



# MMWR<sup>TM</sup>

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### National HIV Testing Day — June 27, 2006

June 27 is National HIV Testing Day. Initiated in 1995 by the National Association of People with AIDS, National HIV Testing Day serves to increase awareness of HIV/AIDS and to encourage all persons in the United States to get tested for human immunodeficiency virus (HIV). Locations of HIV test sites by postal code are available at National HIV Testing Resources at <http://www.hivtest.org/index.htm>.

Persons who know they have HIV infection often can receive antiretroviral treatment at an early stage of disease, when more treatment options are available. Knowing HIV status also has the potential to reduce transmission. Persons who learn they are infected with HIV usually take steps to reduce their risk for transmitting the virus (1).

In 2003, CDC began its Advancing HIV Prevention initiative (2), which aims to increase the prevalence of persons who know their HIV status by making HIV testing more available and by encouraging more people to take advantage of the tests. *MMWR* will publish CDC's revised *Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings* later this year.

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2. CDC. Advancing HIV prevention: new strategies for a changing epidemic—United States, 2003. *MMWR* 2003;52:329–2.

### Rapid HIV Test Distribution — United States, 2003–2005

At the end of 2003, an estimated 1 million persons in the United States were living with human immunodeficiency virus (HIV) infection, including those with acquired immunodeficiency syndrome (AIDS); approximately one fourth of these persons had not had their infections diagnosed (1). In 2003, CDC implemented a new initiative, Advancing HIV Prevention (AHP) (2), focused, in part, on reducing the prevalence of undiagnosed HIV infection by expanding HIV testing (2) and taking advantage of rapid HIV tests that enable persons to receive results within 30 minutes, instead of the 2 weeks typically associated with conventional tests (3). In support of AHP strategies, during September 2003–December 2005, CDC purchased and distributed rapid HIV tests to expand testing and assess the feasibility of using rapid tests in new environments (e.g., outreach settings or emergency departments). This report summarizes the results of this rapid HIV-test distribution program (RTDP), in which CDC distributed tests to 230 organizations in the United States and identified 4,650 (1.2%) HIV infections among 372,960 rapid tests administered. The results suggest that RTDP helped scale up rapid HIV-testing programs in the United States and enabled diagnosis of HIV in persons who might not have had their infections diagnosed otherwise.

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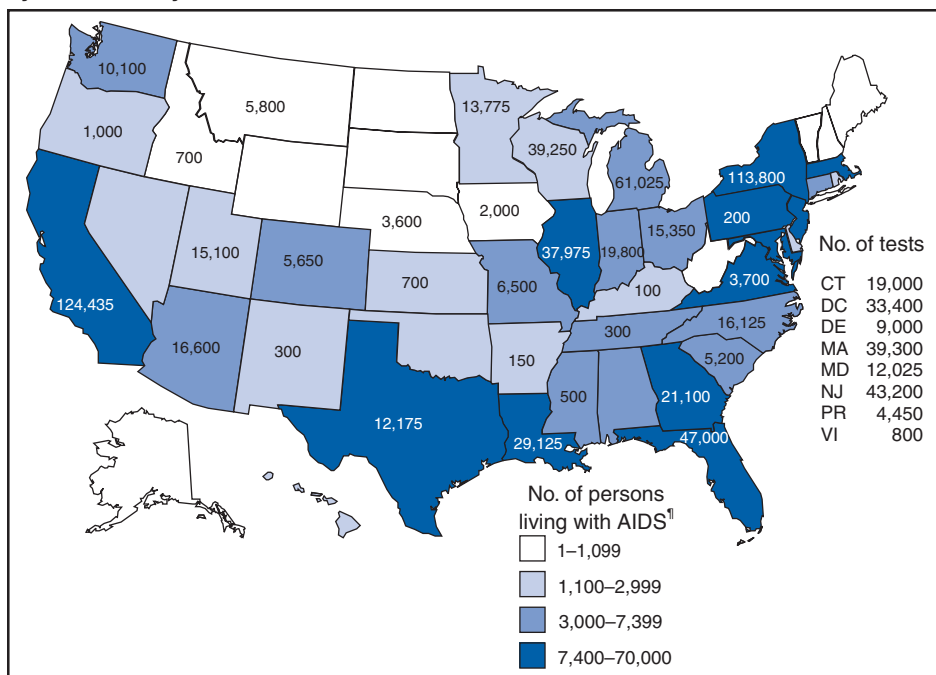
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During 2003–2004, any publicly funded organization providing HIV testing was eligible to participate in RTDP. During 2005, participation was limited to organizations in 21 states and the District of Columbia (DC) funded by the CDC AHP initiative. In all 3 years, participating organizations were required to 1) have appropriate quality-assurance plans and Clinical Laboratory Improvement Amendments (CLIA) certification, 2) run periodic external quality controls, and 3) use either Western blot or immunofluorescent assays to confirm all reactive (i.e., preliminary positive) rapid HIV test results. Clients with test results that were confirmed positive were referred to HIV-care clinics.

