



# MMWR<sup>TM</sup>

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### Commemorating CDC's 60th Anniversary

This month marks the 60th anniversary of the establishment of CDC, which was founded as the Communicable Disease Center on July 1, 1946, in Atlanta, Georgia (1). To commemorate this anniversary, *MMWR* is departing from its usual report format to present a series of commentaries by past directors and the current director of CDC. The directors were invited to give their personal perspectives on the key public health achievements and challenges that occurred during their tenures.

Reports from *MMWR* and the media have provided contemporary accounts of the events that shaped CDC over the years. Other histories have been researched by CDC authors (2) or drawn from interviews with staff members and partners whose achievements contributed to the CDC public health legacy (3,4). The unique views provided by CDC directors might reinforce these perspectives or reveal something much different.

This week's issue of *MMWR* contains the first Director's Perspective, written by David J. Sencer, who served as director of CDC during 1966–1977. Commentaries by other CDC directors will be published in the months ahead.

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### *CDC's 60th Anniversary*

#### Director's Perspective — David J. Sencer, M.D., M.P.H., 1966–1977

Change, national and international, was the engine that thrust CDC into its third decade (1966–1975). Starting the decade as the Communicable Disease Center, it ended the decade as the Center for Disease Control as part of the Public Health Service (PHS) under the U.S. Department of Health, Education, and Welfare (HEW) (Box).

By 1965, CDC had become a national resource in communicable disease control, serving its primary constituency, state and local health departments, through technical assistance, loan of personnel, and grants in aid. By then, the Epidemic Intelligence Service (EIS) was firmly entrenched as the nation's major source of trained epidemiologists. CDC laboratories were recognized as gold standards in microbiology, clinical chemistry, and toxicology. Programs to assist states in the control of vaccine-preventable diseases, sexually transmitted diseases, and tuberculosis were functioning well. However, only 1 year later, events in the United States and abroad forever changed the scope of CDC's public health responsibilities. These events transformed CDC into a major contributor to global health programs and broadened its domestic responsibilities well beyond communicable disease.

### Global Health

In 1966, CDC inherited one disease-eradication program that was faltering and initiated another that led to the first and only worldwide eradication of a disease. The first program targeted malaria. In 1966, malaria activities of the U.S.

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Agency for International Development (USAID), in support of the World Health Organization (WHO) Malaria Eradication Program, were falling short of their goals. The basic premise of the WHO program was that malaria could be eradicated by control of its mosquito vectors using indoor spraying with DDT. Obstacles to this goal included inadequate surveillance, lack of research, corruption and waning support in the countries involved, and insufficient training of health-care workers.

CDC spearheaded efforts to include more effective surveillance and research, improve training, and instill good management practices into country programs in cooperation with their national health authorities. Under the leadership of Donald Schliessmann and Robert Kaiser, CDC changed the focus of malaria activities from eradication to control of death and morbidity (1). Today, nearly 40 years later, CDC is recognized as a leading force in the global fight against the disease, focusing on evaluation of methodology, surveillance, and field research through its stations in Kenya and Guatemala, and collaborating with USAID and WHO on the President's Malaria Initiative and the Roll Back Malaria program.

The second global challenge was smallpox. CDC envisioned a smallpox eradication program, based on efforts begun by CDC's Alexander Langmuir and D.A. Henderson, for 20 countries in West and Central Africa. CDC agreed to a request from USAID to assist in a measles-control program in the area on the condition that the program be combined with smallpox eradication. This arrangement was supported by USAID, which agreed to fund the program. Henderson was assigned to WHO headquarters to head the global effort, and J. Donald Millar led CDC's efforts in West Africa.

To prepare for their field work, epidemiologists and operations officers were trained in smallpox epidemiology, clinical aspects, and vaccine properties; they also received French language instruction and lessons in motor vehicle repair. They embarked on a program that demonstrated that smallpox eradication was possible, but only if the standard approach was altered drastically. Although original plans had called for mass vaccination, CDC staff in Nigeria demonstrated that eradication was best achieved by surveillance and containment of local outbreaks (2). The last case of smallpox in West Africa was reported in 1970; the program was successful, under budget, and a year ahead of schedule. Technology and supplies were vital to the effort; however, more important was the ability of CDC staff members to establish collegial relations with their counterparts in the countries in which they worked, motivating them to assume responsibility and leadership. This ability has proven indispensable and remains a key to CDC's successful global activities (3).

**BOX. Selected milestones and events in public health that occurred during CDC's 60-year history**

|      |   |      |   |
|------|---|------|---|
| 1946 | Communicable Disease Center established from the World War II agency, Malaria Control in War Areas.   | 1980 | CDC name changed to Centers for Disease Control, reflecting new organization.<br>Congress creates the Agency for Toxic Substances and Disease Registry, which becomes a "sister agency" to CDC.<br><i>MMWR</i> reports on Reye syndrome associated with aspirin use.<br>Toxic shock syndrome associated with tampons. |
| 1949 | Last case of smallpox in the United States.   | 1981 | First AIDS cases reported in <i>MMWR</i> .  |
| 1951 | Epidemic Intelligence Service (EIS) founded.  | 1986 | Office on Smoking and Health becomes part of CDC.   |
| 1953 | First EIS assistance for environmental exposure (trichloroethylene) and occupational exposure (anthrax).  | 1987 | National Center for Health Statistics added to CDC.   |
| 1955 | Inactivated polio vaccine licensed; "Cutter incident" investigated.   | 1988 | Center for Chronic Disease Prevention and Health Promotion established at CDC.  |
| 1957 | Onset of "Asian flu" influenza pandemic.  | 1992 | CDC name changed to Centers for Disease Control and Prevention.<br>National Center for Injury Prevention and Control added to CDC.  |
| 1961 | <i>MMWR</i> moved to CDC from National Office of Vital Statistics.  | 1993 | Hantavirus pulmonary syndrome recognized in southwestern United States.   |
| 1962 | First EIS assistance for chronic disease (leukemia cluster).  | 1994 | Vaccines for Children Program established.  |
| 1964 | Advisory Committee on Immunization Practices (ACIP) holds first meeting.<br>First Surgeon General's Report on Smoking and Health.   | 1996 | Prevention Effectiveness Program and Guide for Community Preventive Services initiated.   |
| 1966 | Global smallpox eradication effort begins.  | 1997 | Cardiac valvulopathy associated with fenfluramine (fen-phen).<br>H5N1 avian influenza outbreak spreads to humans in Hong Kong.  |
| 1968 | Onset of "Hong Kong flu" influenza pandemic.  | 1998 | Cereal grain enriched with folic acid by federal mandate.   |
| 1970 | CDC name changed to Center for Disease Control.   | 1999 | West Nile virus identified in New York City.  |
| 1973 | National Institute for Occupational Safety and Health becomes part of CDC.<br>First EIS assistance for injury (homicide in Georgia).<br>First Environmental Protection Agency standards to phase out lead from U.S. gasoline. | 2001 | CDC responds to World Trade Center and bioterrorist anthrax attacks.<br>National Center on Birth Defects and Developmental Disabilities formed at CDC.  |
| 1975 | First Field Epidemiology Training Program (Canada).   | 2003 | Severe acute respiratory syndrome (SARS) coronavirus identified.  |
| 1976 | Legionnaires disease investigated; etiologic agent identified.<br>Guillain-Barré syndrome associated with swine influenza vaccine.<br>Ebola virus identified in Zaire and Sudan.  | 2005 | CDC responds to Hurricanes Katrina and Rita.  |
| 1977 | Last case of endemic smallpox in world reported from Somalia.   | 2006 | ACIP recommends 15th and 16th routine immunizations for children and adolescents (rotavirus and human papillomavirus vaccines, respectively).   |
| 1978 | CDC opens maximum-containment laboratory.<br>National health objectives for 1990 initiated at CDC.  |      |   |
| 1979 | Last case of endemic poliomyelitis caused by wild poliovirus in the United States.  |      |   |

