

Weekly

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Pertussis — United States, 1997-2000

Pertussis was a major cause of morbidity and mortality among infants and children in the United States during the prevaccine era (i.e., before the mid-1940s). Following the introduction and widespread use of whole-cell pertussis vaccine combined with diphtheria and tetanus toxoids (DTP) among infants and children in the late 1940s, the incidence of reported pertussis declined to a historic low of 1,010 cases in 1976 (Figure 1). However, since the early 1980s, reported pertussis incidence has increased cyclically with peaks occurring every 3-4 years (1). In 1996, less reactogenic acellular pertussis vaccines (DTaP) were licensed and recommended for routine use among infants (2). This report summarizes national surveillance data for pertussis during 1997-2000 and assesses the effectiveness of pertussis vaccination in the United States during this period. The findings indicate that pertussis incidence continues to increase in infants too young to receive 3 doses of pertussis-containing vaccine and in adolescents and adults. Prevention efforts should be directed at maintaining high vaccination rates and managing pertussis cases and outbreaks.

State health departments report weekly to CDC the number of pertussis cases, including demographic information, through the National Electronic Transmittal System for Surveillance. More detailed information about persons with pertussis, including clinical characteristics and vaccination history, is reported to CDC through the Supplementary Pertussis Surveillance System. Probable and confirmed pertussis cases are reported. A clinical case is defined as an acute cough illness lasting ≥ 14 days in a person with at least one pertussisassociated symptom (i.e., paroxysmal cough, post-tussive vomiting, or inspiratory whoop) or ≥ 14 days of cough in a person in an outbreak setting. A confirmed case is defined as a cough illness of any duration in a person with isolation of *Bordetella* *pertussis*, or a case that meets the clinical case definition and is confirmed by polymerase chain reaction (PCR) or by epidemiologic linkage to a laboratory-confirmed case. A probable case meets the clinical case definition but is not laboratory confirmed or epidemiologically linked to a laboratoryconfirmed case.

Vaccination coverage data are obtained from the National Health Interview Survey (NHIS) and the National Immunization Survey (NIS). NHIS is an annual cross-sectional household survey of the U.S. civilian population that collects data on vaccination status of children aged <6 years (*3*). Vaccination status is based on vaccination records or, when no records are available, on parental recall. NIS is a national telephone survey of the noninstitutionalized civilian population that estimates vaccination coverage among U.S. children aged 19– 35 months (*4*). Vaccination histories are verified by vaccine providers.

The effectiveness of pertussis vaccine (VE) among children aged 7–18 months in 1998 and 1999 was calculated using the screening method (5). During this time, most children received DTaP rather than DTP. The formula VE=1 - [PCV/ (1-PCV)][(1-PPV)/PPV] was used; PCV is the proportion of children vaccinated and PPV is the proportion of the population vaccinated. All confirmed and probable pertussis cases were included. Children were considered vaccinated if they had received ≥ 3 doses of pertussis-containing vaccine.

INSIDE

- 76 Hypothermia-Related Deaths Utah, 2000, and United States, 1979–1998
- 78 Update: Influenza Activity United States, 2001–02 Season
- 91 Notice to Readers

CENTERS FOR DISEASE CONTROL AND PREVENTION SAFER • HEALTHIER • PEOPLE[™] 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.

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Notifiable Disease Morbidity and 122 Cities Mortality Data Carol M. Knowles Deborah A. Adams Felicia J. Connor Patsy A. Hall Mechele A. Hester Pearl C. Sharp Children who were partially vaccinated (e.g., received 1 or 2 doses of vaccine) were excluded from calculations of PCV and PPV. Surveillance data during 1998–1999 were used to determine PCV, and data from NHIS for 1998 were used to estimate PPV. Data from NIS were used to determine the percentage of DTP, DTaP, and pediatric diphtheria and tetanus toxoids (DT) administered to children aged 7–18 months during 1998–1999. PCV and PPV were corrected for estimated use of DT.

During 1997–2000, a total of 29,134 pertussis cases were reported to NETSS (6,564 in 1997; 7,405 in 1998; 7,298 in 1999, and 7,867 in 2000), for a crude average annual incidence rate of 2.7 per 100,000 population. Among 29,048 persons with pertussis for whom age was known, 8,390 (29%) were aged <1 year, 3,359 (12%) were aged 1–4 years, 2,835 (10%) were aged 5–9 years, 8,529 (29%) were aged 10–19 years, and 5,935 (20%) were aged \geq 20 years. Average annual incidence rates were highest among infants aged <1 year (55.5 cases per 100,000 population) and lower in children aged 1–4 years (5.5), children aged 5–9 years (3.6), persons aged 10–19 years (5.5), and persons aged \geq 20 years (0.8).

Data on race were available for 17,308 (75%) of 23,113 patients aged <20 years. Of these, 15,124 (88%) were white, 1,438 (8%) were black, 316 (2%) were Asian/Pacific Islander, and 359 (2%) were American Indian/Alaska Native. Data on ethnicity were available for 16,543 (72%) patients aged <20 years. Of these, 2,715 (16%) were Hispanic. In comparison, the national population estimates for persons aged <20 years in 1998 were 79% white, 16% black, 4% Asian/Pacific Islander, and 1% American Indian/Alaska Native. Nationally, for all races, 15% of persons aged <20 years were Hispanic. Among persons with pertussis aged <20 years, males and females were represented equally; however, 67% of patients aged ≥20 years were female.

Supplementary clinical data for persons with pertussis with known age was available for 28,187 (97%) cases. The proportion of pertussis patients who were hospitalized or had complications of pertussis was highest among infants aged <6 months, and decreased with increasing age (Table 1). Among infants aged <6 months, 63% were hospitalized, 12% had radiographically confirmed pneumonia, and 1% had seizures. Among all age groups, 26 cases of encephalopathy and 62 pertussis-related deaths were reported.

According to NHIS data from 1998, 73% of children aged 7–18 months were vaccinated with \geq 3 doses of DTP, DTaP, or DT vaccines. Surveillance data for 1998 and 1999 indicated that 58% of patients aged 7–18 months were vaccinated with \geq 3 doses of DTaP, DTP, or DT. Compared with no doses of pertussis-containing vaccine, the VE for children aged 7–18 months receiving 3 doses was 88% (95%)

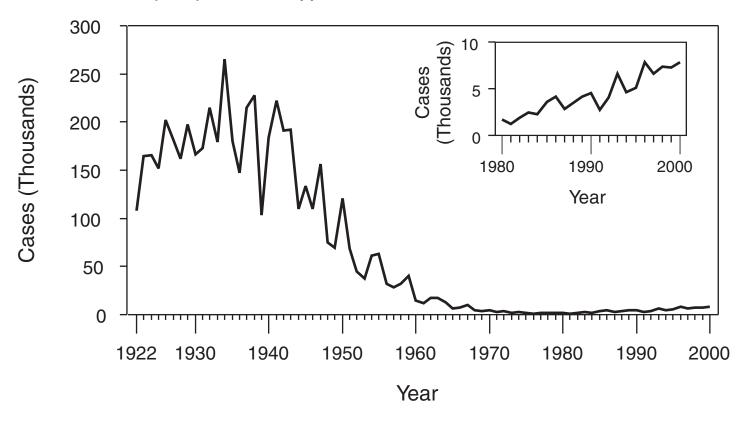


FIGURE 1. Number of reported pertussis cases, by year — United States, 1922–2000

TABLE 1. Pertussis-related hospitalizations, complications, and deaths, by age group — United States, 1997–2000

						Compli	cations				
	No. with	Hospi	talized	Pneu	monia*	Seiz	ures	Encep	halopathy	D	eaths
Age group	pertussis	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<6 mos	7,203	4,543	(63.1)	847	(11.8)	103	(1.4)	15	(0.2)	56	(0.8)
6-11 mos	1,073	301	(28.1)	92	(8.6)	7	(0.7)	1	(0.1)	1	(0.1)
1–4 yrs	3,137	324	(10.3)	168	(5.4)	36	(1.2)	3	(0.1)	1	(<0.1)
5–9 yrs	2,756	86	(3.1)	68	(2.5)	13	(0.5)	0	_	2	(0.1)
10–19 yrs	8,273	174	(2.1)	155	(1.9)	25	(0.3)	4	(0.1)	0	_
<u>></u> 20 yrs	5,745	202	(3.5)	147	(2.6)	32	(0.6)	3	(0.1)	2	(<0.1)
Total	28,187 [†]	5,630	(20.0)	1,477	(5.2)	216 [§]	(0.8)	26	(0.1)	62	(0.2)

*Radiographically confirmed.

Excludes 92 (0.3%) persons of unknown age with pertussis.