During September 2003–December 2005, CDC distributed 790,310 OraQuick® Advance™ Rapid HIV-1/2 Antibody Tests (OraSure Technologies, Bethlehem, Pennsylvania) to 107 coordinators representing 230 organizations (121 state and local health departments, 101 medical centers and community-based organizations, and eight correctional facilities) in 37 states, DC, Puerto Rico, and the Virgin Islands. RTDP generally distributed more rapid tests to states and territories with higher estimated numbers of persons aged  $\geq 13$  years living with AIDS (Figure). Evaluation of RTDP was performed using two methods. First, coordinators of participating organizations were asked to submit quarterly reports regarding the number of rapid HIV tests used for training, external controls, and diagnostic purposes and the number of confirmed results (i.e., positive, negative, or indeterminate) for clients with preliminary positive rapid HIV test results. Quarterly reports also included data on the total number of conventional HIV tests administered, and of these, the number that were confirmed positive. Second, 52 RTDP coordinators, representing a random sample of all 107 coordinators, were telephoned during February 23–April 6, 2006, to assess challenges to implementing rapid HIV testing and the impact of RTDP on HIV testing services overall.

Of the 230 organizations, 128 (56%) submitted quarterly reports that accounted for 606,951 (76.8%) of the rapid tests distributed. Of these tests, 372,960 (61.4%) were administered for diagnostic purposes, 60,294 (9.9%) were used for external quality control, and 25,378 (4.2%) were used for training. The remaining 148,319 (24.4%) tests either had not yet been used at the time the reports were submitted, had been returned to CDC and redistributed to other organizations, or had expired before they could be administered. On average, approximately one rapid test was used for external quality control for every six rapid tests used for diagnostic purposes (60,294 versus 372,960). Among tests administered, results from 5,385 (1.4%) were preliminary positive for HIV,

**FIGURE. Number of rapid HIV\* tests distributed by CDC during September 2003–December 2005 and estimated number of persons† living with AIDS‡ at the end of 2004, by state/territory — United States**



\* Human immunodeficiency virus.

† Aged ≥13 years.

‡ Acquired immunodeficiency syndrome.

¶ CDC. HIV/AIDS surveillance report, 2004. Vol. 16. Atlanta, GA: US Department of Health and Human Services, CDC; 2005:22. Available at <http://www.cdc.gov/hiv/stats/2004surveillancereport.pdf>.

and 4,650 (1.2%) were confirmed as HIV positive from samples drawn at the rapid testing sites; similarly, during 2003–2005, the same 230 organizations reported that 1.5% of results from 600,732 conventional tests were confirmed positive. Of preliminary HIV-positive rapid tests, 4,262 confirmed positive, negative, or indeterminate results (79.1%) were provided to clients; data were not collected on the number of clients who refused confirmatory testing or left the site before confirmatory specimens could be drawn, or on other reasons clients did not receive results of confirmed tests.

Of the 52 coordinators telephoned for interview, four were no longer employed by the organization and could not be contacted; 48 (92%) participated, representing 97 organizations from 27 different states. Forty-six (96%) reported one or more challenges that delayed the start of their rapid-test programs, including training of staff (63%); meeting local, state, or federal regulations (48%); and creating operating procedures and quality-assurance protocols (35%). A total of 22 (46%) coordinators reported one or more expired test kits. The most commonly reported reasons for expiration were receipt of rapid tests from the manufacturer too near their

expiration dates or unexpected expiration date changes by the manufacturer (i.e., because annual stability testing suggested the shelf life should be reduced [4]) (cited by 11 [50%] coordinators); overestimating demand for rapid testing (nine coordinators [41%]); delay in starting programs (nine [41%]); and inadequate inventory control (e.g., tracking of expiration dates or test supplies) (eight [36%]). Of the 22 coordinators, 15 (68%) reported using expired tests for training purposes.