The expertise gained in Africa served as a major resource for WHO in the two countries that posed the greatest obstacle to global smallpox eradication, India and Bangladesh. In addition to full-time staff assigned to both countries, hundreds of CDC staff members served short-term assignments in India and Bangladesh. The last known case of naturally acquired smallpox in the world occurred in 1977 in Somalia (Figure).

A manmade disaster affecting an African nation's health led CDC into the new areas of disaster relief and nutritional health. In 1968, civil war in Nigeria caused a disastrous famine in parts of that country. The International Committee of the Red Cross and, ultimately, the U.S. Department of State, requested that CDC assist in determining the extent of the famine in eastern Nigeria. Epidemiologists and operations officers immersed themselves in surveillance and the design of programs to combat malnutrition. CDC's Karl Western was secretly airlifted by the Department of State into the secessionist state of Biafra to investigate the famine there; he found the highest recorded prevalence of severe malnutrition since

**FIGURE.** The last known case of smallpox in the world was in this man aged 23 years in Somalia in 1977



Photo/World Health Organization

the Netherlands Potato Famine of 1945 (4). CDC's experience in these two new areas of disaster and nutrition would later be put to use both domestically and globally. Such international activities are not without risk. Paul Schnitker, an EIS officer in the class of 1969 who was enroute to Nigeria to aid in the famine activities, was killed when his aircraft failed to land safely at Lagos.

### **Broadened Domestic Horizons**

In contrast to its sudden and dramatic entrance into global health, CDC's venture into broader domestic activities was more gradual. In 1970, CDC's involvement in these activities led to its renaming as the Center for Disease Control. Many of the new programs were described by Langmuir, the "father of EIS," as the "EIS diaspora" (5).

Langmuir had long been concerned about overpopulation. He saw the CDC approach to communicable disease control as adaptable to evaluating family planning programs. CDC supported his decision to assign an EIS officer, Nicholas Wright, to evaluate the family planning program at Grady Memorial Hospital in Atlanta, Georgia. Investing even a single person's time in this field was initially controversial. However, from this small beginning, CDC's multidisciplinary reproductive health program grew to eventually encompass not only family planning but also maternal and child health.

An epidemiologic investigation of clusters of leukemia cases in the 1960s led to establishment of leukemia surveillance at CDC in 1966 (6). This and other early investigations of non-infectious disease clusters led to discovery of small clusters of birth defects; CDC's leukemia surveillance activities were broadened to include them. Birth defects surveillance and research led to recognition of the role of folic acid in the prevention of spina bifida and ultimately to the mandatory inclusion of folic acid in many of the nation's cereal grain products in 1998.

Experience with the famine in Biafra provided a basis for establishment of a CDC nutrition program. In 1969, Congress authorized a nutrition survey in 10 states to determine the true extent of malnutrition in the United States. The PHS-administered nutrition program requested assistance from CDC to analyze the data and write the required report to Congress. CDC agreed under the condition that it be allowed to assume responsibility for the entire public health nutrition program. This agreement inaugurated the first nutrition program at CDC. Staff members who had been in Nigeria during its civil war evaluated the 10-state survey data and wrote the report to Congress. The program has continued to grow with realization of the major role of nutrition in disease prevention.

In 1972, CDC had another opportunity to consolidate PHS prevention activities into one agency. PHS wanted to recognize the role of health education in preventing disease. CDC proposed taking on that role through the transfer of HEW's Smoking and Health Program to CDC. This would provide a foundation on which to develop expertise in health communications regarding the major causes of death and disability. This approach was gradually adopted throughout CDC and provided the basis for the widespread recognition of the role of behavioral scientists in CDC's prevention mission (7).

The final building block in the consolidation of preventive health services was the addition of programs related to the environment. In the 1960s, epidemiologic investigations related to environmental contamination and toxicologic laboratory testing were conducted by CDC, but prevention programs related to environmental health were housed in other parts of PHS. In 1973, the National Institute for Occupational Safety and Health was transferred to CDC, as were community environmental activities relating to lead exposure and rat control. These programs benefited by being incorporated into an agency that considered surveillance, investigation, and corrective action as the foundation of successful prevention programs.

This brief historical comment does not give due attention to the many major outbreaks and investigations and to the evolution of public health science during the era described. Concern over hospital-acquired infections led to the major undertaking of the Study on the Efficacy of Nosocomial Infection Control (SENIC) to prove that reduction in such infections was not only life saving but cost effective (8), which provided a scientific foundation for 21st-century efforts such as the 100,000 Lives Campaign (9). Legionnaires disease put CDC on the front page of newspapers for weeks (10) and foreshadowed CDC's comprehensive response to emerging infections. The Tuskegee syphilis study led to the establishment of programs to protect human subjects in research (11) and a formal apology by the U.S. government in 1997. The swine flu vaccination program demonstrated the possibility of organizing and managing an immunization program involving procurement, distribution, liability issues, and adverse event surveillance while vaccinating 43 million persons in 2 months (12). Lessons learned by CDC during the 1976 swine flu vaccination program are being used to improve preparedness for pandemic influenza.

This third decade of CDC history might be summarized as establishing a firm foundation for what would become the nation's disease prevention agency.

