12	7	-	-	3	1	1	-	5	10
Ill.	-	26	-	-	-	-	-	8	40	60
Mich.	9	6	-	1	4	1	-	-	40	51
Wis.	10	7	-	-	-	-	1	1	11	18
W.N. CENTRAL	18	32	1	-	1	4	-	3	30	36
Minn.	9	12	-	-	1	4	-	-	1	4
Iowa	1	-	1	-	-	-	-	-	6	9
Mo.	4	13	-	-	-	-	-	3	11	9
N. Dak.	-	1	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	4	-	-	-	-	-	-	-	7	3
Kans.	-	5	-	-	-	-	-	-	3	11
S. ATLANTIC	143	178	-	1	3	8	12	13	270	673
Del.	3	-	-	-	-	-	2	-	3	3
Md.	27	19	-	-	1	1	-	-	47	39
D.C.	-	-	-	-	-	-	-	-	3	4
Va.	10	8	-	-	-	-	-	2	24	28
W. Va.	6	3	-	-	-	-	3	-	1	4
N.C.	12	5	-	-	-	-	-	-	16	22
S.C.	-	1	-	-	-	-	-	-	5	17
Ga.	52	19	-	-	-	-	7	2	105	144
Fla.	33	123	-	1	2	7	-	9	66	412
E.S. CENTRAL	18	29	-	-	-	1	4	4	43	45
Ky.	-	3	-	-	-	1	-	-	4	7
Tenn.	10	14	-	-	-	-	3	3	27	21
Ala.	8	11	-	-	-	-	1	1	5	9
Miss.	-	1	-	-	-	-	-	-	7	8
W.S. CENTRAL	17	22	-	-	2	2	-	1	71	122
Ark.	2	3	-	-	-	-	-	-	7	6
La.	1	6	-	-	-	-	-	1	1	23
Okla.	14	13	-	-	2	2	-	-	11	4
Tex.	-	-	-	-	-	-	-	-	52	89
MOUNTAIN	83	53	1	1	10	8	11	9	140	103
Mont.	-	-	-	-	-	-	-	-	1	1
Idaho	2	-	-	-	-	-	1	-	4	6
Wyo.	-	-	-	-	-	-	-	-	1	1
Colo.	24	11	-	-	-	-	5	4	22	6
N. Mex.	14	6	-	-	3	2	2	1	3	7
Ariz.	35	28	-	1	6	3	1	3	87	62
Utah	3	5	1	-	-	1	1	1	19	6
Nev.	5	3	-	-	1	2	1	-	3	14
PACIFIC	18	31	2	2	1	5	2	6	282	333
Wash.	3	3	2	-	-	2	1	1	12	14
Oreg.	10	12	-	-	-	-	-	3	15	21
Calif.	2	14	-	2	1	3	1	2	247	292
Alaska	-	-	-	-	-	-	-	-	2	3
Hawaii	3	2	-	-	-	-	-	-	6	3
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	3	10
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 April 3, 2004, and March 29, 2003 (13th Week)\*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C		Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003						
UNITED STATES	1,322	2,331	294	604	240	369	93	140	1,492	1,886
NEW ENGLAND	56	77	-	-	4	11	4	5	84	127
Maine	1	-	-	-	-	-	1	-	17	-
N.H.	12	3	-	-	-	-	1	1	8	4
Vt.	1	1	-	-	-	1	-	-	2	3
Mass.	42	56	-	-	1	5	-	2	30	82
R.I.	-	-	-	-	1	1	-	-	13	10
Conn.	-	17	U	U	2	4	2	2	14	28
MID. ATLANTIC	185	280	39	34	49	48	22	21	1,207	1,419
Upstate N.Y.	15	17	3	5	11	12	6	3	440	448
N.Y. City	14	137	-	-	1	6	2	7	-	-
N.J.	87	64	-	-	11	4	5	3	249	287
Pa.	69	62	36	29	26	26	9	8	518	684
E.N. CENTRAL	90	113	14	36	62	62	12	9	20	42
Ohio	46	37	2	3	32	25	5	1	14	7
Ind.	2	4	-	-	4	3	1	1	-	3
Ill.	-	1	1	10	2	10	-	3	-	-
Mich.	42	53	11	23	22	18	5	4	-	-