Of the 48 coordinators interviewed, 43 (90%) said RTDP enabled their organizations to screen more clients for HIV because the program provided them with additional tests (cited by 35 coordinators [81%]) or because clients did not have to make a second visit to the clinic and meet with staff members a second time to receive their results (33 [79%]), increasing client acceptance of testing and increasing staff availability for testing additional clients. During 2005, when participation was limited to AHP-funded organizations, 26

(54%) of the interviewed coordinators were not eligible to participate in RTDP. Four (15%) of these coordinators said their rapid testing was discontinued at one or more test sites because of lack of funding, and one reported that a rapid test site was closed for other reasons; however, 21 (80%) reported continuing rapid testing by using non-RTDP federal, state, or local resources.

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**Editorial Note:** The findings in this report suggest that HIV testing might be increased by using rapid tests and that RTDP might have enabled diagnosis of HIV infection in persons who would not have known their HIV status otherwise. Although follow-up client data were not collected on the 4,650 confirmed HIV-positive test results, previous research has indicated that the majority of persons who learn they are infected with HIV take steps to prevent transmission to others (5) and obtain health care that can prolong the quality and duration of their lives (6). Previous research also has suggested that many

providers and clients prefer rapid HIV tests, which allow clients to receive test results in <30 minutes (6–8), eliminating for those with negative results the 2-week waiting period typically associated with conventional tests. Rapid tests also are simple to use and accurate. For example, the sensitivity of the OraQuick Advance test is 99.3% using oral fluid specimens and 99.6% using whole blood specimens; the specificity is 99.8% and 100.0%, respectively (3).

Despite the considerable utilization of rapid HIV tests provided through RTDP, nearly all coordinators identified challenges to implementing their programs, including receipt of tests with a short shelf life or notices of reduction in the shelf life of devices that had already been distributed. The short shelf life of OraQuick Advance (currently 6 months [4]) and lack of programmatic experience in rapid testing resulted in some devices expiring before their use. To help prevent expiration of tests, RTDP organizations also should ensure that comprehensive inventory-control mechanisms are in place and that initial orders for rapid HIV tests are based on accurate estimates.

The results of this assessment, combined with other CDC data, suggest that an excessive number of rapid tests might have been used for external quality control. External controls for rapid HIV tests should be run 1) by a new operator before performing testing, 2) when opening a new test lot or when a new shipment of rapid tests is received, 3) if the temperature in the test storage or testing area falls outside of specified ranges, or 4) at periodic intervals as dictated by the user facility (3). Many of the RTDP recipient organizations participated in another CDC evaluation of rapid HIV test quality-control procedures, which documented that rapid HIV tests were rarely exposed to temperatures outside of specified ranges (CDC, unpublished data, 2006). Thus, the high ratio of controls to tests in RTDP likely reflects running periodic controls at short user-defined intervals (e.g., daily). With increased experience in using rapid HIV tests, the New York State Department of Health, in March 2006, reduced its minimum requirement for periodic external controls from daily to monthly and with change in lot number and receipt of new shipments.\*

The findings in this report are subject to at least four limitations. First, because 44% of participating organizations did not submit any reports, the number of tests reported as administered, expired, and used for training or external control should be considered minimum estimates. Second, some organizations that submitted quarterly reports operated

multiple testing sites; the quality of test utilization data might not have been consistent among these multiple sites. Third, the organizations used different data collection methods that might have changed over time and might not have been able to distinguish rapid tests provided by RTDP from those purchased by the organizations. Finally, although organizations used RTDP devices on both oral fluid and whole blood specimens, RTDP quarterly reports did not differentiate between the two specimen types.

Despite obstacles associated with implementing a new diagnostic technology, RTDP has helped initiate rapid HIV testing at sites throughout the United States. Many organizations, although no longer associated with RTDP in 2005, continued to offer rapid HIV testing. CDC will procure an additional 211,800 OraQuick Advance rapid HIV tests for RTDP distribution during June 2006–June 2007. Currently, a total of six rapid HIV tests have been approved by the Food and Drug Administration (FDA) and are available in the United States; two of these tests are CLIA waived and can be used in nonlaboratory settings. However, OraQuick Advance remains the only FDA-approved, CLIA-waived rapid test for use on oral fluid (3). CDC will continue to work with federal, state, and local partners to increase the efficient use of rapid HIV tests, providing more access to HIV testing in settings and communities in which many HIV infections are undiagnosed.