⁸Excludes one person of unknown age with seizures.

confidence interval [CI]=79%–93%). The VE was 91% (95% CI=82%–95%) for hospitalized patients, and 86% (95% CI=75%–92%) for nonhospitalized patients. Data do not now allow for separate estimation of VE for DTaP and DTP. According to NIS, use of DTaP, DTP, and DT in children aged \leq 18 months during 1998–1999 was 66.3%, 33.1%, and 0.3%, respectively.

Reported by: L Zanardi, MD, FB Pascual, MPH, K Bisgard, DVM, T Murphy, MD, M Wharton, MD, Epidemiology and Surveillance Div; E Maurice, MS, Data Management Div, National Immunization Program, CDC. **Editorial Note:** The increase in reported pertussis first noted in the 1980s continued throughout the 1990s (*1,6*). Compared with surveillance data for 1994–1996, the pertussis incidence rate among adolescents and adults has increased, 62% and 60%, respectively (*6*). The rate increased 11% among infants. In comparison, the incidence rate decreased 8% among children aged 1–4 years and remained stable among children aged 5–9 years. These increases could reflect a change in reporting or a true increase in incidence. In 1995, criteria for reporting a pertussis case changed in two ways: PCR became a method of confirmation, and data collection began for pertussis cases epidemiologically linked to another pertussis case. These changes primarily affected the reporting among patients aged ≥ 10 years. Although underreporting of mild or atypical disease is common (1), increased recognition and diagnosis of pertussis among older age groups probably contributed to the large increase of reported cases among adolescents and adults (7). Conversely, an increase in pertussis among infants too young to receive 3 doses of pertussiscontaining vaccine suggests a true increase in pertussis circulation (8). Infants have been a well-recognized high-risk group; changes in diagnosis or reporting patterns in this age group are unlikely. Despite recent changes in pertussis diagnostic methods, the proportion of culture-confirmed cases among infants has increased (8).

The screening VE estimate of 88% reflects the effectiveness of the overall vaccination program that, according to NIS, used approximately two thirds DTaP and one third DTP in children aged 7–18 months. This estimate is similar to the VE of 77%–90% previously estimated using the screening method for whole cell vaccine during 1992–1994 (9) and to VEs observed in clinical trials for acellular pertussis vaccines (2). The incidence of pertussis among children aged 6 months– 4 years has remained stable throughout the 1990s (6), suggesting that protection offered by vaccination has continued with the introduction of DTaP. Thus, the increase in reported pertussis cases is not related to low VE or the introduction of acellular pertussis vaccines.

Despite the effectiveness of vaccination, pertussis continues to occur in the United States among all age groups. The burden of disease remains highest in infants, who also have the highest rates for complications and death. In addition to maintaining high vaccination rates among preschool-aged children, prevention efforts should be directed at treatment of pertussis cases to prevent further spread of disease, use of antimicrobial prophylaxis in contacts of pertussis cases, and minimizing infant exposures to children and adults with cough illnesses (10). Studies among older children, adolescents, and adults examining pertussis disease burden and transmission of disease to infants might guide future policy decisions on the use of acellular pertussis vaccines among persons aged ≥ 7 years.

Acknowledgement

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Hypothermia-Related Deaths — Utah, 2000, and United States, 1979–1998

Hypothermia is a medical emergency that is completely preventable (1). Hypothermia occurs when persons are exposed to ambient cold temperatures without appropriate protection for extended periods of time (1). The clinical definition of hypothermia is a core body temperature \leq 95 F (35 C) (1). This report describes cases of hypothermia-related deaths in Utah during 2000 and describes unintentional hypothermia-related deaths in the United States during 1979–1998. The Utah cases illustrate risk factors and environmental conditions associated with hypothermia.

Case Reports

Case 1. In February 2000, a man aged 50 years was found dead in an alley behind local businesses in urban Utah. The high temperature that day had been 50 F (10 C), and the low temperature had been 36 F (2 C) with 0.1 inch of precipitation. The decedent was a transient who overused alcohol. His postmortem blood alcohol level was 0.36 g/dL. The death certificate listed the cause of death as hypothermia attributed to acute and chronic alcoholism.

Case 2. In March 2000, a man aged 27 years with a history of schizophrenia was found dead in a remote area of Utah. An investigation determined that his vehicle had become stuck in mud and he had become wet and cold while attempting to extricate the vehicle. The death certificate listed the cause of death as hypothermia.

Case 3. In October 2000, a boy aged 2 years was left alone by his father in a vehicle in a remote area of Utah for approximately 45 minutes. When the father returned, the child was missing. Six days later, the child was found dead. During the 6 days the child was missing, snow and rain fell in the area. The high temperature on the first day the child was missing was 54 F (12 C), and the low temperature was 27 F (-3 C). The death certificate listed the cause of death as hypothermia attributed to exposure to low environmental temperatures.

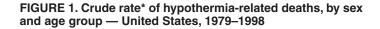
Case 4. In December 2000, a woman aged 74 years with Alzheimer disease wandered away from her nursing home in Utah. She was wearing her nightgown, was last seen alive at 6:30 a.m., and was found dead 3 hours later. The high temperature that day was 15 F (-9 C), and the low temperature was -2 F (-19 C) with snow on the ground. The death certificate listed the cause of death as hypothermia attributed to exposure to low environmental temperatures.

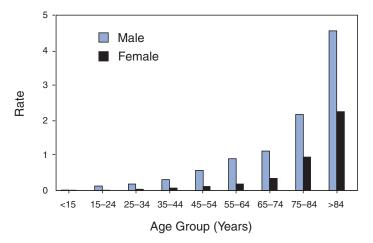
United States

U.S. data were obtained from the Compressed Mortality File (CMF), maintained by CDC's National Center for Health Statistics, and were prepared in accordance with the external cause-of-death codes from the *International Classification of Diseases, Ninth Revision* (ICD-9). CMF contains information from death certificates filed in the 50 states and the District of Columbia. During 1979–1998, a total of 13,970 deaths were attributed to hypothermia (ICD-9 codes E901.0, E901.8, and E901.9; excludes human-made cold E901.1). The death rate attributed to hypothermia for males is approximately three times that for females for every age group except for persons aged <15 years, and the elderly have the highest rates of death attributed to hypothermia (Figure 1).

During 1979–1998, Utah reported 91 deaths attributed to hypothermia, with an age-adjusted rate of 0.4 per 100,000 population. During the same period, Illinois reported the most deaths (859), with an age-adjusted rate of 0.4. Alaska had the highest age-adjusted rate of 2.9, with 250 deaths attributed to hypothermia.

Reported by: TC Grey, MD, Office of the Medical Examiner, R Rolfs, MD, Acting State Epidemiologist, Utah Dept of Health. MA Chambers, Western Regional Climate Center, Reno, Nevada. AS Niskar, MPH, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.





* Per 100,000 population.

Editorial Note: The findings in this report indicate that hypothermia-related deaths in the United States increase with age and that rates are highest among men. In the cases presented in this report, all decedents had one or more risk factors for hypothermia-related death (e.g., aged ≥ 65 years, alcohol use, homelessness, and mental illness).

The warning signs of hypothermia include shivering, confusion and disorientation, memory loss, drowsiness, exhaustion, fumbling hands and poor coordination, slurred speech, and numbness (1,2). Shivering is a sign that the body is losing heat and shivering decreases as body temperature falls; a person who shivers persistently should return indoors. Severe hypothermia results in unconsciousness, shallow breathing, weak pulse, and death. Warning signs of hypothermia in an infant include bright red, cold skin and lethargy.

Persons with signs or symptoms of hypothermia should seek medical attention immediately (2). Until medical care becomes available, the person should be moved into a warm room or shelter and wet clothing removed. The center of the body should be warmed first, including the chest, neck, head, and groin using an electric blanket or skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets. Warm, nonalcoholic beverages can help increase body temperature, but they should not be given to an unconscious person. If the person does not appear to be breathing, does not have a pulse, and appears to be unconscious, cardiopulmonary resuscitation (CPR) should be administered in conjunction with warming efforts until the person responds or medical attention is available. Even if the person appears to be dead, CPR should be provided because, in some cases, persons with hypothermia who appear dead can be resuscitated.

Alcohol use, homelessness, vehicle breakdown, psychiatric disorders, and Alzheimer disease are all risk factors associated with hypothermia. Factors such as neuromuscular disease, arthritis, hypothyroidism, malnutrition, beta-blocker use, neuroleptic use, and alcohol use decrease the body's ability to produce heat (1,3). Factors that can result in increased body heat loss include psoriasis, dermatitis, burns, dehydration, decreased subcutaneous fat, and alcohol use. Loss of body thermo-regulation can occur with central nervous system pathology, trauma, stroke, Parkinson disease, neuropathies, and spinal cord injuries. Elderly persons are more likely to have one or more risk factors, placing them at especially high risk for hypothermia. Children are particularly susceptible to hypothermia (4). Infants need sufficient blankets and clothing for insulation (1). Persons participating in outdoor activity might have impaired judgment from hypothermia, causing them to remain unprotected in situations of dangerous cold (1,5).