Wis.	-	18	-	-	2	6	1	-	6	32
W.N. CENTRAL	105	72	139	70	5	7	3	2	22	20
Minn.	8	5	1	1	-	2	2	1	6	13
Iowa	1	4	-	-	-	2	-	-	3	2
Mo.	87	50	138	69	4	1	1	-	12	3
N. Dak.	1	-	-	-	-	1	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-
Nebr.	6	7	-	-	-	-	-	1	-	-
Kans.	2	5	-	-	-	1	-	-	1	2
S. ATLANTIC	452	1,069	44	109	64	186	16	56	133	214
Del.	4	2	-	-	2	-	N	N	8	30
Md.	43	27	1	6	10	13	2	3	72	77
D.C.	5	-	1	-	-	1	-	-	1	2
Va.	43	33	9	-	4	5	-	2	5	10
W. Va.	-	1	2	-	2	-	1	-	1	-
N.C.	44	39	3	3	7	7	4	5	30	12
S.C.	15	34	-	14	-	3	-	2	1	-
Ga.	145	297	7	6	6	6	4	6	1	3
Fla.	153	636	21	80	33	151	5	38	14	80
E.S. CENTRAL	94	87	15	23	9	5	4	4	2	11
Ky.	11	13	8	3	2	-	1	-	1	1
Tenn.	40	27	5	3	5	2	3	-	1	2
Ala.	16	21	-	4	2	1	-	3	-	-
Miss.	27	26	2	13	-	2	-	1	-	8
W.S. CENTRAL	21	255	22	308	11	18	8	10	2	28
Ark.	9	26	-	2	-	-	-	-	-	-
La.	6	42	9	47	-	-	-	-	-	3
Okla.	6	13	-	-	2	2	-	1	-	-
Tex.	-	174	13	259	9	16	8	9	2	25
MOUNTAIN	125	155	10	8	19	13	5	11	3	3
Mont.	-	4	1	1	-	-	-	1	-	-
Idaho	3	2	-	-	1	1	1	-	-	1
Wyo.	1	4	-	-	4	1	-	-	1	-
Colo.	17	23	2	3	3	2	1	5	-	-
N. Mex.	5	9	-	-	-	1	-	1	-	-
Ariz.	69	85	2	3	4	4	-	4	1	-
Utah	12	9	-	-	6	2	-	-	1	1
Nev.	18	19	5	1	1	2	3	-	-	1
PACIFIC	194	223	11	16	17	19	19	22	19	22
Wash.	21	14	2	2	3	1	5	1	2	-
Oreg.	27	35	4	3	N	N	3	1	6	6
Calif.	140	168	3	10	14	18	11	20	11	15
Alaska	4	2	-	-	-	-	-	-	-	1
Hawaii	2	4	2	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	5	31	-	-	-	-	-	-	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 April 3, 2004, and March 29, 2003 (13th 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	216	315	461	589	1,850	1,642	724	1,280	106	80
NEW ENGLAND	16	8	22	26	471	163	101	102	4	-
Maine	-	1	7	2	-	-	11	8	-	-
N.H.	-	2	2	1	10	10	6	5	-	-
Vt.	1	-	1	-	12	18	5	8	-	-
Mass.	8	5	12	20	438	122	37	35	4	-
R.I.	2	-	-	-	7	-	4	6	-	-
Conn.	5	-	-	3	4	13	38	40	-	-
MID. ATLANTIC	43	58	58	60	531	158	101	190	9	9
Upstate N.Y.	10	11	16	8	388	65	72	60	1	-
N.Y. City	18	33	11	14	-	-	-	1	1	4
N.J.	7	4	8	10	45	27	-	48	1	4
Pa.	8	10	23	28	98	66	29	81	6	1
E.N. CENTRAL	14	24	60	80	223	109	3	6	2	1
Ohio	3	5	26	22	111	61	2	-	2	1
Ind.	-	-	7	12	11	7	1	2	-	-
Ill.	1	11	1	18	-	-	-	1	-	-
Mich.	5	6	20	17	29	11	-	3	-	-
Wis.	5	2	6	11	72	30	-	-	-	-
W.N. CENTRAL	16	6	23	42	88	81	84	143	3	2