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## Methicillin-Resistant *Staphylococcus aureus* Skin Infections Among Tattoo Recipients — Ohio, Kentucky, and Vermont, 2004–2005

Community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infections have emerged as a major cause of skin disease in the United States (1). Outbreaks of CA-MRSA have occurred among athletes, inmates at correctional facilities, and military recruits (2–4). This report summarizes investigations of six unlinked clusters of skin and soft tissue infections caused by CA-MRSA among 44 recipients of tattoos from 13 unlicensed tattooists in three states (Ohio, Kentucky, and Vermont); use of nonsterile equipment and suboptimal infection-control practices were identified as potential causes of the infections. Clinicians should consider CA-MRSA in their differential diagnosis for staphylococcus diseases, including skin infections. Clinicians can contact their local health departments to determine the prevalence of CA-MRSA in their community and whether the disease is reportable. MRSA infections should be added to education and prevention campaigns highlighting the risks of unlicensed tattooing.

CA-MRSA outbreaks among tattoo recipients were identified by hospital infection-control practitioners and reported to local health departments in six separate communities in Ohio, Kentucky, and Vermont during June 2004–August 2005 (Table). CA-MRSA is reportable in Ohio, Kentucky, and

Vermont during outbreaks or when clusters have been identified. CDC was notified independently of the clusters in Ohio (four clusters) and Kentucky (one) by the state health departments; the Vermont Department of Health notified public authorities nationally of one tattoo-associated CA-MRSA cluster in August 2005 by using the Epidemic Information Exchange (*Epi-X*). After this notification, CDC contacted the Vermont Department of Health to share information on the clusters. Separate investigations of each cluster were conducted by local and state health departments, assisted by CDC, to identify the sources of exposure. A primary case of tattoo-associated CA-MRSA skin infection was defined as a skin infection consistent with staphylococcal infection (e.g., boil, folliculitis, erythema, or abscess) that occurred near or at the site of a recent tattoo in a person from whom a culture from that site yielded MRSA. A secondary case was defined as a skin infection consistent with staphylococcal disease that occurred in a person who had not received a recent tattoo, had provided a specimen that yielded MRSA, and had been in close contact with an MRSA patient who had received a tattoo.

A total of 34 primary cases and 10 secondary cases were identified in the three states. Patients ranged in age from 15 to 42 years. The majority were male (73%) and white (63%); 35% were black. Except for one Ohio patient with hepatitis C, no underlying diseases or risk factors were identified. Among all 34 primary cases, the time from tattoo to symptom onset was 4–22 days; no incubation period was recorded for the

**TABLE. Characteristics of tattoo-associated methicillin-resistant *Staphylococcus aureus* skin infection clusters — Ohio, Kentucky, and Vermont, 2004–2005**

Characteristic	Ohio				Kentucky	Vermont
	Cluster 1	Cluster 2	Cluster 3	Cluster 4		
Month and year of outbreak*	June 2004	November 2004	April 2005	April 2005	May 2005	August 2005
Primary cases	13	4	4	4	4	5†
Median time to onset (days)	22	21	13	15	4	12
Secondary cases	6	0	1	1	0	2
Age range (yrs)	15–36	19–34	15–30	22–42	16–32	17–24
Percentage male	62	100	60	80	100	40
Unlicensed tattooists‡	4	1	4	1	2	1
PFGE¶ matches	10 of 13 primary cases	Test not performed	1 of 4 primary cases, 1 of 1 secondary case	3 of 3 primary cases	Test not performed	3 of 3 primary cases
Antimicrobial resistance	Test not performed	Test not performed	Oxacillin, erythromycin	Oxacillin, erythromycin	Test not performed	Oxacillin, erythromycin
Personal protective equipment use reported	None	Gloves, mask	Gloves	None	Gloves	Gloves
Professional tattoo gun use reported	No	Yes	Unknown	Yes	Yes	Yes
Persons hospitalized	0	0	0	0	2	2

\* Defined as month of first diagnosed case.

† Two of five cases had signs of infection observed at the tattoo site, but cultures were obtained from other infected skin.

‡ All the tattooists (n = 13) implicated in all six clusters were unlicensed; no licensed tattooists were involved with any of the cases.

¶ Pulsed-field gel electrophoresis results for all cases tested.

secondary cases described in this report. Most infections were mild to moderate, ranging from cellulitis and small pustules (Figure) to larger abscesses that required surgical incision and drainage (n = 20). Most infections improved with surgical drainage (n = 16) and/or oral antimicrobials (n = 24), including trimethoprim-sulfamethoxazole, levofloxacin, and clindamycin. Four patients had bacteremia and required hospitalization for intravenous vancomycin.