An extremely cold environment is not necessary for hypothermia (1,6). Persons who participate in outdoor activities during cold weather should take precautions to avoid hypothermia. Persons can maximize heat production by voluntary muscular activity, shivering, eating to maintain calorie intake, and drinking nonalcoholic beverages to stay hydrated. Heat loss can be minimized by wearing a hat that does not retain moisture, a scarf or knit mask to cover the face and mouth, sleeves that are snug at the wrist, mittens, water-resistant coat and shoes to stay dry, and several layers of loose-fitting clothing (2,6). The outer layer of clothing should be tightly woven and wind resistant to reduce body heat loss caused by wind. Wool, silk, or polypropylene inner layers of clothing will hold more body heat than cotton. Persons who feel too warm should remove extra layers of clothing because excess perspiration will increase heat loss. In high wind, use of goggles can protect the corneas from freezing. Persons should avoid overexertion and overheating because of potential dehydration and the wetting effect of perspiration. Swimmers need insulating swimwear in cold water.

Vehicle-safety precautions also can help prevent hypothermia (1,2). Vehicles should be equipped with cold weather gear for use during a breakdown. Travelers stranded during a winter storm should remain in their vehicle, stay awake, and wrap their entire bodies in extra clothing, blankets, or newspapers to stay warm. The motor and heater should be run for approximately 10 minutes per hour and one window should be opened slightly to let in air while making sure that snow is not blocking the exhaust pipe to reduce the risk for carbon monoxide poisoning. Persons should move their arms and legs to improve circulation and stay warmer, and avoid eating unmelted snow because it will lower body temperature. Public health prevention strategies for reducing hypothermia-related deaths include educating the public and healthcare providers about heat preservation strategies and providing outreach programs that identify and protect persons at risk (e.g., the elderly, young children, mentally and physically disabled persons, persons with psychiatric disorders, and homeless persons) (1). Community outreach programs should check on these risk groups frequently to discourage prolonged exposure to cold and to ensure properly heated dwellings. Many hypothermia-related deaths might only be prevented with improvement in overall medical and social support services for vulnerable populations. Public health prevention strategies for reducing hypothermia should be part of a broader social support program to provide support services to populations at risk.

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Update: Influenza Activity — United States, 2001–02 Season

Although influenza activity in the United States remained low from October through mid-January, the number and percentage of specimens testing positive for influenza viruses have increased in recent weeks. Laboratory-confirmed influenza infections have been reported from 45 states. The predominant influenza viruses isolated this season have been type A (H3N2) viruses that are well matched by this season's influenza vaccine. This report summarizes U.S. influenza activity from September 30, 2001 through January 19, 2002 and updates the previous summary^{*} (1).

During September 30–January 19, World Health Organization collaborating laboratories and National Respiratory and Enteric Virus Surveillance System laboratories in the United States tested 25,779 respiratory specimens for influenza viruses; 1,299 (5%) were positive. The weekly percentage of

^{*} As of January 24, 2002.

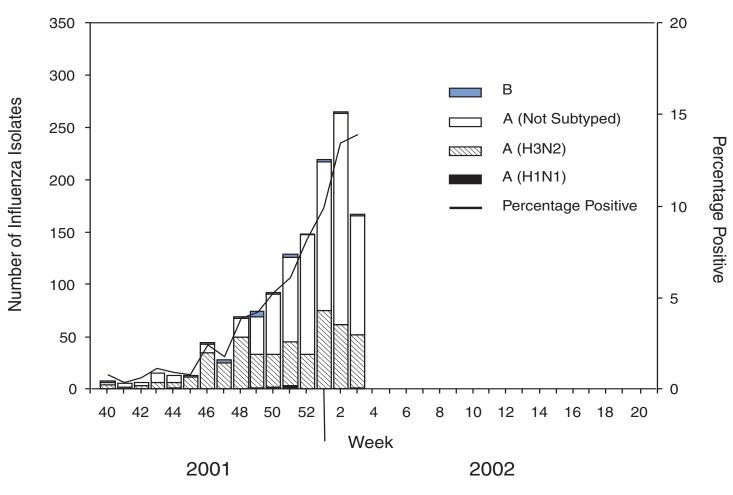


FIGURE 1. Number and percentage of specimens testing positive for influenza, World Health Organization and National Respiratory and Enteric Virus Surveillance System Collaborating Laboratories — United States, 2001–02 Season*

* As of January 24, 2002. Reporting is incomplete.

specimens testing positive for influenza increased from 3.9% during the week ending December 1 to 13.9% during the week ending January 19 (week 3) (Figure 1). The percentage of positive influenza infections identified each week is a key indicator of influenza activity and has peaked at 24%–33% during recent seasons. Since September 30, 1,299 influenza isolates have been reported; 1,278 (98%) were influenza A viruses, and 21 (2%) were influenza B viruses. Of the 477 influenza A viruses that have been subtyped, 469 (98%) were A (H3N2) viruses and eight (2%) were A (H1N1) viruses.

CDC has characterized antigenically 94 influenza isolates collected in the United States since September: 89 influenza A (H3N2) viruses, four influenza A (H1N1) viruses, and one influenza B virus. All were similar to the vaccine strains A/Panama/2007/99 (H3N2), A/New Caledonia/20/99 (H1N1), and B/Sichuan/379/99.

During November 25–January 19, the weekly percentage of patient visits for influenza-like illness (ILI)[†] reported by U.S. sentinel physicians in 47 states ranged from 1.3% to 2.2%. During week 3, the percentage of visits for ILI was 2.2%, slightly above the national baseline[§] of 1.9%. During the same week, influenza activity[§] was reported by state epidemiologists as widespread in Colorado, New York, Utah, and Virginia and regional in 11 states.

[†]Temperature of \geq 100.0 F (\geq 37.8 C) and either cough or sore throat in the absence of a known cause.

[§] The national baseline was calculated as the mean percentage of visits for ILI during noninfluenza weeks plus two standard deviations. Because of wide variability in regional level data, to calculate region-specific baselines is not possible and to apply the national baseline to regional level data is not appropriate.

Levels of activity: 1) *no activity*, 2) *sporadic*—sporadically occurring ILI or laboratory-confirmed influenza with no outbreaks detected, 3) *regional*—outbreaks of ILI or laboratory-confirmed influenza in counties with a combined population of <50% of the state's population, and 4) *widespread*—outbreaks of ILI or laboratory-confirmed influenza in counties with a combined population of \geq 50% of the state's population.

During week 3, 7.7% of recorded deaths in the 122 Cities Mortality Reporting System were attributed to pneumonia and influenza (P&I), which is below the epidemic threshold** of 8.1% for that week. The percentage of P&I deaths has remained below the epidemic threshold for each week during September 30–January 19.

Reported by: WHO collaborating laboratories. National Respiratory and Enteric Virus Surveillance System laboratories. Sentinel Physicians Influenza Surveillance System. Div of Public Health Surveillance and Informatics, Epidemiology Program Office; Div of Vital Statistics, National Center for Health Statistics; WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza, T Uyeki, MD, A Postema, MPH, L Brammer, MPH, H Hall, A Klimov, PhD, K Fukuda, MD, N Cox, PhD, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: During November 25–January 19, all four influenza surveillance system components indicated low levels of influenza activity nationally. However, influenza activity recently began to increase nationally and is expected to increase further in the coming weeks. During 15 of the past 25 seasons, influenza activity in the United States peaked during February or later. The predominant viruses isolated so far this season have been influenza A (H3N2) viruses, and all of the U.S. isolates characterized antigenically at CDC this season have been well matched by the vaccine strains.

The best protection against influenza is vaccination, and approximately 10 million doses of 2001–02 influenza vaccine remain available. Health-care providers should continue to offer influenza vaccine during February because influenza activity is expected to increase, and unvaccinated persons can benefit from vaccination even after influenza has been detected in their communities. Influenza vaccine is strongly recommended for those at increased risk for serious complications from influenza (e.g., persons aged 6 months–64 years with certain chronic medical conditions and persons aged \geq 65 years) and health-care providers (2). In addition, household contacts of high-risk persons, healthy persons aged 50–64 years, and any person who wants to reduce their risk for becoming ill with influenza should be vaccinated.