Minn.	6	4	7	10	14	27	11	5	-	-
Iowa	1	2	4	6	15	30	11	17	-	1
Mo.	3	-	5	19	45	13	3	-	3	1
N. Dak.	1	-	-	-	3	1	11	17	-	-
S. Dak.	1	-	1	-	1	2	10	24	-	-
Nebr.	1	-	1	3	-	1	15	24	-	-
Kans.	3	-	5	4	10	7	23	56	-	-
S. ATLANTIC	78	135	87	156	111	214	325	686	75	64
Del.	1	-	1	7	3	1	9	-	-	-
Md.	22	21	4	8	26	16	50	87	4	6
D.C.	4	2	-	-	1	-	-	-	-	-
Va.	4	6	3	6	26	28	15	105	-	1
W. Va.	-	2	3	1	2	1	16	17	-	-
N.C.	4	5	10	6	26	45	148	178	66	34
S.C.	3	1	7	9	10	5	20	38	-	3
Ga.	11	6	12	12	4	4	64	82	3	2
Fla.	29	92	47	107	13	114	3	179	2	18
E.S. CENTRAL	7	6	22	23	26	26	30	48	9	2
Ky.	1	1	3	2	3	4	5	9	-	-
Tenn.	1	3	8	4	15	12	10	33	3	1
Ala.	4	2	6	6	4	8	15	5	1	-
Miss.	1	-	5	11	4	2	-	1	5	1
W.S. CENTRAL	6	21	44	71	56	78	38	55	-	2
Ark.	1	1	8	5	3	3	13	17	-	-
La.	2	1	10	22	2	4	-	-	-	-
Okla.	1	-	1	5	6	4	25	38	-	-
Tex.	2	19	25	39	45	67	-	-	-	2
MOUNTAIN	12	9	27	21	216	245	19	15	-	-
Mont.	-	-	1	1	4	-	3	2	-	-
Idaho	-	1	2	1	13	8	-	-	-	-
Wyo.	-	-	2	2	2	59	-	-	-	-
Colo.	5	7	13	5	120	89	-	-	-	-
N. Mex.	1	-	4	2	10	19	-	-	-	-
Ariz.	2	1	4	7	46	45	16	13	-	-
Utah	2	-	1	-	19	20	-	-	-	-
Nev.	2	-	-	3	2	5	-	-	-	-
PACIFIC	24	48	118	110	128	568	23	35	4	-
Wash.	2	5	8	9	84	83	-	-	-	-
Oreg.	2	5	28	23	37	61	-	-	2	-
Calif.	20	38	78	72	-	423	21	33	2	-
Alaska	-	-	1	-	3	-	2	2	-	-
Hawaii	-	-	3	6	4	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	3	1	-	14	15	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 April 3, 2004, and March 29, 2003 (13th 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	5,783	10,131	2,384	6,773	1,368	2,044	766	1,238	112	115
NEW ENGLAND	267	277	56	83	54	180	4	34	3	1
Maine	11	15	1	3	2	10	-	-	-	-
N.H.	17	21	3	-	8	13	-	-	N	N
Vt.	10	5	1	1	1	7	2	4	1	1
Mass.	159	171	37	55	41	78	N	N	N	N
R.I.	13	15	1	2	2	1	2	-	2	-
Conn.	57	50	13	22	-	71	-	30	U	U
MID. ATLANTIC	738	766	281	408	198	319	46	42	26	24
Upstate N.Y.	163	126	123	62	72	103	19	21	19	16
N.Y. City	222	246	76	104	27	44	U	U	U	U
N.J.	139	141	48	103	33	81	N	N	N	N
Pa.	214	253	34	139	66	91	27	21	7	8
E.N. CENTRAL	809	859	201	361	227	448	176	140	42	61
Ohio	230	241	46	69	80	98	139	97	29	36
Ind.	75	54	40	24	24	27	37	43	10	5
Ill.	198	318	63	178	18	130	-	-	-	-
Mich.	161	121	30	59	96	124	N	N	N	N
Wis.	145	125	22	31	9	69	N	N	3	20
W.N. CENTRAL	364	340	84	171	110	113	72	77	11	16