During interviews regarding the circumstances of their tattoos, 34 patients with primary MRSA identified a total of 13 unlicensed tattooists. Investigations were performed by local health departments in coordination with law enforcement officials; seven tattooists who could be located were interviewed. Although gloves were reportedly worn by all tattooists in four of the six clusters (defined by spatial and temporal relationships), adherence to other infection-control measures (e.g., changing gloves between clients and performing appropriate hand hygiene, skin antisepsis, and disinfection of equipment and surfaces) was not practiced. Investigators determined that three of the tattooists in Ohio had recently been incarcerated in correctional facilities, a potential site for exposure to MRSA infection (4). However, none of the tattooists from Kentucky or Vermont reported previous incarceration. None of the 34 persons with primary cases were incarcerated when they received their tattoos. Five patients reported seeing lesions on the hands of tattooists that were consistent in description with MRSA skin infection, and one tattooist reported a pustule on his finger; however, no specimens from tattooists were cultured. All 13 primary patients in the first of the four Ohio clusters reported receiving their tattoos in

**FIGURE. Pustules resulting from a methicillin-resistant *Staphylococcus aureus* skin infection in a tattoo recipient — Ohio, 2005**



Photo/Toledo-Lucas County Health Department

public places (e.g., parks or private residences) from tattooists who used homemade tattooing equipment consisting of guitar-string tattoo needles and computer ink-jet printer cartridges for dye. The persons with secondary cases were exposed to persons with primary cases by direct contact because they were living in the same house or had close personal contact.

Isolates from four of the six clusters also were characterized by pulsed-field gel electrophoresis (PFGE). Analysis of PFGE results revealed that isolates were indistinguishable within each cluster and all were USA300, a common CA-MRSA type (Table). Antimicrobial susceptibilities were characterized for infections in two of the Ohio clusters and the Vermont cluster. *S. aureus* isolates in all three clusters were resistant to oxacillin and erythromycin.

Interventions initiated by local health departments included educational forums targeting local infection-control professionals and medical providers. Students also were targeted in one Ohio community because many of the cases occurred in persons who attended one local high school and the educational forums provided them with information regarding the dangers of illegal tattoos. In addition, public service announcements were issued on the radio and in local newspapers, discussing the risks of acquiring tattoos from unlicensed tattooists and the possibility of skin infections with CA-MRSA.

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**Editorial Note:** CA-MRSA skin infections are usually transmitted from person to person by direct contact with a draining lesion or by contact with an asymptomatic carrier of *S. aureus*. Transmission also can occur indirectly through contact with contaminated items or environmental surfaces (3,5). In 2001, CDC initiated population-based surveillance for CA-MRSA at three Emerging Infection Program (EIP) sites using the Active Bacterial Core surveillance (ABCs) program (1). Currently, nine EIP sites participate in ABCs invasive MRSA surveillance, which represents a population of 16.3 million persons.\* The annual incidence for all MRSA infections varied from 18.0 to 25.7 cases per 100,000 population. The majority of these were skin and soft tissue infections, accounting for 75% of cases (1).

\* Available at [http://www.cdc.gov/ncidod/dhqp/ar\\_mrsa\\_CDCactions.html](http://www.cdc.gov/ncidod/dhqp/ar_mrsa_CDCactions.html).

Limited data are available on the morbidity and mortality of CA-MRSA. Most infections are mild skin and soft tissue infections, but more severe invasive disease such as pneumonia and necrotizing fasciitis has been reported (6,7). The cases in this report involved persons who received services from unlicensed tattooists who reportedly did not follow proper infection-control precautions recommended by tattoo industry groups and local and state regulators. These recommendations include following infection-control standard precautions<sup>†</sup> and using sterilized or single-use equipment, including needles, tattoo guns, and ink supplies. Persons considering getting a tattoo should be aware of the potential for CA-MRSA infection associated with unlicensed tattooists.

Laws and regulating authorities for tattooing vary by state. In Ohio, tattooing is regulated by local health departments,<sup>§</sup> in Vermont by the Office of the Secretary of State,<sup>¶</sup> and in Kentucky by the State Cabinet for Health Services.<sup>\*\*</sup> Statutes or regulations have been in place in these three states since the mid-1990s. For example, under Ohio law, the operator of a tattoo establishment must ensure that tattooists follow standard infection-control procedures, are trained adequately, and have completed required first aid and bloodborne pathogen courses.