Prompt laboratory diagnosis of influenza can guide clinical decision-making and confirm influenza as the cause of respiratory outbreaks in all settings (e.g., nursing homes and hospitals). Immunofluorescence and enzyme immunoassay are available in some laboratories. Commercially available rapid influenza diagnostic tests differ by their ability to detect and distinguish between influenza A and B virus infections, methodologies, processing time, acceptable respiratory specimens, and cost. Some rapid tests are approved for use in a physician's office, and others are considered moderately complex and must be performed at a clinical laboratory. One test detects only influenza A viruses, another test detects and distinguishes between influenza A and B viruses, and three tests detect but do not distinguish between infection with influenza A or B viruses. Respiratory specimens for rapid testing generally should be obtained within 3-4 days of illness onset. The sensitivities of the rapid tests are lower than viral culture of respiratory specimens and a negative result might not exclude influenza virus infection (3-5). When rapid tests are used to detect influenza outbreaks, respiratory specimens also should be obtained and sent for confirmatory viral culture. Information has been published about detection and control of influenza outbreaks in acute-care and long-term-care facilities (6-7).

Antiviral medications can be useful for early treatment of influenza and as an adjunct to influenza vaccination for influenza prevention and control. Influenza antiviral drugs differ in approved ages, recommended dosages, routes of administration, adverse effects, development of antiviral resistance, and cost. When administered within 48 hours of symptom onset, antiviral treatment of influenza can reduce the duration of illness by approximately 1 day in healthy adults (8). Four prescription antiviral medications (amantadine, rimantadine, oseltamivir, and zanamivir) are approved for treatment of influenza A virus infections. Oseltamivir and zanamivir also are approved for treatment of influenza B virus infections. Antiviral chemoprophylaxis is approximately 70%–90% effective in preventing illness in healthy adults (8). Amantadine, rimantadine, and oseltamivir are approved for chemoprophylaxis of influenza A virus infections; only oseltamivir is approved for chemoprophylaxis of influenza B virus infections. Physicians should consult the package inserts of the antiviral drugs for information on approved age groups, dosing, and adverse effects.

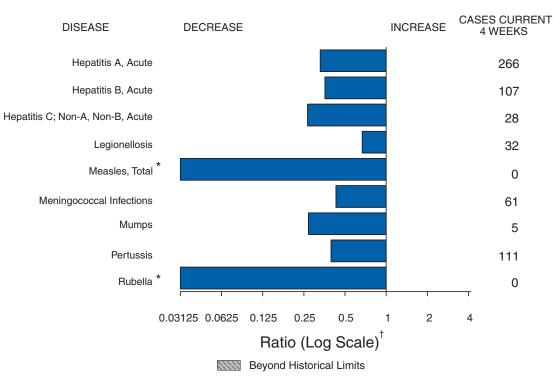
CDC collects and reports U.S. influenza surveillance data during October–May. This information is updated weekly and is available through CDC voice information, 888-232-3228, fax information, 888-232-3299 (request document number 361100), or at http://www.cdc.gov/ncidod/diseases/flu/ weekly.htm.

Acknowledgement

This report was based on data contributed by participating state and territorial epidemiologists and state health laboratories; WHO

^{**}The expected baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I since 1983. The epidemic threshold is 1.654 standard deviations above the seasonal baseline. Before the 1999–2000 season, a new case definition for a P&I death was introduced. During the summer of 2000, the baseline and epidemic thresholds were adjusted manually to account for these changes in case definition. For the 2001–02 season, sufficient data have been collected using the new case definition to allow projection of the baseline using the regression procedure employed before the 2000–01 season.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending January 26, 2002, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 4 of zero (0).

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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending January 26, 2002 (4th Week)*

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		-	-	Encephalitis: West Nile [†]	3	-
Botulism:	foodborne	3	1	Hansen disease (leprosy)†	-	3
	infant	3	3	Hantavirus pulmonary syndrome [†]	-	1
	other (wound & unspecified)	1	-	Hemolytic uremic syndrome, postdiarrheal [†]	7	5
Brucellosis [†]		5	3	HIV infection, pediatric ^{†§}	-	-
Chancroid		2	4	Plague	-	-
Cholera		-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis	s [†]	4	1	Psittacosis [†]	6	1
Diphtheria		-	-	Q fever [†]	2	-
Ehrlichiosis:	human granulocytic (HGE) [†]	4	2	Rabies, human	-	-
	human monocytic (HME) [†]	1	2	Streptococcal toxic-shock syndrome [†]	3	7
	other and unspecified	-	-	Tetanus	-	4
Encephalitis:	California serogroup viral [†]	6	1	Toxic-shock syndrome	8	9
	eastern equine [†]	-	-	Trichinosis	-	3
	Powassan [†]	-	-	Tularemia [†]	3	1
	St. Louis [†]	-	-	Yellow fever	-	-
	western equine [†]	-	-			

-:No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

^TNot notifiable in all states.

[§] Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update December 25, 2001.

MMWR

(4th Week)*			1							
								Escheric		in Positive,
	AI	DS	Chlai	nydia†	Cryptos	poridiosis	O15	7:H7		non-0157
Reporting Area	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES		-	30,807	48,841	85	101	57	59	3	3
NEW ENGLAND	-	-	1,197	1,285	2	3	5	7	-	-
Maine	-	-	82	86	-	-	-	-	-	-
N.H. Vt.	-	-	93 59	84 46	1	- 2	-	1	-	-
Mass.	-	-	761	331	-	1	4	6	-	-
R.I.	-	-	202	226	1	-	÷	-	-	-
Conn.	-	-	-	512	_	-	1	-	-	-
MID. ATLANTIC Upstate N.Y.	-	-	2,059 360	3,967 453	7 2	12 2	4 4	9 7	-	-
N.Y. City	-	-	1,034	1,740	1	8	-	-	-	-
N.J.	-	-	-	498	-	2	-	2	-	-
Pa.	-	-	665	1,276	4	-	N	Ν	-	-
E.N. CENTRAL Ohio	-	-	4,262 288	9,306 2,630	18 5	42 7	12 5	9 5	-	-
Ind.	-	-	604	2,030	2	2	5	-	-	-
III.	-	-	1,558	2,976	-	4	1	3	-	-
Mich. Wis.	-	-	1,544 268	1,366 1,350	6 5	7 22	4	- 1	-	-
	-	-						-	-	-
W.N. CENTRAL Minn.	-	-	1,117 295	2,697 658	4 1	3	11 3	3 1	2 2	-
Iowa	-	-	-	128	1	1	4	-	-	-
Mo. N. Dak.	-	-	403 37	978 67	2	-	1	-	-	-
S. Dak.	-	-	144	147		-	-	- 1	-	-
Nebr.	-	-	-	212	-	2	-	-	-	-
Kans.	-	-	238	507	-	-	3	1	-	-
S. ATLANTIC	-	-	6,046	9,203	28	10	12	8	1	1
Del. Md.	-	-	181 949	214 1,017	- 1	- 1	-	-	-	-
D.C.	-	-	77	269	1	1	-	-	-	-
Va.	-	-	993	1,070	-	2	1	-	-	1
W.Va. N.C.	-	-	171 701	151 1,477	3	- 1	2	6	-	-
S.C.	-	-	505	1,527	-	-	-	1	-	-
Ga. Fla.	-	-	372 2,097	1,655 1,823	21 2	2 3	9	1	1	-
	-	-					-		-	-
E.S. CENTRAL Ky.	-	-	2,839 522	3,305 493	5 1	2	-	3	-	-
Tenn.	-	-	1,220	1,046	-	-	-	2	-	-
Ala.	-	-	837	887	4	1	-	1	-	-
Miss.	-	-	260	879		-	-	-	-	-
W.S. CENTRAL Ark.	-	-	6,441 146	7,854 750	2 2	2	-	4	-	-
La.	-	-	1,197	1,269	-	1	-	-	-	-
Okla.	-	-	577	720	-	1	-	-	-	-
Tex.	-	-	4,521	5,115	-	-	-	4	-	-
MOUNTAIN Mont.	-	-	2,045 139	2,715 15	5	7	3	4	-	1
Idaho	-	-	114	138	2	-	1	2	-	-
Wyo.	-	-	46	66	-	-	-	-	-	-
Colo. N. Mex.	-	-	325 135	875 359	1	3 2	1	1	-	1
Ariz.	-	-	677	801	-	1	-	1	-	-
Utah	-	-	609	67	2	1	-	-	-	-
Nev.	-	-	-	394	-	-	-	-	-	-
PACIFIC Wash.	-	-	4,801 998	8,509 1,001	14	20 U	10 2	12 1	-	1
Oreg.	-	-	330	421	6	1	2 5	-	-	1
Calif.	-	-	3,488	6,639	8	19	3	9	-	-
Alaska Hawaii	-	-	170 145	140 308	-	-	-	- 2	-	-
	-	-	140	000	-	-	- N		-	-
Guam P.R.	-	-	-	226	-	-	N	N	-	-
V.I.	-	-		9	-	-	-	-	-	-
Amer. Samoa C.N.M.I.	U	U U	U 11	U U	U	U U	U	U U	U	U U
N: Not notifiable	- Ll·Llnavailable		enorted cases		-	-	- hern Mariana		-	U

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 26, 2002, and January 27, 2001 (4th Week)*

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands. * Incidence data for reporting year 2001 and 2002 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 25, 2001.