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*David J. Sencer, M.D., M.P.H., joined CDC in 1960 and was director of CDC during 1966–1977. His other positions included New York City Health Commissioner during 1982–1986. Currently, he is retired and living in Atlanta, Georgia.*

## Varicella Outbreak Among Vaccinated Children — Nebraska, 2004

On November 19, 2004, a school nurse notified the Nebraska Health and Human Services System (NHHSS) of a varicella outbreak in an elementary school (grades kindergarten through 7). In collaboration with local health department officials and CDC, NHHSS initiated a retrospective cohort study to determine the magnitude of the outbreak, assess vaccine coverage and effectiveness, and compare disease severity among vaccinated and unvaccinated students. This report summarizes the investigation and considers the suitability of school settings for case-based surveillance. The findings highlighted the importance of improving varicella vaccination coverage and implementing varicella vaccination school-entry requirements.

Questionnaires were sent to parents of all students at the elementary school to determine history of varicella disease, varicella vaccination status, and underlying medical conditions. School immunization records were reviewed to confirm vaccination status for all students. In addition to receiving the questionnaires, parents of ill students were interviewed by telephone to ascertain the extent and nature of the disease. Specimens from skin lesions were solicited and tested for varicella-zoster virus (VZV).

A case was defined as illness in a student with an acute generalized maculopapulovesicular rash without other apparent cause with onset during August 26–December 23, 2004 (i.e., during the fall school term). Cases were categorized as mild (<50 skin lesions), moderate (50–500 skin lesions), or severe (>500 skin lesions or any complications or hospitalization). No student with a history of varicella had the disease during the outbreak; therefore, students with a varicella history were excluded from vaccine effectiveness (VE) calculations (as were students whose parents did not return the questionnaire). VE was calculated as the proportional reduction in varicella attack rate between vaccinated and unvaccinated students using the following formula:  $VE = (1 - \text{Relative Risk [RR]}) \times 100$ .

The 283 students enrolled at the elementary school were divided into 15 classrooms. Parents of 19 (7%) of the 283 students did not return the questionnaire. Of the 264 respondents, 122 (46%) indicated that their child had a previous history of varicella. Of the remaining 142 students, 115 (81%) had been vaccinated. Illness in 33 students met the case definition. Specimens collected from skin lesions of seven students tested positive for VZV by polymerase chain reaction. The 33 patients ranged in age from 5 to 13 years (median: 8 years), and 20 (61%) were male. They represented all grades (kindergarten through 7) and 13 of 15 classrooms (Table).

Results were grouped by grade to clarify vaccination coverage and varicella attack rates in the school.

The outbreak started in late September and peaked in late October to early November (Figure). The index patient was an unvaccinated kindergarten student with rash onset on September 21. The child had a febrile illness and severe disease (i.e., >500 lesions and a secondary skin infection complication) and attended school for 2 days after rash onset. The source of the infection for the index case could not be identified. In nine of the 13 affected classrooms, the earliest rash onset was in an unvaccinated student. Three students became ill subsequent to illness onset in a sibling who attended the same school. Four secondary cases among nonstudent household members were identified (one child and three parents, all of whom were unvaccinated). All had rash onset within 2 weeks of exposure.

Attack rates for vaccinated and unvaccinated students were 13% (15 of 115 students) and 67% (18 of 27 students), respectively. VE was 81% (95% confidence interval [CI] = 66%–89%) for preventing varicella of any severity and 93% (95% CI = 82%–97%) for preventing moderate to severe disease. Vaccinated students were significantly more likely to have milder disease (67% versus 11%) and fewer days of rash (5 versus 7.3) and to miss fewer days of school (3 versus 5.2) than unvaccinated students ( $p < 0.01$ ).

After recognition of the outbreak, all parents at the school were notified of its occurrence, and parents of infected children were asked to keep their children at home until the end of the infectious period (i.e., 4–5 days after rash onset or until lesions formed crusts); NHHSS did not legally have the option of excluding unvaccinated students from school during the outbreak. In addition, teachers were provided information regarding recognition of mild cases that typically occur in vaccinated

**TABLE. Distribution of students,\* by grade, varicella vaccination status, and varicella attack rate — Nebraska, 2004**

| Grade        | Total no. of students | No. of students with history of varicella† | No. of cases§ (total no. of eligible students¶) |                 |                 | Vaccination coverage of eligible students % | Overall attack rate among eligible students % |
|--------------|-----------------------|--|---|-----------------|-----------------|---|---|
|              |                       |  | Unvaccinated                                    | Vaccinated      | Total           |   |   |
| Kindergarten | 28                    | 2  | 3 (3)   | 1 (23)          | 4 (26)          | 89  | 15  |
| 1            | 27                    | 4  | 5 (6)   | 6 (17)          | 11 (23)         | 74  | 48  |
| 2            | 21                    | 3  | 0 (0)   | 3 (18)          | 3 (18)          | 100   | 17  |
| 3            | 33                    | 7  | 4 (5)   | 3 (21)          | 7 (26)          | 81  | 27  |
| 4            | 28                    | 12   | 4 (5)   | 1 (11)          | 5 (16)          | 69  | 29  |
| 5            | 28                    | 15   | 1 (4)   | 0 (9)           | 1 (13)          | 69  | 8   |
| 6            | 35                    | 26   | 1 (1)   | 0 (8)           | 1 (9)           | 89  | 11  |
| 7            | 64                    | 53   | 0 (3)   | 1 (8)           | 1 (11)          | 73  | 9   |
| <b>Total</b> | <b>264</b>            | <b>122</b>                                 | <b>18 (27)</b>                                  | <b>15 (115)</b> | <b>33 (142)</b> | <b>81</b>                                   | <b>23</b>                                     |

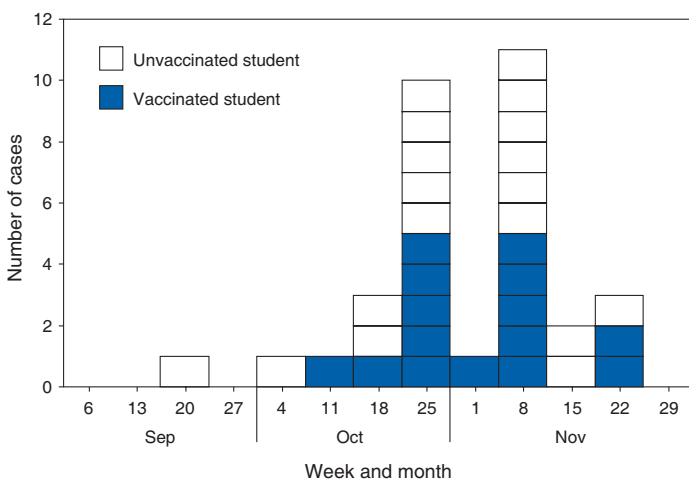
\* Students whose parents responded to the questionnaire (N = 264); age range: 5–13 years.

† Excluded from analyses.

§ Acute generalized maculopapulovesicular rash illness without other apparent cause with onset during August 26–December 23, 2004.

¶ Students with no history of varicella.