Minn.	81	89	11	22	57	42	-	-	9	13
Iowa	73	78	24	7	N	N	N	N	N	N
Mo.	108	84	25	63	19	25	3	3	2	1
N. Dak.	8	7	1	3	3	7	-	3	-	2
S. Dak.	17	18	1	8	7	13	1	-	-	-
Nebr.	30	25	3	48	7	13	-	-	N	N
Kans.	47	39	19	20	17	13	68	71	N	N
S. ATLANTIC	1,425	5,502	773	3,745	349	458	387	857	3	3
Del.	7	17	2	83	1	3	2	-	N	N
Md.	103	145	27	146	68	82	-	2	-	-
D.C.	8	7	13	15	2	3	1	-	3	-
Va.	155	116	28	60	14	27	N	N	N	N
W. Va.	29	8	-	-	9	9	33	16	-	3
N.C.	192	260	111	205	34	31	N	N	U	U
S.C.	74	82	103	50	18	7	21	52	N	N
Ga.	279	198	150	337	137	65	144	176	N	N
Fla.	578	4,669	339	2,849	66	231	186	611	N	N
E.S. CENTRAL	323	361	146	222	65	54	49	36	-	-
Ky.	56	65	22	34	24	11	12	2	N	N
Tenn.	94	133	54	73	41	43	37	34	N	N
Ala.	117	106	52	80	-	-	-	-	N	N
Miss.	56	57	18	35	-	-	-	-	-	-
W.S. CENTRAL	344	523	351	911	48	151	21	41	25	8
Ark.	55	64	14	11	3	2	3	11	4	3
La.	25	81	24	91	-	1	18	30	2	3
Okla.	51	43	91	165	19	26	N	N	11	2
Tex.	213	335	222	644	26	122	N	N	8	-
MOUNTAIN	547	417	195	244	164	167	11	10	2	2
Mont.	23	30	3	1	-	-	-	-	-	-
Idaho	38	44	1	5	3	9	N	N	N	N
Wyo.	10	4	1	1	4	-	4	1	-	-
Colo.	122	113	41	38	49	47	-	-	-	-
N. Mex.	32	33	31	41	26	44	5	9	-	-
Ariz.	230	129	91	139	70	63	-	-	N	N
Utah	50	35	11	8	11	4	-	-	2	2
Nev.	42	29	16	11	1	-	2	-	-	-
PACIFIC	966	1,086	297	628	153	154	-	1	-	-
Wash.	69	85	15	44	20	-	-	-	N	N
Oreg.	65	79	16	18	N	N	N	N	N	N
Calif.	738	862	252	553	105	129	N	N	N	N
Alaska	26	23	2	4	1	-	-	-	N	N
Hawaii	68	37	12	9	27	25	-	1	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	24	119	1	2	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 3, 2004, and March 29, 2003 (13th 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	1,527	1,741	48	123	1,544	2,532	49	86	3,846	3,994
NEW ENGLAND	30	42	1	-	48	67	6	6	231	638
Maine	-	2	-	-	-	-	-	-	43	332
N.H.	1	6	-	-	1	4	-	-	-	-
Vt.	-	-	-	-	-	2	-	-	188	241
Mass.	20	28	-	-	37	31	6	2	-	63
R.I.	2	3	-	-	5	10	-	2	-	2
Conn.	7	3	1	-	5	20	-	2	-	-
MID. ATLANTIC	210	194	7	19	416	465	8	14	13	5
Upstate N.Y.	15	4	2	1	41	39	-	3	-	-
N.Y. City	117	100	3	10	221	228	3	7	-	-
N.J.	38	50	2	8	94	75	3	3	-	-
Pa.	40	40	-	-	60	123	2	1	13	5
E.N. CENTRAL	151	244	15	22	222	230	3	8	1,818	1,900
Ohio	51	50	1	2	43	37	1	-	513	407
Ind.	10	8	-	5	13	29	-	2	-	-
Ill.	42	92	-	10	139	105	-	1	-	-
Mich.	43	90	14	5	8	48	2	5	1,273	1,203