82

(4th Week)*	Escherichia coli							<i>s influenzae</i> , sive	
	Shiga Tox	in Positive,	_				Ages,	Age <5 Serot	
	Cum.	ogrouped Cum.	Giardiasis Cum.	Gonor Cum.	Cum.	Cum.	rotypes Cum.	B Cum.	Cum.
Reporting Area	2002	2001 1	2002	2002	2001	2002	2001	2002	2001
UNITED STATES	1	1	525	15,218	24,782	76	79	-	-
NEW ENGLAND Maine	-	-	58 14	401 5	347 8	2	2	-	-
N.H.	-	-	7	7	5	-	-	-	-
Vt. Mass.	-	-	9 8	9 314	12 111	- 2	- 2	-	-
R.I.	-	-	5	66	53	-	-	-	-
Conn.	-	-	15	-	158	-	-	-	-
MID. ATLANTIC	-	-	90	952	2,151	17	17	-	-
Upstate N.Y.	-	-	22 25	199	264	8 7	4 5	-	-
N.Y. City N.J.	-	-	- 25	491	818 338	/	5 8	-	-
Pa.	-	-	43	262	731	2	-	-	-
E.N. CENTRAL	1	-	103	2,326	4,806	10	14	-	-
Ohio	1	-	44	200	1,523	10	5	-	-
Ind. III.	-	-	- 11	292 943	457 1,641	-	- 6	-	-
Mich.	-	-	40	843	683	-	1	-	-
Wis.	-	-	8	48	502	-	2	-	-
W.N. CENTRAL	-	-	55	638	1,203	-	2	-	-
Minn.	-	-	14	125	221	-	-	-	-
Iowa Mo.	-	-	13 13	- 377	38 596	-	- 2	-	-
N. Dak.	-	-	-	-	1	-	-	-	-
S. Dak.	-	-	4	18	18	-	-	-	-
Nebr. Kans.	-	-	- 11	- 118	91 238	-	-	-	-
	-	-				-		-	-
S. ATLANTIC Del.	-	-	82 4	4,232 141	6,624 86	27	30	-	-
Md.	-	-	8	596	672	11	7	-	-
D.C.	-	-	6	92	249	-	-	-	-
Va. W.Va.	-	-	-	630 66	587 29	1	3 1	-	-
N.C.	-	-	-	802	1,352	3	6	-	-
S.C.	-	-	-	374	1,489	-	1	-	-
Ga. Fla.	-	-	34 30	283 1,248	1,025 1,135	7 5	7 5	-	-
E.S. CENTRAL		1	17	1,798	2,532	0	1		
Ky.	-	1	-	237	2,552	-	-	-	-
Tenn.	-	-	4	786	816	-	-	-	-
Ala. Miss.	-	-	13	592 183	854 628	-	1	-	-
	-	-	-			-	-	-	-
W.S. CENTRAL Ark.	-	-	5 5	3,199 98	4,210 578	1	-	-	-
La.	-	-	-	874	948	-	-	-	-
Okla.	-	-	-	252	366	1	-	-	-
Tex.	-	-	-	1,975	2,318	-	-	-	-
MOUNTAIN Mont.	-	-	52 3	529 11	834 2	8	10	-	-
Idaho	-	-	1	6	8	-	-	-	-
Wyo.	-	-	-	4	9	-	-	-	-
Colo. N. Mex.	-	-	30 7	218 25	342 83	3	5 3	-	-
Ariz.	-	-	6	221	230	5	2	-	-
Utah	-	-	5	44	9	-	-	-	-
Nev.	-	-	-	-	151	-	-	-	-
PACIFIC	-	-	63	1,143	2,075	11	3	-	-
Wash. Oreg.	-	-	7 45	243	231 81	- 7	-	-	-
Calif.	-	-	-	839	1,693	-	2	-	-
Alaska	-	-	4	42	18	-	-	-	-
Hawaii	-	-	7	19	52	4	1	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R. V.I.	-	-	-	-	77 1	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

	Haemophilus influenzae, Invasive											
		Age «	<5 Years			He	epatitis (Viral,	Acute), By Ty	be			
	Non-Sei		Unknown Se		A		+	В	C; Non-A,			
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001		
JNITED STATES	7	23		2	358	809	139	352	39	378		
NEW ENGLAND	-	2	-	-	13	36	3	7	-	5		
Maine	-	-	-	-	1	-	-	1	-	-		
N.H.	-	-	-	-	1	1	1	1	-	-		
/t. Mass.	-	2	-	-	- 1	- 18	1	-	-	2 3		
R.I.	-	-	-	-	-	-	1	-	-	-		
Conn.	-	-	-	-	10	17	-	4	-	-		
MID. ATLANTIC	1	1	-	-	29	86	12	90	2	154		
Jpstate N.Y. N.Y. City	1	- 1	-	-	5 5	9 32	2 4	43	1	-		
N.J.	-	-	-	-	-	36	-	40	-	153		
⊃a.	-	-	-	-	19	9	6	7	1	1		
E.N. CENTRAL	-	6	-	-	32	166	28	38	4	21		
Ohio Ind.	-	1	-	-	16	19	6	13	1	-		
ma. III.	-	4	-	-	1 4	100	-	-	-	8		
Mich.	-	-	-	-	11	41	22	25	3	13		
Nis.	-	1	-	-	-	6	-	-	-	-		
W.N. CENTRAL	-	-	-	1	25	45	4	21	19	79		
Vinn. Iowa	-	-	-	-	- 7	- 1	2 1	- 2	-	-		
Mo.	-	-	-	1	2	13	-	14	19	77		
N. Dak.	-	-	-	-	-	-	-	-	-	-		
S. Dak. Nebr.	-	-	-	-	1	- 13	-	1 3	-	-		
Kans.	-	-	-	-	15	18	1	1	-	1		
S. ATLANTIC	1	2	_	_	139	84	46	51	2	2		
Del.	-	-	-	-	-	1	-	2	1	-		
Vd.	-	-	-	-	37	22	9	5	-	-		
D.C. Va.	-	-	-	-	8 1	1 9	1	2 6	-	-		
N.Va.	-	-	-	-	-	-	1	-	-	-		
N.C.	-	-	-	-	23	5	11	9	1	1		
S.C. Ga.	-	2	-	-	2 32	4 28	2 12	- 20	-	-		
Fla.	1	-	-	-	36	14	9	7	-	1		
E.S. CENTRAL	1	-	-	-	7	15	2	21	2	20		
Ky.	-	-	-	-	-	1	_	6	-	-		
Ténn.	-	-	-	-	-	4	-	2	-	2		
Ala. Viss.	1	-	-	-	4 3	10	2	4 9	1 1	18		
N.S. CENTRAL	1	1	_	_	7	191	10	23	-	92		
Ark.	-	-	-	-	4	6	9	5	-	1		
_a.	-	-	-	-	-	9	-	14	-	28		
Okla. Tex.	1	1	-	-	2 1	8 168	- 1	4	-	63		
	2	3							4	2		
MOUNTAIN Mont.	2	-	-	-	23 2	59 2	12	23	4	2		
daho	-	-	-	-	-	4	-	1	-	-		
Nyo.	-	-	-	-	-	1		-	-	2		
Colo. N. Mex.	- 1	2	-	- 1	7 3	12 2	7 1	10 6	4	-		
Ariz.	1	1	-	-	8	28	1	3	-	-		
Jtah	-	-	-	-	3	1	3	-	-	-		
Nev.	-	-	-	-	-	9	-	3	-	-		
PACIFIC Vash.	1	8	-	-	83 1	127 1	22	78	6	3		
Dreg.	- 1	-	-	-	11	1	10	2	2	- 1		
Calif.	-	7	-	-	71	116	12	73	4	2		
Alaska Hawaii	-	- 1	-	-	-	8 1	-	1 2	-	-		
	-	I	-	-	-	í	-	2	-	-		
Guam P.R.	-	-	-	-	-	-	-	- 2	-	-		
V.I.	-	-	-	-	-	-	-	-	-	-		
Amer. Samoa	U	U	U	U	U	U	U	U	U	U		

N: Not notifiable. U: Unavailable. -: No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