**FIGURE. Number of varicella cases,\* by week of rash onset and vaccination status — Nebraska, 2004**



\* Acute generalized maculopapulovesicular rash illness without other apparent cause with onset during August 26–December 23, 2004 (N = 33).

children. Although school and public health officials recommended vaccination of exposed, susceptible students at the Nebraska elementary school after recognition of the outbreak, no parents of the susceptible students agreed to administration of varicella vaccine to their children during the outbreak.

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**Editorial Note:** Since licensure of varicella vaccine in the United States in 1995 and subsequent nationwide implementation of a varicella vaccination program, the country has experienced a dramatic decline in cases, hospitalizations, and deaths related to varicella (1,2). However, varicella outbreaks continue to occur among unvaccinated and vaccinated school children (3–6). This report corroborates the findings of other postlicensure studies, which indicated that the varicella vaccine is 80%–85% effective in preventing varicella of any severity and  $\geq 95\%$  effective in preventing severe varicella disease and that disease is generally milder in vaccinated persons.

In 1999, the Advisory Committee on Immunization Practices (ACIP) recommended establishing a varicella vaccination school-entry requirement (7). In August 2004, Nebraska implemented the requirement, applicable that year to students entering kindergarten and 7th grade and all out-of-state transfers.\* The requirement has been extended to successive grades

each subsequent year. In 2004, at the time of the outbreak, coverage in Nebraska was 82% among children aged 19–35 months. Some kindergartners and 7th graders at the outbreak school remained unvaccinated for religious reasons and were allowed to begin the 2004 fall term; Nebraska state law allows exceptions on religious and medical grounds.

No parents of susceptible students agreed to administration of varicella vaccine to their children during the outbreak, likely because of a widespread belief among the parents that the vaccine was ineffective; the outbreak coincided with introduction of the varicella vaccination requirement, and some vaccinated students were contracting varicella. This report refutes the misconception that vaccination was ineffective and underscores the importance of investigating such outbreaks and educating parents about the value of varicella vaccination.

The findings in this report are subject to at least three limitations. First, information on history of varicella was obtained from parents and therefore subject to recall bias and reporting errors. Second, reliance on school staff members to notify NHHSS of potential cases might have led to incomplete case ascertainment. Third, reliance on parents for reports of rash or physicians for diagnosis might have resulted in overestimation or underestimation of VE; inability of school staff members or parents to recognize mild cases of disease also might have led to an overestimation of VE.

In the United States, school-entry vaccination requirements have resulted in high and sustained vaccination coverage among school-aged children (8). By July 2006, the District of Columbia and all states except Idaho, Montana, Vermont, and Wyoming had implemented a varicella vaccination school-entry requirement. Varicella vaccination has reduced the risk for and severity of varicella disease among vaccinated students and warrants improving varicella vaccination coverage through broader school-entry requirements. In 2005, ACIP expanded its varicella vaccination school-entry requirement recommendations to include students from kindergarten through college (9). Gradually covering all grades through implementation of school-entry requirements will increase vaccination coverage and population immunity and continue to reduce varicella morbidity in schools and the community.

To reduce additional virus transmission during outbreaks, in 2005, ACIP recommended a second dose of vaccine in outbreak settings for those who had received 1 dose of varicella vaccine (9). In addition, ACIP recently recommended a routine second dose of varicella vaccine for children aged 4–6 years.† During the 2004 Nebraska outbreak, because of the resistance by parents to vaccinating exposed susceptible students, NHHSS did not consider providing a second dose

\* Available at [http://www.sos.state.ne.us/business/regsearch/Rules/Health\\_and\\_Human\\_Services\\_System/Title-173/Chapter-4.pdf](http://www.sos.state.ne.us/business/regsearch/Rules/Health_and_Human_Services_System/Title-173/Chapter-4.pdf).

† Available at <http://www.cdc.gov/od/oc/media/pressrel/r060629-b.htm>.

for previously vaccinated students; 13% of vaccinated children acquired varicella. Varicella-zoster immune globulin was not administered to any students.

In 2002, the Council of State and Territorial Epidemiologists recommended that by 2005, all states should establish case-based varicella reporting by using either statewide surveillance or surveillance in sentinel sites (10). Case-based surveillance systems facilitate timely recognition and control of outbreaks such as the Nebraska outbreak and help define the impact of varicella vaccination on the epidemiology of varicella disease. As demonstrated in this outbreak, schools are an ideal setting for varicella sentinel surveillance because of their readily available vaccination records and populations that can be surveyed easily.

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### Errata: Vol. 55, No. SS-6

In the *Surveillance Summary*, “Human Immunodeficiency Virus (HIV) Risk, Prevention, and Testing Behaviors — United States, National HIV Behavioral Surveillance System: Men Who Have Sex with Men, November 2003–April 2005,”

on page 1, in the “Results” section of the Abstract, the fifth sentence should read, “Unprotected anal intercourse was reported by 58% with a main male partner (someone with whom the participant had sex and to whom he felt most committed [e.g., a boyfriend, spouse, significant other, or life partner]) and by 36% with a casual male partner (someone with whom the participant had sex but who was not considered a main partner).”

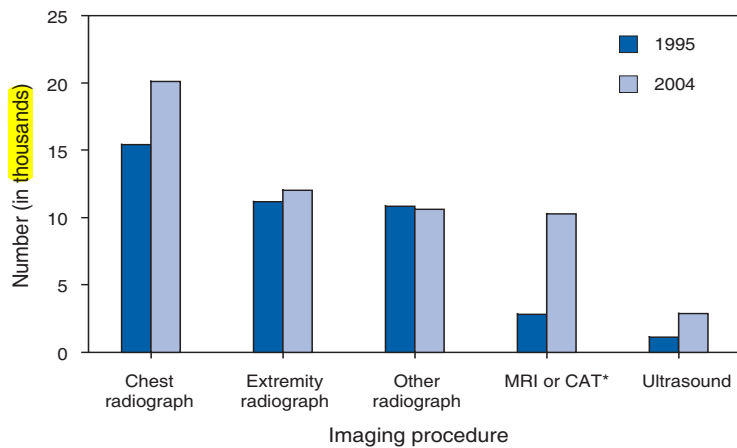
On page 9, under the heading, “Use of HIV Prevention Services and Programs,” the second sentence should read, “Overall, 8,035 (80%) participants had received free condoms; 1,505 (15%) had engaged in an individual-level intervention, and 801 (8%) had engaged in a group-level intervention (Table 11).”



# QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

## Number of Emergency Department (ED) Visits with Diagnostic Imaging Performed — United States, 1995 and 2004



\* Magnetic resonance imaging or computerized axial tomography.

Trends in the use of diagnostic imaging can be an important component of tracking ED use and cost. In 2004, more ED visits included imaging procedures than in 1995 (43% versus 38% of visits, respectively). During 1995–2004, the number of MRI or CAT scans nearly quadrupled, and the number of ultrasounds more than doubled. The overall number of ED visits increased by 14%.