Wis.	5	4	-	-	19	11	-	-	32	290
W.N. CENTRAL	28	53	-	2	53	103	1	-	90	11
Minn.	4	19	-	-	27	32	-	-	-	-
Iowa	-	4	-	-	4	6	-	-	N	N
Mo.	17	20	-	2	11	28	1	-	2	-
N. Dak.	-	-	-	-	2	-	-	-	64	11
S. Dak.	-	-	-	-	2	9	-	-	24	-
Nebr.	4	1	-	-	2	2	-	-	-	-
Kans.	3	9	-	-	5	26	-	-	-	-
S. ATLANTIC	407	421	6	24	257	472	8	28	580	656
Del.	2	2	-	-	-	-	-	-	2	2
Md.	73	59	1	4	44	36	2	3	-	-
D.C.	12	9	-	-	-	-	-	-	6	7
Va.	1	20	-	1	6	44	2	8	143	119
W. Va.	1	-	-	-	5	4	-	-	367	488
N.C.	38	41	1	3	38	37	2	1	-	-
S.C.	30	35	-	4	23	35	-	-	62	40
Ga.	55	92	-	5	11	115	-	1	-	-
Fla.	195	163	4	7	130	201	2	15	-	-
E. S. CENTRAL	82	99	2	7	81	153	-	1	1	-
Ky.	14	16	-	1	13	21	-	-	-	-
Tenn.	38	39	1	1	33	46	-	-	-	-
Ala.	24	36	1	4	35	66	-	1	-	-
Miss.	6	8	-	1	-	20	-	-	1	-
W.S. CENTRAL	262	211	15	18	126	387	3	2	333	705
Ark.	12	10	-	-	30	18	-	-	-	-
La.	59	25	-	-	-	-	-	-	-	7
Okla.	7	11	2	-	35	20	-	-	-	-
Tex.	184	165	13	18	61	349	3	2	333	698
MOUNTAIN	98	76	2	15	43	60	3	3	780	79
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	8	2	-	-	-	1	-	-	-	-
Wyo.	1	-	-	-	-	1	-	-	14	2
Colo.	-	8	-	3	5	27	-	3	566	-
N. Mex.	20	16	-	4	-	2	-	-	23	-
Ariz.	64	47	2	8	24	23	1	-	-	-
Utah	3	1	-	-	14	6	1	-	177	77
Nev.	2	2	-	-	-	-	1	-	-	-
PACIFIC	259	401	-	16	298	595	17	24	-	-
Wash.	20	16	-	-	46	52	1	-	-	-
Oreg.	9	13	-	-	15	20	1	2	-	-
Calif.	230	367	-	16	201	482	9	22	-	-
Alaska	-	-	-	-	8	14	-	-	-	-
Hawaii	-	5	-	-	28	27	6	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	20	48	-	7	-	22	-	-	75	118
V.I.	-	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

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

TABLE III. Deaths in 122 U.S. cities,\* week ending April 3, 2004 (13th Week)

Reporting Area	All causes, by age (years)							P&I† Total	Reporting Area	All causes, by age (years)							P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages			≥65	45-64	25-44	1-24	<1			
NEW ENGLAND	552	389	112	31	13	7	56	S. ATLANTIC	1,118	720	250	76	28	44	65		
Boston, Mass.	141	93	31	11	3	3	15	Atlanta, Ga.	166	95	33	15	6	17	6		
Bridgeport, Conn.	42	32	9	-	1	-	5	Baltimore, Md.	146	87	46	11	1	1	12		
Cambridge, Mass.	23	19	2	2	-	-	3	Charlotte, N.C.	111	79	20	4	3	5	10		
Fall River, Mass.	29	21	4	2	1	1	2	Jacksonville, Fla.	145	101	31	11	1	1	9		