84

	Vo	l. 51 /	' No. 4
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	Legion	ellosis	Liste	riosis	Lyme	Disease	Mal	aria	Measles Total		
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	
INITED STATES	32	48	14	24	2002	2001	35	76	-	11†	
EW ENGLAND	-	1	2	2	9	15	4	8	-	1	
aine	-	-	1	-	-	-	-	-	-	-	
H. 	-	- 1	-	-	6	-	3	-	-	-	
ass.	-	-	-	2	3	15	-	5	-	- 1	
.l.	-	-	Ē	-	-	-	-	-	-	-	
onn.	-	-	1	-	-	-	1	3	-	-	
IID. ATLANTIC pstate N.Y.	3	5 1	2 2	4 1	167 135	120 29	2 1	18 1	-	-	
.Y. City	-	-	-	1	-	29	1	11	-	-	
.J.	-	2	-	2	-	51	-	4	-	-	
a.	3	2	-	-	32	37	-	2	-	-	
.N. CENTRAL	21	24	3	4	2	19	5	15	-	-	
)hio nd.	15	10 1	2	-	2	8	3	2 1	-	-	
	-	4	-	1	-	2	-	5	-	-	
1ich. Vis.	6	3 6	1	2 1	- U	- 9	2	7	-	-	
	-		-			Э			-	-	
V.N. CENTRAL 1inn.	-	4	-	1	3 1	-	3	2	-	-	
owa	-	1	-	-	-	-	1	-	-	-	
lo.	-	1	-	-	2	-	2	2	-	-	
I. Dak. S. Dak.	-	-	-	-	-	-	-	-	-	-	
lebr.	-	1	-	-	-	-	-	-	-	-	
lans.	-	1	-	1	-	-	-	-	-	-	
ATLANTIC	5	3	1	2	33	31	9	13	-	-	
Del. 1d.	1 2	2	-	- 1	- 28	3 25	- 5	- 6	-	-	
).C.	-	-	-	-	2	1	1	1	-	-	
a.	-	1	-	1	-	1	-	4	-	-	
V. Va. I.C.	N	N	-	-	-	- 1	2	- 1	-	-	
S.C.	-	-	-	-	-	-	-	-	-	-	
ia. Ia.	- 2	-	- 1	-	- 3	-	- 1	- 1	-	-	
	2		1	-	3	-		1	-	-	
E.S. CENTRAL (y.	-	2 1	-	1	-	1	2	-	-	-	
enn.	-	-	-	-	-	-	1	-	-	-	
la.	-	1	-	-	-	-	1	-	-	-	
liss.	-		-	-	-	-	-	-	-	-	
V.S. CENTRAL Ark.	-	1	-	-	1	9	-	2	-	-	
.a.	-	1	-	-	-	-	-	1	-	-	
)kla. ex.	-	-	-	-	- 1	- 9	-	- 1	-	-	
	-	-	-	-		Э	-		-	-	
IOUNTAIN Iont.	2	2	2	-	2	-	-	2	-	-	
daho	-	-	-	-	-	-	-	1	-	-	
Vyo. Solo.	- 1	- 2	- 1	-	- 1	-	-	- 1	-	-	
. Mex.	-	-	-	-	1	-	-	-	-	-	
riz.	-	-	1	-	-	-	-	-	-	-	
ltah lev.	1	-	-	-	-	-	-	-	-	-	
ACIFIC	4		4	10	F	F	10	10		10	
lash.	1	6	4	10	5	5	10	16	-	10 7	
reg.	N	N	-	1	2	2	-	2	-	2	
alif. Iaska	1	6	4	9	5	5	8	14	-	-	
awaii	-		-	-	N	N	2	-	-	1	
luam	-	-	-	-	-	-	-	-	-	-	
R.	-	2	-	-	N	N	-	-	-	-	
′.I. Imer. Samoa	- U	- U									
N.M.I.	-	U	-	U	-	U	-	U	-	U	

N: Not notifiable. U: Unavailable. -: No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date). † Of 11 cases reported, nine were indigenous and two were imported from another country.

(4th Week)*								
	Meningo Disea	coccal ase	Mum	าตร	Perti	ussis	Rabies,	Animal
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	73	248	5	11	171	286	150	409
NEW ENGLAND Maine	5 1	15	-	-	51 3	67	24 2	33 4
N.H. Vt.	- 1	1	-	-	- 12	- 12	4	- 7
Mass.	3	9	-	-	36	55	7	9
R.I. Conn.	-	- 5	-	-	-	-	2 9	4 9
MID. ATLANTIC	11	31	1	-	4	18	38	43
Upstate N.Y. N.Y. City	3 1	3 7	-	-	4	15 3	33	31
N.J.	-	16	-	-	-	-	-	9
Pa.	7	5	1	-	-	-	5	3
E.N. CENTRAL Ohio	13 11	26 8	-	1	23 18	39 24	1	5
Ind.	-	-	-	-	-	-	1	-
III. Mich.	2	7 7	-	-	- 4	- 3	-	- 2
Wis.	-	4	-	-	4	12	-	3
W.N. CENTRAL	4	12	-	-	25	17	10	24
Minn.	-	-	-	-	- 7	- 2	1 3	9 5
lowa Mo.	3	2 7	-	-	12	9	-	2
N. Dak. S. Dak.	- 1	-	-	-	-	- 1	-	- 6
Nebr.	-	1	-	-	-	-	-	-
Kans.	-	2	-	-	6	5	6	2
S. ATLANTIC Del.	11	34	1	1	14 1	8	53	89
Md.	- 1	5	-	- 1	3	4	-	18
D.C. Va.	- 1	- 3	- 1	-	-	-	- 17	- 19
va. W.Va.	-	-	-	-	-	-	7	8
N.C. S.C.	1	10 2	-	-	7 2	1 3	26 3	19 3
Ga.	4	6	-	-	-	-	-	15
Fla.	4	8	-	-	1	-	-	7
E.S. CENTRAL	4	7 1	1	-	4 1	5 1	5	108
Ky. Tenn.	-	1	-	-	2	2	3	106
Ala.	4	5	1	-	1	1	2	2
Miss. W.S. CENTRAL	-		-	-		1		
Ark.	5 3	74 1	-	-	5 4	1	8	62
La.	1	11	-	-	-	-	-	-
Okla. Tex.	- 1	5 57	-	-	- 1	-	8	6 56
MOUNTAIN	6	12	-	1	33	102	7	22
Mont.	-	- 3	-	-	1	-	-	1
ldaho Wyo.	-	-	-	-	4	4	-	7
Colo. N. Mex.	4	4 3	-	-	19 8	47 1	-	-
Ariz.	2	1	-	-	-	50	7	14
Utah Nev.	-	1	-	-	1	-	-	-
PACIFIC	-	37	-	-	- 10	-	-	-
Wash.	14 2	1	2	8	12	29 1	-	23
Oreg. Calif.	6 6	1 31	N 2	N 5	11	1 22	-	- 11
Alaska	-	-	-	-	1	-	4	12
Hawaii	-	4	-	3	-	5	-	-
Guam P.R.	-	-	-	-	-	-	- 6	- 8
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa C.N.M.I.	U -	U U	U -	U U	U -	U U	U -	U U

N: Not notifiable. U: Unavailable. - : No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

(4th Week)*				Rul	bella			
		<i>l</i> lountain d Fever	But	pella	Cong	enital pella	Salmon	ماامعنع
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	21	6		-		-	1,100	1,649
NEW ENGLAND	-	-	-	-	-	-	79	90
Maine	-	-	-	-	-	-	11	7
N.H. Vt.	-	-	-	-	-	-	3 3	4 6
Mass.	-	-	-	-	-	-	46	71
R.I. Conn.	-	-	-	-	-	-	3 13	2
MID. ATLANTIC	2	-	-	-	-	-	76	245
Upstate N.Y.	-	-	-	-	-	-	14	27
N.Y. City N.J.	-	-	-	-	-	-	27	58 122
Pa.	2	-	-	-	-	-	35	38
E.N. CENTRAL	1	1	-	-	-	-	127	261
Ohio	1	-	-	-	-	-	48	77
Ind. III.	-	- 1	-	-	-	-	11 14	7 89
Mich.	-	-	-	-	-	-	45	37
Wis.	-	-	-	-	-	-	9	51
W.N. CENTRAL	-	-	-	-	-	-	99	90
Minn. Iowa	-	-	-	-	-	-	15 14	24 8
Mo.	-	-	-	-	-	-	55	30
N. Dak.	-	-	-	-	-	-	-	-
S. Dak. Nebr.	-	-	-	-	-	-	3	7 8
Kans.	-	-	-	-	-	-	12	13
S. ATLANTIC	17	5	-	-	-	-	349	330
Del.	-	-	-	-	-	-	-	7
Md. D.C.	5	2	-	-	-	-	51 6	31 6
Va.	-	-	-	-	-	-	14	32
W.Va. N.C.	- 12	- 3	-	-	-	-	1 79	1 80
S.C.	-	-	-	-	-	-	13	29
Ga.	-	-	-	-	-	-	132	86
Fla.	-	-	-	-	-	-	53	58
E.S. CENTRAL	1	-	-	-	-	-	78	102
Ky. Tenn.	- 1	-	-	-	-	-	3 14	18 9
Ala.	-	-	-	-	-	-	48	53
Miss.	-	-	-	-	-	-	13	22
W.S. CENTRAL	-	-	-	-	-	-	36	223
Ark. La.	-	-	-	-	-	-	18	16 38
Okla.	-	-	-	-	-	-	16	6
Tex.	-	-	-	-	-	-	2	163
MOUNTAIN	-	-	-	-	-	-	61	83
Mont. Idaho	-	-	-	-	-	-	2 6	4 4
Wyo.	-	-	-	-	-	-	-	3
Colo.	-	-	-	-	-	-	34	25
N. Mex. Ariz.	-	-	-	-	-	-	6 5	17 16
Utah	-	-	-	-	-	-	8	6
Nev.	-	-	-	-	-	-	-	8
PACIFIC	-	-	-	-	-	-	195	225
Wash. Oreg.	-	-	-	-	-	-	3 22	1
Calif.	-	-	-	-	-	-	154	207
Alaska	-	-	-	-	-	-	6	4
Hawaii	-	-	-	-	-	-	10	12
Guam P.R.	-	-	-	-	-	-	-	- 29
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	1	U