**SOURCE:** CDC. National Hospital Ambulatory Medical Care Survey, 1995 and 2004. Available at <http://www.cdc.gov/nchs/nhamcs.htm>.

**TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 8, 2006 (27th Week)\***

| Disease   | Current week | Cum 2006 | 5-year weekly average <sup>†</sup> | Total cases reported for previous years |       |       |       |       | States reporting cases during current week (No.)       |
|---|--------------|----------|------------------------------------|---|-------|-------|-------|-------|--|
|   |              |          |                                    | 2005                                    | 2004  | 2003  | 2002  | 2001  |  |
| Anthrax   | —            | 1        | 0                                  | —                                       | —     | —     | 2     | 23    |  |
| Botulism:   |              |          |                                    |   |       |       |       |       |  |
| foodborne   | —            | 3        | 1                                  | 19                                      | 16    | 20    | 28    | 39    |  |
| infant  | —            | 35       | 1                                  | 90                                      | 87    | 76    | 69    | 97    |  |
| other (wound & unspecified)                                       | 1            | 27       | 0                                  | 33                                      | 30    | 33    | 21    | 19    | CA (1)   |
| Brucellosis   | —            | 51       | 2                                  | 122                                     | 114   | 104   | 125   | 136   |  |
| Chancroid   | —            | 19       | 1                                  | 17                                      | 30    | 54    | 67    | 38    |  |
| Cholera   | —            | 2        | 0                                  | 8                                       | 5     | 2     | 2     | 3     |  |
| Cyclosporiasis <sup>§</sup>                                       | 2            | 39       | 10                                 | 734                                     | 171   | 75    | 156   | 147   | RI (1), FL (1)   |
| Diphtheria  | —            | —        | 0                                  | —                                       | —     | 1     | 1     | 2     |  |
| Domestic arboviral diseases <sup>§,¶</sup> :                      |              |          |                                    |   |       |       |       |       |  |
| California serogroup  | —            | —        | 3                                  | 78                                      | 112   | 108   | 164   | 128   |  |
| eastern equine  | —            | —        | 0                                  | 21                                      | 6     | 14    | 10    | 9     |  |
| Powassan  | —            | —        | 0                                  | 1                                       | 1     | —     | 1     | N     |  |
| St. Louis   | —            | 1        | 0                                  | 10                                      | 12    | 41    | 28    | 79    |  |
| western equine  | —            | —        | —                                  | —                                       | —     | —     | —     | —     |  |
| Ehrlichiosis <sup>§</sup> :                                       |              |          |                                    |   |       |       |       |       |  |
| human granulocytic  | 2            | 84       | 17                                 | 790                                     | 537   | 362   | 511   | 261   | NY (2)   |
| human monocytic   | 1            | 83       | 10                                 | 522                                     | 338   | 321   | 216   | 142   | NC (1)   |
| human (other & unspecified)                                       | —            | 27       | 3                                  | 122                                     | 59    | 44    | 23    | 6     |  |
| <i>Haemophilus influenzae</i> ,**                                 |              |          |                                    |   |       |       |       |       |  |
| invasive disease (age <5 yrs):                                    |              |          |                                    |   |       |       |       |       |  |
| serotype b  | —            | 4        | 0                                  | 9                                       | 19    | 32    | 34    | —     |  |
| nonspecific b   | —            | 44       | 2                                  | 135                                     | 135   | 117   | 144   | —     |  |
| unknown serotype  | 2            | 98       | 2                                  | 217                                     | 177   | 227   | 153   | —     | CA (2)   |
| Hansen disease <sup>§</sup>                                       | 1            | 31       | 2                                  | 88                                      | 105   | 95    | 96    | 79    | NH (1)   |
| Hantavirus pulmonary syndrome <sup>§</sup>                        | —            | 9        | 1                                  | 29                                      | 24    | 26    | 19    | 8     |  |
| Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>             | 2            | 64       | 5                                  | 221                                     | 200   | 178   | 216   | 202   | CA (2)   |
| Hepatitis C viral, acute  | 2            | 403      | 32                                 | 771                                     | 713   | 1,102 | 1,835 | 3,976 | DC (1), FL (1)   |
| HIV infection, pediatric (age <13 yrs) <sup>§,††</sup>            | —            | 52       | 6                                  | 380                                     | 436   | 504   | 420   | 543   |  |
| Influenza-associated pediatric mortality <sup>§,§§,¶¶</sup>       | —            | 38       | 1                                  | 49                                      | —     | N     | N     | N     |  |
| Listeriosis   | 10           | 245      | 17                                 | 892                                     | 753   | 696   | 665   | 613   | NY (2), PA (2), OH (2), IN (1), MO (1), ND (1), NC (1) |
| Measles   | —***         | 22       | 2                                  | 66                                      | 37    | 56    | 44    | 116   |  |
| Meningococcal disease,††† invasive:                               |              |          |                                    |   |       |       |       |       |  |
| A, C, Y, & W-135  | —            | 130      | 4                                  | 297                                     | —     | —     | —     | —     |  |
| serogroup B   | —            | 80       | 3                                  | 157                                     | —     | —     | —     | —     |  |
| other serogroup   | —            | 12       | 0                                  | 27                                      | —     | —     | —     | —     |  |
| Mumps   | 13           | 5,155    | 4                                  | 314                                     | 258   | 231   | 270   | 266   | OH (2), IA (3), MO (3), KS (4), CA (1)                 |
| Plague  | —            | 1        | 0                                  | 8                                       | 3     | 1     | 2     | 2     |  |
| Poliomyelitis, paralytic  | —            | —        | —                                  | 1                                       | —     | —     | —     | —     |  |
| Psittacosis <sup>§</sup>  | —            | 9        | 0                                  | 19                                      | 12    | 12    | 18    | 25    |  |
| Q fever <sup>§</sup>  | 1            | 65       | 2                                  | 139                                     | 70    | 71    | 61    | 26    | CA (1)   |
| Rabies, human   | —            | 1        | 0                                  | 2                                       | 7     | 2     | 3     | 1     |  |
| Rubella   | —            | 4        | 0                                  | 11                                      | 10    | 7     | 18    | 23    |  |
| Rubella, congenital syndrome                                      | —            | 1        | —                                  | 1                                       | —     | 1     | 1     | 3     |  |
| SARS-CoV <sup>§,§§</sup>  | —            | —        | —                                  | —                                       | —     | 8     | N     | N     |  |
| Smallpox <sup>§</sup>   | —            | —        | —                                  | —                                       | —     | —     | —     | —     |  |
| Streptococcal toxic-shock syndrome <sup>§</sup>                   | 1            | 63       | 1                                  | 129                                     | 132   | 161   | 118   | 77    | OH (1)   |
| <i>Streptococcus pneumoniae</i> , <sup>§</sup>                    |              |          |                                    |   |       |       |       |       |  |
| invasive disease (age <5 yrs)                                     | 8            | 613      | 10                                 | 1,257                                   | 1,162 | 845   | 513   | 498   | RI (1), NY (4), OH (3)                                 |
| Syphilis, congenital (age <1 yr)                                  | —            | 100      | 8                                  | 361                                     | 353   | 413   | 412   | 441   |  |
| Tetanus   | 1            | 10       | 0                                  | 27                                      | 34    | 20    | 25    | 37    | MA (1)   |
| Toxic-shock syndrome (other than streptococcal) <sup>§</sup>      | 1            | 49       | 2                                  | 96                                      | 95    | 133   | 109   | 127   | GA (1)   |
| Trichinellosis  | —            | 7        | 0                                  | 19                                      | 5     | 6     | 14    | 22    |  |
| Tularemia <sup>§</sup>  | —            | 29       | 5                                  | 154                                     | 134   | 129   | 90    | 129   |  |
| Typhoid fever   | 1            | 117      | 7                                  | 324                                     | 322   | 356   | 321   | 368   | CA (1)   |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup> | —            | 2        | —                                  | 2                                       | —     | N     | N     | N     |  |
| Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>    | —            | —        | —                                  | 4                                       | 1     | N     | N     | N     |  |
| Yellow fever  | —            | —        | —                                  | —                                       | —     | —     | 1     | —     |  |