Hartford, Conn.	U	U	U	U	U	U	U	Miami, Fla.	U	U	U	U	U	U	U		
Lowell, Mass.	26	22	3	1	-	-	-	Norfolk, Va.	60	36	10	6	-	8	1		
Lynn, Mass.	10	9	-	1	-	-	3	Richmond, Va.	69	42	18	6	3	-	4		
New Bedford, Mass.	23	20	2	1	-	-	1	Savannah, Ga.	56	34	16	3	1	2	4		
New Haven, Conn.	43	26	16	-	1	-	1	St. Petersburg, Fla.	56	38	11	2	5	-	7		
Providence, R.I.	67	45	12	5	4	1	6	Tampa, Fla.	188	133	38	7	3	7	10		
Somerville, Mass.	6	4	2	-	-	-	1	Washington, D.C.	99	60	24	8	4	3	1		
Springfield, Mass.	42	31	8	2	1	-	6	Wilmington, Del.	22	15	3	3	1	-	1		
Waterbury, Conn.	42	33	7	-	1	1	4	E.S. CENTRAL	855	588	183	46	20	17	85		
Worcester, Mass.	58	34	16	6	1	1	9	Birmingham, Ala.	159	102	43	5	4	4	19		
MID. ATLANTIC	2,712	1,878	577	179	40	37	174	Chattanooga, Tenn.	93	75	11	2	2	3	5		
Albany, N.Y.	51	37	8	3	1	2	6	Knoxville, Tenn.	104	67	28	7	2	-	-		
Allentown, Pa.	15	15	-	-	-	-	1	Lexington, Ky.	69	48	13	6	1	1	11		
Buffalo, N.Y.	91	60	20	6	4	1	10	Memphis, Tenn.	170	110	33	14	9	4	14		
Camden, N.J.	36	19	11	3	1	2	-	Mobile, Ala.	64	51	8	1	1	3	7		
Elizabeth, N.J.	23	13	5	5	-	-	-	Montgomery, Ala.	61	50	9	2	-	-	12		
Erie, Pa.	36	31	4	1	-	-	-	Nashville, Tenn.	135	85	38	9	1	2	17		
Jersey City, N.J.	42	32	7	-	3	-	-	W.S. CENTRAL	1,530	1,011	336	117	33	33	107		
New York City, N.Y.	1,571	1,108	322	97	22	21	94	Austin, Tex.	111	79	19	6	3	4	11		
Newark, N.J.	69	30	28	10	-	1	3	Baton Rouge, La.	39	25	8	4	-	2	-		
Paterson, N.J.	28	13	10	3	2	-	-	Corpus Christi, Tex.	65	40	15	7	3	-	4		
Philadelphia, Pa.	360	224	90	39	6	1	17	Dallas, Tex.	212	131	41	25	8	7	18		
Pittsburgh, Pa. <sup>§</sup>	25	16	7	-	1	1	2	El Paso, Tex.	81	64	12	2	1	2	6		
Reading, Pa.	24	19	4	1	-	-	1	Ft. Worth, Tex.	124	80	31	9	2	2	7		
Rochester, N.Y.	124	98	20	5	-	1	16	Houston, Tex.	397	239	104	35	12	7	30		
Schenectady, N.Y.	21	18	3	-	-	-	3	Little Rock, Ark.	76	48	16	7	1	4	2		
Scranton, Pa.	23	16	7	-	-	-	3	New Orleans, La.	44	24	16	4	-	-	-		
Syracuse, N.Y.	96	75	18	1	-	2	11	San Antonio, Tex.	188	141	33	12	1	1	15		
Trenton, N.J.	39	26	4	4	-	5	1	Shreveport, La.	81	57	17	3	1	3	7		
Utica, N.Y.	17	11	6	-	-	-	4	Tulsa, Okla.	112	83	24	3	1	1	7		
Yonkers, N.Y.	21	17	3	1	-	-	2	MOUNTAIN	927	637	190	53	26	21	65		
E.N. CENTRAL	2,027	1,408	414	118	46	38	141	Albuquerque, N.M.	129	97	23	4	3	2	8		