N: Not notifiable. U: Unavailable. - : No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

(4th Week)*				Streptococcal Disease,					
	Shige	ellosis	Streptococo Invasive,		Streptococcus Invasive (-		Streptococcus Drug Resista	s <i>pneumoniae</i> , ant, Invasive	
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	
UNITED STATES	533	918	195	264	10	5	106	132	
NEW ENGLAND	8	12	7	8	5	-	-	2	
Maine	-	-	3	2	-	-	-	-	
N.H. Vt.	-	-	2 1	- 1	5	-	-	- 2	
Mass.	7	11	1	5	-	-	-	-	
R.I. Conn.	- 1	- 1	-	-	-	-	-	-	
MID. ATLANTIC	16	141	25	60	-	3	2	8	
Upstate N.Y.	5	44	12	11	-	3	2	8	
N.Y. City N.J.	4	44 29	10	31 18	-	-	-	-	
Pa.	7	24	3	-	-	-	-	-	
E.N. CENTRAL	97	144	36	74	3	2	6	2	
Ohio	66	38	16	9	2	-	1	-	
Ind. III.	3 12	9 54	- 1	- 26	1	2	5	2	
Mich.	16	33	19	36	-	-	-	-	
Wis.	-	10	-	3	-	-	-	-	
W.N. CENTRAL Minn.	100 16	128 60	8	18	-	-	16	1	
Iowa	5	12	-	-	-	-	-	-	
Mo. N. Dak.	13	36	5	11	-	-	1	-	
S. Dak.	53	- 1	-	2	-	-	-	-	
Nebr.	-	5	-	-	-	-	-	-	
Kans.	13	14	3	5	-	-	15	1	
S. ATLANTIC Del.	185 2	79 1	59	26	2	-	70	95	
Md.	27	5	9	5	-	-	-	-	
D.C. Va.	3 22	3 5	2 1	- 3	2	-	2	-	
W.Va.	1	1	-	-	-	-	-	3	
N.C. S.C.	18 1	19 10	12 2	9 1	-	-	- 10	- 21	
Ga.	85	14	26	3	-	-	34	26	
Fla.	26	21	7	5	-	-	24	45	
E.S. CENTRAL	33 3	57 23	4	4	-	-	8	5 1	
Ky. Tenn.	3	- 23	4	4	-	-	- 8	4	
Ala.	23	17	-	-	-	-	-	-	
Miss.	6	17	-	-	-	-	-	-	
W.S. CENTRAL Ark.	15 8	176 11	5	35	-	-	1 1	15 3	
La.	-	13	-	-	-	-	-	12	
Okla. Tex.	6 1	1 151	4 1	3 32	-	-	-	-	
MOUNTAIN	18	47	24	31	-	-	3	4	
Mont.	-	-	-	-	-	-	-	-	
ldaho Wyo.	1	1	-	-	-	-	-	-	
Colo.	8	9	16	21	-	-	-	-	
N. Mex. Ariz.	1 3	15 18	8	10	-	-	3	4	
Utah	5	1	-	-	-	-	-	-	
Nev.	-	3	-	-	-	-	-	-	
PACIFIC	61	134	27	8	-	-	-	-	
Wash. Oreg.	- 11	4	-	-	-	-	-	-	
Calif.	47	130	22	8	-	-	-	-	
Alaska Hawaii	1 2	-	- 5	-	-	-	-	-	
Guam	-	-	-	-	-	-	-	-	
P.R.	-	1	-	-	-	-	-	-	
V.I. Amer. Samoa	- U	U	- U	U	- U	U	-	-	
C.N.M.I.	-	Ū	-	Ū	-	U	-	-	

N: Not notifiable. U: Unavailable. - : No reported cases. *Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

	Drimony 9					Typhoid		
		Secondary	Cong	enital†	Tuberc	ulosis	Fev	/er
Ronarting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
Reporting Area JNITED STATES	261	299	-	29	172	353	5	7
NEW ENGLAND	1	2	-		9	6	2	1
Naine	-	-	-	-	-	-	-	-
I.H.	-	-	-	-	-	-	-	-
/t. /ass.	- 1	-	-	-	-	1 2	- 1	-
7.1.	-	-	-	-	3	-	-	-
Conn.	-	2	-	-	6	3	1	-
/ID. ATLANTIC	5	27	-	4	36	27	2	-
Jpstate N.Y.	-	1	-	2	-	4	-	-
I.Y. City	4	14	-	-	17	8	2	-
N.J. Pa.	- 1	2 10	-	2	- 19	10 5	-	-
			-				-	-
E.N. CENTRAL Dhio	33 5	28 3	-	2	24 10	29 6	-	2
nd.	3	6	-	-	7	9	-	-
II.	7	18	-	2	6	12	-	1
Aich.	18	-	-	-	-	-	-	1
Vis.	-	1	-	-	1	2	-	-
W.N. CENTRAL	1	6	-	1	23	9	-	1
Vlinn. owa	-	5	-	-	5	6	-	-
Mo.	1	1	-	-	18	2	-	1
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-
Nebr. Kans.	-	-	-	- 1	-	1	-	-
	07	-	-	1	-	-	-	_
S. ATLANTIC Del.	87 1	115	-	9	9	31	1	1
Vd.	7	18	-	1	-	-	-	1
D.C.	3	-	-	-	-	3	-	-
Va.	3	7	-	-	-	1	-	-
N.Va. N.C.	- 30	- 33	-	-	3 2	4	-	-
S.C.	7	18	-	2	2	5	-	-
Ga.	11	15	-	3	2	15	1	-
=la.	25	24	-	3	-	1	-	-
E.S. CENTRAL	43	33	-	-	12	16	-	-
Ky.	1	3	-	-	4	-	-	-
Tenn. Ala.	20 20	14 8	-	-	8	14	-	-
Miss.	2	8	-	-	-	2	-	-
N.S. CENTRAL	53	46	-	5	3	105	-	1
Ark.	-	5	-	2	2	9	-	-
_a.	14	10	-	-	-	-	-	-
Okla. Tex.	7 32	3 28	-	1 2	1	96	-	-
			-		_		-	'
MOUNTAIN Mont.	21	9	-	1	7	19	-	-
daho	1	-	-	-	-	-	-	-
Nyo.	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	2	-	-
N. Mex. Ariz.	3 16	- 5	-	-	2 4	3 6	-	-
Jtah	1	4	-	-	4	-	-	-
Nev.	-	-	-	-	-	8	-	-
PACIFIC	17	33	-	7	49	111	-	1
Vash.	1	8	-	-	9	12	-	-
Dreg.	-	2	-	-	-	5	-	-
Calif. Alaska	16	21	-	7	31 1	79 5	-	1
laska	-	2	-	-	8	5 10	-	-
Guam		-			õ	10		
R.	-	21	-	-	-	-	-	-
/.1.	-	-	-	-	-	-	-	-
Amer. Samoa	U 1	U U	U	U U	U 2	U U	U	U U