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

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

† Calculated by summing the incidence counts for the current week, the two weeks preceding the current week, and the two weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf>.

§ Not notifiable in all states.

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

\*\* Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

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

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

¶¶ A total of 37 cases were reported for the 2005-06 flu season (October 2, 2005 [week 40]–May 20, 2006 [week 20]).

\*\*\* No measles cases were reported for the current week.

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





TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 8, 2006, and July 9, 2005 (27th Week)\*

Table with columns for Reporting area, Hepatitis (viral, acute), by type (A and B), and Legionellosis. It includes rows for United States, New England, Mid. Atlantic, E.N. Central, W.N. Central, S. Atlantic, E.S. Central, W.S. Central, Mountain, Pacific, and American Samoa/C.N.M.I./Guam/Puerto Rico/U.S. Virgin Islands.

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2005 and 2006 are provisional. † Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 8, 2006, and July 9, 2005 (27th Week)\***

| Reporting area       | Lyme disease |                   |       |          |          | Malaria      |                   |     |          |          |
|----------------------|--------------|-------------------|-------|----------|----------|--------------|-------------------|-----|----------|----------|
|                      | Current week | Previous 52 weeks |       | Cum 2006 | Cum 2005 | Current week | Previous 52 weeks |     | Cum 2006 | Cum 2005 |
|                      |              | Med               | Max   |          |          |              | Med               | Max |          |          |
| <b>United States</b> | 310          | 229               | 2,153 | 4,002    | 7,103    | 13           | 24                | 125 | 531      | 625      |
| <b>New England</b>   | 129          | 37                | 780   | 582      | 1,189    | 4            | 1                 | 12  | 35       | 28       |
| Connecticut          | 124          | 8                 | 753   | 444      | 94       | 2            | 0                 | 10  | 10       | —        |
| Maine                | —            | 2                 | 26    | 39       | 74       | —            | 0                 | 1   | 3        | 2        |
| Massachusetts        | —            | 3                 | 205   | 26       | 958      | —            | 0                 | 3   | 15       | 20       |
| New Hampshire        | 5            | 5                 | 21    | 63       | 52       | 2            | 0                 | 1   | 6        | 3        |
| Rhode Island         | —            | 0                 | 12    | —        | 3        | —            | 0                 | 8   | —        | 2        |
| Vermont†             | —            | 1                 | 5     | 10       | 8        | —            | 0                 | 1   | 1        | 1        |
| <b>Mid. Atlantic</b> | 166          | 147               | 1,176 | 2,396    | 3,965    | 6            | 5                 | 15  | 79       | 174      |
| New Jersey           | —            | 21                | 271   | 472      | 1,796    | —            | 1                 | 7   | 13       | 40       |
| New York (Upstate)   | 152          | 74                | 1,150 | 1,172    | 675      | 5            | 1                 | 11  | 17       | 24       |
| New York City        | —            | 1                 | 33    | 1        | 157      | —            | 2                 | 8   | 36       | 90       |
| Pennsylvania         | 14           | 35                | 376   | 751      | 1,337    | 1            | 1                 | 2   | 13       | 20       |
| <b>E.N. Central</b>  | 1            | 11                | 160   | 239      | 863      | 1            | 2                 | 8   | 48       | 72       |
| Illinois             | —            | 0                 | 13    | —        | 66       | —            | 1                 | 5   | 12       | 39       |
| Indiana              | —            | 0                 | 4     | 5        | 10       | —            | 0                 | 3   | 6        | 3        |
| Michigan             | 1            | 1                 | 7     | 14       | 7        | —            | 0                 | 2   | 8        | 14       |
| Ohio                 | —            | 1                 | 5     | 17       | 23       | 1            | 0                 | 3   | 17       | 11       |
| Wisconsin            | —            | 10                | 145   | 203      | 757      | —            | 0                 | 3   | 5        | 5        |
| <b>W.N. Central</b>  | —            | 9                 | 98    | 119      | 162      | —            | 0                 | 32  | 23       | 27       |
| Iowa                 | —            | 1                 | 8     | 19       | 44       | —            | 0                 | 1   | 1        | 4        |
| Kansas               | —            | 0                 | 2     | 3        | 2        | —            | 0                 | 1   | —        | 2        |
| Minnesota            | —            | 6                 | 96    | 83       | 110      | —            | 0                 | 30  | 14       | 11       |
| Missouri             | —            | 0                 | 3     | 7        | 6        | —            | 0                 | 2   | 3        | 10       |
| Nebraska†            | —            | 0                 | 2     | 6        | —        | —            | 0                 | 2   | 3        | —        |
| North Dakota         | —            | 0                 | 3     | —        | —        | —            | 0                 | 1   | 1        | —        |
| South Dakota         | —            | 0                 | 1     | 1        | —        | —            | 0                 | 1   | 1        | —        |