Akron, Ohio	52	35	12	3	1	1	10	Boise, Idaho	37	23	10	3	1	-	3		
Canton, Ohio	40	29	6	4	-	1	1	Colorado Springs, Colo.	63	40	13	7	2	1	1		
Chicago, Ill.	324	201	71	31	14	5	20	Denver, Colo.	106	70	25	6	3	2	10		
Cincinnati, Ohio	83	59	16	5	2	1	8	Las Vegas, Nev.	232	148	59	16	3	6	13		
Cleveland, Ohio	244	183	49	8	2	2	9	Ogden, Utah	31	28	2	1	-	-	1		
Columbus, Ohio	197	143	38	6	4	6	18	Phoenix, Ariz.	33	17	7	2	4	3	1		
Dayton, Ohio	119	86	23	7	1	2	10	Pueblo, Colo.	31	27	3	1	-	-	3		
Detroit, Mich.	172	91	53	18	2	8	15	Salt Lake City, Utah	116	88	18	5	2	3	13		
Evansville, Ind.	34	19	13	1	1	-	5	Tucson, Ariz.	149	99	30	8	8	4	12		
Fort Wayne, Ind.	62	43	13	3	3	-	6	PACIFIC	1,655	1,171	320	104	37	23	153		
Gary, Ind.	11	5	3	2	1	-	-	Berkeley, Calif.	18	8	7	3	-	-	-		
Grand Rapids, Mich.	66	50	9	3	3	1	5	Fresno, Calif.	49	33	10	3	1	2	4		
Indianapolis, Ind.	165	110	35	5	8	7	8	Glendale, Calif.	21	16	3	-	-	2	2		
Lansing, Mich.	46	33	7	5	1	-	1	Honolulu, Hawaii	96	71	18	3	4	-	5		
Milwaukee, Wis.	122	95	17	8	1	1	10	Long Beach, Calif.	61	42	14	4	1	-	7		
Peoria, Ill.	35	26	7	-	-	1	1	Los Angeles, Calif.	392	266	77	34	9	6	44		
Rockford, Ill.	43	35	7	1	-	-	1	Pasadena, Calif.	21	15	6	-	-	-	1		
South Bend, Ind.	56	44	10	1	1	-	3	Portland, Oreg.	97	59	23	7	6	2	4		
Toledo, Ohio	112	89	14	6	1	2	5	Sacramento, Calif.	191	147	32	7	4	1	17		
Youngstown, Ohio	44	32	11	1	-	-	5	San Diego, Calif.	152	115	22	10	4	1	15		
W.N. CENTRAL	545	394	92	22	19	18	32	San Francisco, Calif.	116	84	19	12	-	1	17		
Des Moines, Iowa	48	42	5	1	-	-	3	San Jose, Calif.	158	113	29	8	4	4	14		
Duluth, Minn.	44	36	7	-	-	1	2	Santa Cruz, Calif.	34	23	8	3	-	-	2		
Kansas City, Kans.	26	20	5	-	1	-	4	Seattle, Wash.	95	58	27	5	2	3	8		
Kansas City, Mo.	58	40	11	1	4	2	1	Spokane, Wash.	61	50	9	-	1	1	9		
Lincoln, Nebr.	60	48	5	3	3	1	3	Tacoma, Wash.	93	71	16	5	1	-	4		
Minneapolis, Minn.	53	32	11	3	2	5	2	TOTAL	11,921†	8,196	2,474	746	262	238	878		
Omaha, Nebr.	68	50	8	6	1	3	9										
St. Louis, Mo.	72	45	21	2	3	1	5										
St. Paul, Minn.	33	26	5	1	-	1	1										
Wichita, Kans.	83	55	14	5	5	4	2										

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  $\geq 100,000$ . 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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