Certain states have reported an increase in CA-MRSA infections in their prisons (4). In this report, three of the tattooists associated with outbreaks in Ohio had been incarcerated recently. However, the prevalence of unlicensed tattooists in Ohio and other states is unknown; similarly, any association between CA-MRSA infection and tattooists who have been incarcerated is unknown.

In response to the outbreaks described in this report, local health departments rapidly targeted members of the affected population and health-care providers with CA-MRSA prevention messages and provided recommendations for early treatment of infections. Since implementation of the campaigns, no new CA-MRSA clusters have been reported in the affected areas. Persons considering a tattoo should be aware of the potential for CA-MRSA infection and should only use the services of a licensed tattooist who follows proper infection-control procedures.

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## Progress Toward Poliomyelitis Eradication — Pakistan and Afghanistan, January 2005–May 2006

As of March 2006, wild poliovirus (WPV) remained indigenous in four countries: Afghanistan, India, Nigeria, and Pakistan (1). Since 2005, WPV-endemic countries in Asia have intensified their polio eradication measures through use of type 1 monovalent oral polio vaccine (mOPV1)\* and implementation of innovative social mobilization, communication, and vaccine-delivery strategies (2,3). This report describes polio eradication strategies in Afghanistan and Pakistan during January 2005–May 2006.

### Immunization Activities

Routine vaccination coverage with oral polio vaccine (OPV) remains low in Afghanistan and in much of Pakistan (2). The most recent available estimates (2004) for national vaccination coverage of infants with 3 doses of OPV are 66% for Afghanistan and 65% for Pakistan (4). However, population figures for Afghanistan are uncertain, and coverage in both countries varies among provinces and districts.

During 2005–2006, both countries continued to vaccinate children aged <5 years with additional OPV doses during large-scale, closely synchronized, house-to-house immunization

\* mOPV1 contains polio vaccine virus against type 1 WPV (WPV1) only and does not provide protection against other WPV types; mOPV1 provides greater immunity to WPV1 than does trivalent OPV using the same number of doses.

<sup>†</sup> Available at [http://www.cdc.gov/ncidod/dhqp/gl\\_isolation\\_standard.html](http://www.cdc.gov/ncidod/dhqp/gl_isolation_standard.html).

<sup>§</sup> Ohio Revised Code, Sections 3730.01–3730.11; 1997; Ohio Administrative Code, Chapter 3701-9; 1998. Available at <http://onlinedocs.andersonpublishing.com/oh/lpExt.dll?f=templates&fn=titlepage.htm>.

<sup>¶</sup> The Vermont Statutes, Title 26, Chapter 79. Tattooists and Body Piercers; 2004. Available at <http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=26&Chapter=079&Section=04103>.

<sup>\*\*</sup> Kentucky Tattoo Regulation; 2004; Kentucky Tattoo and Body Piercing Law; 2005. Available at <http://www.lrc.state.ky.us/krs/211-00/760.pdf>.