| <b>S. Atlantic</b>   | 11           | 28                | 124   | 532      | 818      | 1            | 7                 | 16  | 163      | 125      |
| Delaware             | 5            | 8                 | 37    | 219      | 320      | 1            | 0                 | 1   | 5        | 2        |
| District of Columbia | 1            | 0                 | 2     | 9        | 4        | —            | 0                 | 2   | 2        | 3        |
| Florida              | —            | 1                 | 5     | 14       | 12       | —            | 1                 | 6   | 26       | 20       |
| Georgia              | —            | 0                 | 1     | —        | 2        | —            | 1                 | 6   | 50       | 26       |
| Maryland†            | 1            | 14                | 87    | 222      | 389      | —            | 1                 | 9   | 35       | 44       |
| North Carolina       | 4            | 0                 | 5     | 15       | 24       | —            | 0                 | 8   | 13       | 15       |
| South Carolina†      | —            | 0                 | 3     | 5        | 8        | —            | 0                 | 2   | 4        | 3        |
| Virginia†            | —            | 3                 | 22    | 48       | 57       | —            | 1                 | 9   | 27       | 11       |
| West Virginia        | —            | 0                 | 44    | —        | 2        | —            | 0                 | 2   | 1        | 1        |
| <b>E.S. Central</b>  | —            | 0                 | 4     | 3        | 13       | —            | 0                 | 3   | 12       | 12       |
| Alabama†             | —            | 0                 | 1     | —        | —        | —            | 0                 | 2   | 7        | 3        |
| Kentucky             | —            | 0                 | 2     | —        | 1        | —            | 0                 | 2   | 1        | 4        |
| Mississippi          | —            | 0                 | 0     | —        | —        | —            | 0                 | 1   | 2        | —        |
| Tennessee†           | —            | 0                 | 4     | 3        | 12       | —            | 0                 | 2   | 2        | 5        |
| <b>W.S. Central</b>  | —            | 0                 | 5     | 3        | 44       | 1            | 2                 | 31  | 33       | 45       |
| Arkansas             | —            | 0                 | 1     | —        | 2        | —            | 0                 | 2   | 1        | 3        |
| Louisiana            | —            | 0                 | 0     | —        | 3        | —            | 0                 | 1   | —        | 2        |
| Oklahoma             | —            | 0                 | 0     | —        | —        | 1            | 0                 | 6   | 3        | 2        |
| Texas†               | —            | 0                 | 5     | 3        | 39       | —            | 1                 | 29  | 29       | 38       |
| <b>Mountain</b>      | 1            | 0                 | 4     | 6        | 7        | —            | 1                 | 9   | 22       | 28       |
| Arizona              | —            | 0                 | 4     | 2        | —        | —            | 0                 | 9   | 4        | 5        |
| Colorado             | —            | 0                 | 1     | 1        | —        | —            | 0                 | 2   | 9        | 15       |
| Idaho†               | —            | 0                 | 1     | —        | 1        | —            | 0                 | 0   | —        | —        |
| Montana              | —            | 0                 | 0     | —        | —        | —            | 0                 | 1   | 1        | —        |
| Nevada†              | —            | 0                 | 1     | —        | 2        | —            | 0                 | 1   | —        | 2        |
| New Mexico†          | —            | 0                 | 1     | —        | 1        | —            | 0                 | 1   | 1        | 1        |
| Utah                 | 1            | 0                 | 1     | 3        | 1        | —            | 0                 | 2   | 7        | 4        |
| Wyoming              | —            | 0                 | 1     | —        | 2        | —            | 0                 | 1   | —        | 1        |
| <b>Pacific</b>       | 2            | 3                 | 14    | 122      | 42       | —            | 4                 | 12  | 116      | 114      |
| Alaska               | —            | 0                 | 1     | —        | 2        | —            | 0                 | 4   | 14       | 3        |
| California           | 2            | 3                 | 14    | 121      | 26       | —            | 3                 | 10  | 81       | 86       |
| Hawaii               | N            | 0                 | 0     | N        | N        | —            | 0                 | 1   | 1        | 10       |
| Oregon†              | —            | 0                 | 2     | 1        | 12       | —            | 0                 | 2   | 6        | 4        |
| Washington           | —            | 0                 | 3     | —        | 2        | —            | 0                 | 5   | 14       | 11       |
| American Samoa       | U            | 0                 | 0     | U        | U        | U            | 0                 | 0   | U        | U        |
| C.N.M.I.             | U            | 0                 | 0     | U        | U        | U            | 0                 | 0   | U        | U        |
| Guam                 | —            | 0                 | 0     | —        | —        | —            | 0                 | 0   | —        | —        |
| Puerto Rico          | N            | 0                 | 0     | N        | N        | —            | 0                 | 1   | —        | 2        |
| U.S. Virgin Islands  | —            | 0                 | 0     | —        | —        | —            | 0                 | 0   | —        | —        |

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2005 and 2006 are provisional.