N: Not notifiable. U: Unavailable. - : No reported cases. * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date). † Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE III. Deaths				By Age (uary 20	, 2002 (4tr	i week)	All Causes, By Age (Years)						
Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	P&I [†] Total	Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	P&l [†] Total
NEW ENGLAND	554	416	90	27	10	11	48	S. ATLANTIC	1,367	885	287	129	38	27	93
Boston, Mass.	164	109	29	12	6	8	13	Atlanta, Ga.	136	81	35	14	4	2	5
Bridgeport, Conn.	23	21	2	-	-	-	1	Baltimore, Md.	228	133	56	30	8	1	26
Cambridge, Mass.	19 32	17 22	2 7	- 3	-	-	2 4	Charlotte, N.C. Jacksonville, Fla.	118 193	85 128	17 31	9 19	3 6	4 9	17 13
Fall River, Mass. Hartford, Conn.	28	22	7	-	-	-	4	Miami, Fla.	193	75	33	19	6	9	8
Lowell, Mass.	19	14	4	1	-	-	3	Norfolk, Va.	58	42	11	3	-	2	1
Lynn, Mass.	25	18	4	3	-	-	3	Richmond, Va.	64	49	9	4	1	1	4
New Bedford, Mass.	32	25	5	1	-	1	2	Savannah, Ga.	46	36	8	1	1	-	2
New Haven, Conn. Providence, R.I.	27 68	19 55	5 8	2 2	- 2	1 1	4 1	St. Petersburg, Fla. Tampa, Fla.	70 115	57 82	11 20	- 11	1	1 1	4 7
Somerville, Mass.	8	5	3	-	-	-	-	Washington, D.C.	200	112	48	27	7	5	6
Springfield, Mass.	36	26	8	1	1	-	5	Wilmington, Del.	13	5	8	-	-	-	-
Waterbury, Conn.	23	22	-	-	1	-	3	E.S. CENTRAL	1,086	752	224	71	18	21	94
Worcester, Mass.	50	42	6	2	-	-	6	Birmingham, Ala.	206	151	40	7	3	5	19
MID. ATLANTIC	2,409	1,713	475	157	29	32	166	Chattanooga, Tenn.	94	69	12	7	5	1	7
Albany, N.Y.	56	37	11	5	-	3	3	Knoxville, Tenn.	108	85	20	2	1	-	1
Allentown, Pa.	23	22	-	1	-	-	3	Lexington, Ky.	82	54	21	5	1	1	4
Buffalo, N.Y. Camden, N.J.	109 45	79 26	23 12	3 5	1 1	3 1	14 3	Memphis, Tenn. Mobile, Ala.	268 77	180 48	62 11	18 14	2 1	6 3	24 6
Elizabeth, N.J.	28	20	4	1	2	-	1	Montgomery, Ala.	75	49	16	6	1	3	12
Erie, Pa.	42	31	9	1	-	1	2	Nashville, Tenn.	176	116	42	12	4	2	21
Jersey City, N.J.	50	34	10	5	-	1	-	W.S. CENTRAL	1,123	795	198	78	16	34	108
New York City, N.Y.	1,304	916	266	90	15	14	70	Austin, Tex.	102	74	17	7	1	3	14
Newark, N.J. Paterson, N.J.	U 31	U 21	U 5	U 4	U 1	U	U	Baton Rouge, La.	1	-	-	1	-	-	-
Philadelphia, Pa.	260	173	64	20	2	1	18	Corpus Christi, Tex.	68	46	12	5	1	4	7
Pittsburgh, Pa.§	46	26	15	1	1	3	5	Dallas, Tex. El Paso, Tex.	190 56	120 50	44 6	15	3	8	23 5
Reading, Pa.	20	15	2	2	-	1	-	Ft. Worth, Tex.	151	106	24	11	2	- 8	6
Rochester, N.Y.	165	133	20	7	2	3	17	Houston, Tex.	Ŭ	Ŭ	Ū	U	Ū	Ŭ	Ŭ
Schenectady, N.Y. Scranton, Pa.	32 33	26 26	4 6	2 1	-	-	5 2	Little Rock, Ark.	61	42	12	1	-	6	-
Syracuse, N.Y.	115	86	17	9	3	-	18	New Orleans, La.	41	30	3	5	1	-	-
Trenton, N.J.	25	20	3	-	1	1	4	San Antonio, Tex.	243	182	37	17 7	5	2 2	30
Utica, N.Y.	25	21	4	-	-	-	1	Shreveport, La. Tulsa, Okla.	87 123	62 83	16 27	9	3	2	14 9
Yonkers, N.Y.	U	U	U	U	U	U	U								
E.N. CENTRAL	1,832	1,272	365	132	26	37	137	MOUNTAIN Albuquerque, N.M.	976 127	688 85	181 28	66 12	21	19 2	77 7
Akron, Ohio	54	43	5	3	2	1	5	Boise, Idaho	35	31	4	-	-	-	3
Canton, Ohio Chicago, III.	46 U	31 U	14 U	- U	- U	1 U	5 U	Colo. Springs, Colo.	70	57	9	3	1	-	2
Cincinnati, Ohio	135	99	23	10	2	1	17	Denver, Colo.	106	56	24	9	7	10	11
Cleveland, Ohio	142	94	34	11	1	2	12	Las Vegas, Nev.	208	144	38	19	5	2	15
Columbus, Ohio	186	126	44	14	-	2	7	Ogden, Utah Phoenix, Ariz.	25 110	20 73	4 27	- 5	1 3	- 1	3 7
Dayton, Ohio	131	99	17	10	4	1	6	Pueblo, Colo.	32	23	7	2	-	-	4
Detroit, Mich. Evansville, Ind.	209 41	119 30	56 10	23	5	6 1	16 3	Salt Lake City, Utah	106	77	16	7	2	4	14
Fort Wayne, Ind.	73	51	14	5	1	2	8	Tucson, Ariz.	157	122	24	9	2	-	11
Gary, Ind.	16	8	6	2	-	-	-	PACIFIC	1,527	1,055	309	95	38	29	121
Grand Rapids, Mich.	32	18	8	3	1	2	3	Berkeley, Calif.	10	6	1	2	-	1	2
Indianapolis, Ind.	212	126	51	22 5	6	7	17	Fresno, Calif.	124	89 9	24 2	7	2	2	9
Lansing, Mich. Milwaukee, Wis.	49 132	37 94	6 27	5 6	-	1 5	10	Glendale, Calif. Honolulu, Hawaii	14 80	63	2 14	2 3	-	1	1 12
Peoria, III.	70	57	6	5	2	-	6	Long Beach, Calif.	78	53	14	2	4	5	12
Rockford, III.	75	58	11	4	1	1	6	Los Angeles, Calif.	274	169	71	24	6	4	13
South Bend, Ind.	58	51	6	1	-	-	7	Pasadena, Calif.	19	11	6	1	1	-	2
Toledo, Ohio	106	78 53	18 9	6 2	1	3 1	9	Portland, Oreg.	103	72	23 35	6 9	2 5	- 2	8
Youngstown, Ohio	65							Sacramento, Calif. San Diego, Calif.	178 148	127 102	35 29	9 11	э 4	2	20 11
W.N. CENTRAL	666	469	121	46	18	12	49	San Francisco, Calif.		U	Ū	U	U.	Ū	U
Des Moines, Iowa Duluth. Minn.	108 U	89 U	11 U	5 U	1 U	2 U	14 U	San Jose, Calif.	152	104	35	7	3	3	9
Kansas City, Kans.	32	21	4	6	1	-	2	Santa Cruz, Calif.	32	28	3	1	-	-	1
Kansas City, Mo.	110	76	25	6	1	2	12	Seattle, Wash.	145	103	25	11	3	3	8
Lincoln, Nebr.	36	29	7	-	-	-	2	Spokane, Wash. Tacoma, Wash.	68 102	49 70	12 15	4 5	3 5	-	7 6
Minneapolis, Minn.	45	33	9	2	1	-	2								
Omaha, Nebr. St. Louis, Mo.	107 97	72 53	23 25	8 9	2 7	2	9	TOTAL	11,540 [¶]	8,045	2,250	801	214	222	893
St. Louis, Mo. St. Paul, Minn.	97 46	53 37	25	9	1	3 2	- 1								
Wichita, Kans.	85	59	14	7	4	1	7								
								1							

TABLE III. Deaths in 122 U.S. cities,* week ending January 26, 2002 (4th Week)

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.

⁵ 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.

collaborating laboratories; National Respiratory and Enteric Virus Surveillance System laboratories; Sentinel Physicians Influenza Surveillance System; Div of Public Health Surveillance and Informatics; Epidemiology Program Office; Div of Vital Statistics; and the National Center for Health Statistics, CDC.

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The Fifth Annual Conference on Vaccine Research: Basic Science • Product Development • Clinical and Field Studies will be held May 6–8, 2002, in Baltimore, Maryland. The conference is sponsored by the National Foundation for Infectious Diseases (NFID) in collaboration with CDC and seven other national and international agencies, institutes, and organizations involved in conducting and/or promoting research, development, and use of vaccines and associated technologies for the prevention of human and veterinary diseases.

The deadline for online submission of abstracts for oral and poster presentations is February 1. Program announcements and forms for abstract submission, registration, and hotel reservations are available at http://www.nfid.org/conferences/ vaccine02/, and from NFID, Suite 750, 4733 Bethesda Avenue, Bethesda, MD 20814-5278; telephone, 301-656-0003, extension 19; fax 301-907-0878; e-mail vaccine@nfid.org.

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