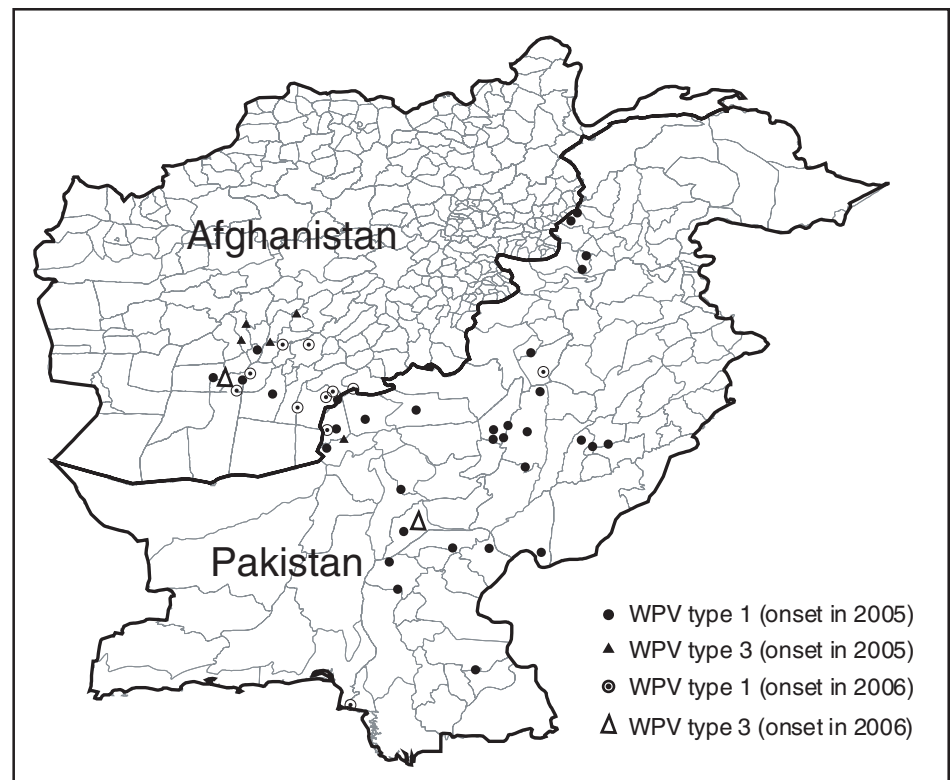
campaigns, or supplementary immunization activities (SIAs). In 2005, Pakistan conducted eight SIAs (seven national immunization days [NIDs] and one subnational immunization day [SNID]), and Afghanistan conducted 10 SIAs (four NIDs, three SNIDs and three mop-up campaigns<sup>†</sup>). In 2006, both countries conducted an SIA in January (NID in Pakistan and SNID in Afghanistan), March (NID in each country), and April (NID in each country), followed in early May by the first of two mop-up SIAs targeting the region stretching from central Pakistan into southern Afghanistan (Figure). A second SIA targeting the same area was held in early June 2006.

Pakistan used mOPV1 in the September 2005 NID and in all subsequent rounds through April 2006. The extent of mOPV1 use varied by round but always included known areas of high risk in Northwest Frontier Province (NWFP) and Punjab and Sindh provinces. Because of WPV type 3 (WPV3) circulation in Balochistan, mOPV1 use in that province was delayed until the December 2005 SNID. In Afghanistan, mOPV1 was used in three rounds: in October 2005 in two provinces in the eastern region, during the April 2006 NID round in the southern region, and in the May 2006 mop-up in the southern, south-eastern, and eastern regions.

Both countries deployed additional partner staff members from areas at lower risk to areas at higher risk. Since January 2005, SIA staff members have targeted mobile groups (e.g., nomads, seasonal migrants and persons seeking temporary employment in harvesting, Afghan refugees moving between countries, and groups moving out of areas with ongoing military conflict) throughout the region with high virus transmission between central Pakistan and southern Afghanistan.

Polio teams in both countries had difficulties gaining access to children and effectively implementing SIAs in several areas affected by conflict. In Pakistan, these areas included the North Waziristan, South Waziristan, and Bajaur agencies in the tribal area of NWFP, and, since mid-2005, two districts in eastern Balochistan (Dera Bugti and Kohlu). Worsening security had the greatest impact on the effectiveness of the vaccination

**FIGURE. Wild poliovirus (WPV) cases,\* by district — Afghanistan and Pakistan, January–May 31, 2006**



\* Excludes viruses detected from environmental surveillance and vaccine-derived polio viruses. Data reported to the World Health Organization as of May 31, 2006.

campaign in the southern region of Afghanistan, despite strategies to overcome the problems (e.g., recruitment of additional local staff members).

### Acute Flaccid Paralysis (AFP) Surveillance

AFP reporting increased in both countries in 2005 compared with 2004; nonpolio AFP reporting rates were more than five cases per 100,000 population aged <15 years, and adequate stool specimens<sup>§</sup> were collected from 89% and 92% of persons with AFP in Pakistan and Afghanistan, respectively. AFP surveillance remained above certification-standard levels<sup>¶</sup> at the national level in both countries, provincial level in Pakistan, and regional level in Afghanistan. However, genetic analysis in 2005 and 2006 identified WPV chains of transmission in both countries that might have existed for 2–3 years without being detected by AFP surveillance. The primary gaps in surveillance are in southern Afghanistan.

<sup>§</sup> Two stool specimens that are collected at an interval of at least 24 hours within 14 days of paralysis onset and properly shipped to the laboratory.

<sup>¶</sup> Nonpolio AFP rate of at least two cases per 100,000 population aged <15 years and collection of two adequate stool specimens from at least 80% of all AFP cases.

<sup>†</sup> SIAs in a targeted geographic area of known virus transmission.