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











**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 8, 2006, and July 9, 2005 (27th Week)\***

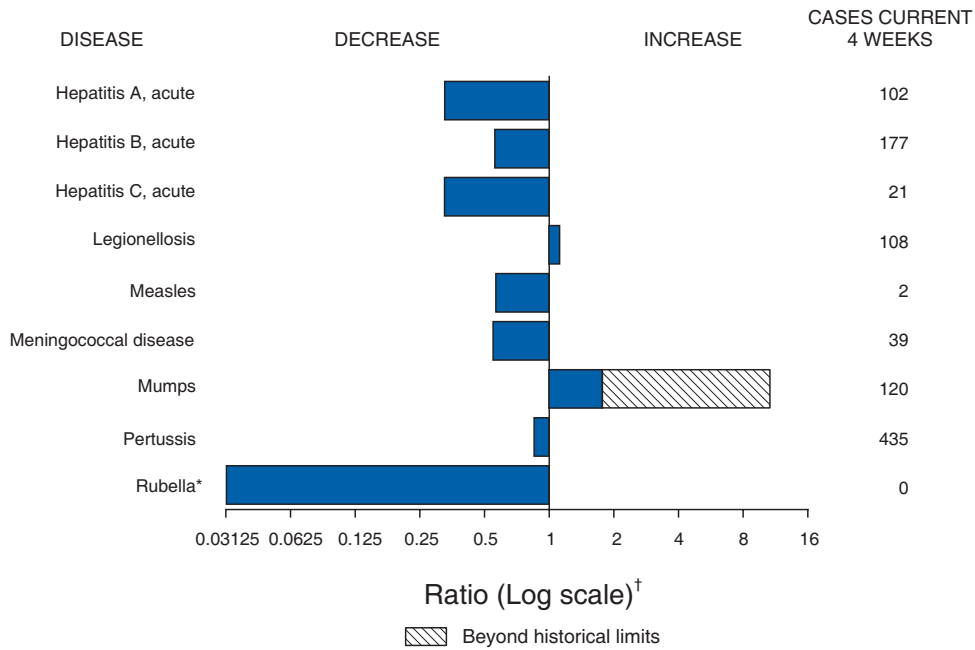
| Reporting area       | West Nile virus disease† |                   |     |          |          |                   |                   |     |          |          |
|----------------------|--------------------------|-------------------|-----|----------|----------|-------------------|-------------------|-----|----------|----------|
|                      | Neuroinvasive            |                   |     |          |          | Non-neuroinvasive |                   |     |          |          |
|                      | Current week             | Previous 52 weeks |     | Cum 2006 | Cum 2005 | Current week      | Previous 52 weeks |     | Cum 2006 | Cum 2005 |
|                      | Med                      | Max               |     |          |          | Med               | Max               |     |          |          |
| <b>United States</b> | —                        | 0                 | 155 | 4        | 36       | —                 | 0                 | 203 | 1        | 100      |
| <b>New England</b>   | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 2   | —        | —        |
| Connecticut          | —                        | 0                 | 2   | —        | —        | —                 | 0                 | 1   | —        | —        |
| Maine                | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Massachusetts        | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 1   | —        | —        |
| New Hampshire        | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Rhode Island         | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Vermont‡             | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| <b>Mid. Atlantic</b> | —                        | 0                 | 10  | —        | 1        | —                 | 0                 | 4   | —        | 1        |
| New Jersey           | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 2   | —        | —        |
| New York (Upstate)   | —                        | 0                 | 7   | —        | —        | —                 | 0                 | 2   | —        | —        |
| New York City        | —                        | 0                 | 2   | —        | —        | —                 | 0                 | 2   | —        | —        |
| Pennsylvania         | —                        | 0                 | 3   | —        | 1        | —                 | 0                 | 2   | —        | 1        |
| <b>E.N. Central</b>  | —                        | 0                 | 39  | —        | 3        | —                 | 0                 | 18  | —        | 1        |
| Illinois             | —                        | 0                 | 25  | —        | 1        | —                 | 0                 | 16  | —        | —        |
| Indiana              | —                        | 0                 | 2   | —        | 1        | —                 | 0                 | 1   | —        | —        |
| Michigan             | —                        | 0                 | 14  | —        | —        | —                 | 0                 | 3   | —        | —        |
| Ohio                 | —                        | 0                 | 9   | —        | 1        | —                 | 0                 | 4   | —        | —        |
| Wisconsin            | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 2   | —        | 1        |
| <b>W.N. Central</b>  | —                        | 0                 | 26  | —        | 3        | —                 | 0                 | 80  | 1        | 14       |
| Iowa                 | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 5   | 1        | —        |
| Kansas               | —                        | 0                 | 3   | —        | —        | N                 | 0                 | 0   | N        | N        |
| Minnesota            | —                        | 0                 | 5   | —        | 1        | —                 | 0                 | 5   | —        | 2        |
| Missouri             | —                        | 0                 | 4   | —        | 1        | —                 | 0                 | 3   | —        | —        |
| Nebraska‡            | —                        | 0                 | 9   | —        | —        | —                 | 0                 | 24  | —        | 1        |
| North Dakota         | —                        | 0                 | 4   | —        | —        | —                 | 0                 | 15  | —        | 2        |
| South Dakota         | —                        | 0                 | 7   | —        | 1        | —                 | 0                 | 33  | —        | 9        |
| <b>S. Atlantic</b>   | —                        | 0                 | 6   | —        | 1        | —                 | 0                 | 4   | —        | 2        |
| Delaware             | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 0   | —        | —        |
| District of Columbia | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 1   | —        | —        |
| Florida              | —                        | 0                 | 2   | —        | 1        | —                 | 0                 | 4   | —        | 1        |
| Georgia              | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 3   | —        | 1        |
| Maryland‡            | —                        | 0                 | 2   | —        | —        | —                 | 0                 | 1   | —        | —        |
| North Carolina       | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 1   | —        | —        |
| South Carolina‡      | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Virginia‡            | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 1   | —        | —        |
| West Virginia        | —                        | 0                 | 0   | —        | —        | N                 | 0                 | 0   | N        | N        |
| <b>E.S. Central</b>  | —                        | 0                 | 10  | 1        | 1        | —                 | 0                 | 5   | —        | 3        |
| Alabama‡             | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 2   | —        | —        |
| Kentucky             | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Mississippi          | —                        | 0                 | 9   | 1        | 1        | —                 | 0                 | 5   | —        | 3        |
| Tennessee‡           | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 1   | —        | —        |
| <b>W.S. Central</b>  | —                        | 0                 | 32  | 2        | 8        | —                 | 0                 | 22  | —        | 6        |
| Arkansas             | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 2   | —        | 2        |
| Louisiana            | —                        | 0                 | 20  | —        | —        | —                 | 0                 | 9   | —        | 2        |
| Oklahoma             | —                        | 0                 | 6   | —        | —        | —                 | 0                 | 3   | —        | —        |
| Texas‡               | —                        | 0                 | 16  | 2        | 8        | —                 | 0                 | 13  | —        | 2        |
| <b>Mountain</b>      | —                        | 0                 | 16  | 1        | 4        | —                 | 0                 | 39  | —        | 17       |
| Arizona              | —                        | 0                 | 8   | —        | 3        | —                 | 0                 | 8   | —        | 4        |
| Colorado             | —                        | 0                 | 5   | 1        | —        | —                 | 0                 | 13  | —        | 10       |
| Idaho‡               | —                        | 0                 | 2   | —        | —        | —                 | 0                 | 3   | —        | —        |
| Montana              | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 9   | —        | —        |
| Nevada‡              | —                        | 0                 | 3   | —        | —        | —                 | 0                 | 8   | —        | 1        |
| New Mexico‡          | —                        | 0                 | 3   | —        | 1        | —                 | 0                 | 4   | —        | 2        |
| Utah                 | —                        | 0                 | 6   | —        | —        | —                 | 0                 | 8   | —        | —        |
| Wyoming              | —                        | 0                 | 2   | —        | —        | —                 | 0                 | 1   | —        | —        |
| <b>Pacific</b>       | —                        | 0                 | 50  | —        | 15       | —                 | 0                 | 90  | —        | 56       |
| Alaska               | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| California           | —                        | 0                 | 50  | —        | 15       | —                 | 0                 | 89  | —        | 55       |
| Hawaii               | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Oregon‡              | —                        | 0                 | 1   | —        | —        | —                 | 0                 | 2   | —        | 1        |
| Washington           | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| American Samoa       | U                        | 0                 | 0   | U        | U        | U                 | 0                 | 0   | U        | U        |
| C.N.M.I.             | U                        | 0                 | 0   | U        | U        | U                 | 0                 | 0   | U        | U        |
| Guam                 | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| Puerto Rico          | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |
| U.S. Virgin Islands  | —                        | 0                 | 0   | —        | —        | —                 | 0                 | 0   | —        | —        |

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





**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals July 8, 2006, with historical data**



\* No rubella cases were reported for the current 4-week period yielding a ratio for week 27 of zero (0).

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

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