AFP surveillance in Pakistan and Afghanistan continues to receive laboratory support from the National Institutes of Health in Islamabad, Pakistan. In 2005, the laboratory isolated nonpolio enteroviruses from 19% and 22% of specimens from Pakistan and Afghanistan, respectively.

## Polio Incidence

In Pakistan, 28 polio cases were confirmed with onset in 2005 (Table), compared with 53 cases in 2004. Twenty-seven of the 2005 cases were WPV1, and one was WPV3 (from Quetta district in the Balochistan province). For the first time, no high-season (August–October) transmission peak occurred; 13 cases were reported during this period in 2005. In 2006, as of May 31, four cases (three WPV1 and one WPV3) had been confirmed: one WPV1 case from Killa Abdullah in the Balochistan province (February 23 onset of paralysis); one WPV1 case from Dera Ismail Khan district in NWFP (February 23 onset of paralysis); one WPV1 case from Karachi in the Sindh province (April 28 onset of paralysis); and one WPV3 case from Jafarabad in the Balochistan province (May 15 onset of paralysis).

In Afghanistan, nine polio cases with onset in 2005 were confirmed (five WPV1 and four WPV3), all from three provinces in the southern region: three WPV1 and two WPV3 cases from Helmand, two WPV3 cases from Oruzgan, and two WPV1 cases from Kandahar. In 2006, WPV1 transmission is continuing in the southern region. As of May 31, eight

WPV1 cases had been reported, including seven from Kandahar (three from Spin Boldak district and four cases from districts near the city of Kandahar) and one from Helmand. A WPV3 case with onset of paralysis on May 4 was also reported from Helmand province. During 2005–2006, confirmed WPV cases (both WPV1 and WPV3) in Afghanistan have been limited to three provinces of the southern region: Helmand, Oruzgan, and Kandahar. Only one case in 2004 and one positive contact (i.e., a person who is excreting WPV but has no paralysis) in 2005 were reported from the eastern region.

During 2005 and 2006, WPV detection in Afghanistan and Pakistan has been limited to five zones known for endemic transmission in preceding years: 1) Peshawar Valley and surrounding districts in NWFP, Pakistan; 2) southern Punjab, Pakistan; 3) northern Sindh, Pakistan; 4) eastern Balochistan and the Quetta area (including Pishin and Killa Abdullah districts) of Balochistan, Pakistan; and 5) the southern region of Afghanistan, particularly Kandahar, Helmand, and Oruzgan provinces.

Genetic data indicate close links between viruses found in zones 2 through 5 and confirm that these zones form a transmission corridor. All cases in Afghanistan since January 2005 and 24 of the 31 cases reported in Pakistan during the same period occurred in zones along this corridor. Genetic analysis indicates that the biodiversity of endemic WPVs has continued to decrease in Pakistan; the number of type-1 lineage

**TABLE. Acute flaccid paralysis (AFP) surveillance indicators and reported wild poliovirus (WPV) cases, by quarter and type — Pakistan and Afghanistan, January 2005–May 31, 2006**

Country/Province or region	AFP reporting (2005)			Reported WPV cases (2005)							Reported WPV cases by type (January–May 31, 2006)	
	No. AFP cases	Nonpolio AFP rate*	% persons with AFP with adequate specimens†	Quarter				Total cases by WPV type			P1	P3
				1	2	3	4	P1	P3	Total cases		
<b>Pakistan</b>	4,025	5.4	88	6	6	8	8	27	1	28	3	1
NWFP§	868	7.6	83	1	1	1	2	5	—	5	1	—
Balochistan	220	6.3	85	1	—	4	3	7	1	8	1	1
Punjab	1,965	4.9	91	2	5	1	2	10	—	10	—	—
Sindh	884	5.5	88	2	—	2	1	5	—	5	1	—
Other areas¶	88	3.5	91	—	—	—	—	—	—	—	—	—
<b>Afghanistan</b>	827	5.2	92	—	4	—	5	5	4	9	8	1
South	123	4.1	86	—	4	—	5	5	4	9	8	1
Southeast	53	3.3	85	—	—	—	—	—	—	—	—	—
East	95	6.6	92	—	—	—	—	—	—	—	—	—
West	128	5.0	94	—	—	—	—	—	—	—	—	—
Central, including Bamian	165	5.6	96	—	—	—	—	—	—	—	—	—
North, including Mazar and Badakhshan	263	5.9	93	—	—	—	—	—	—	—	—	—

\* Per 100,000 children aged <15 years.

† Two stool specimens that are collected at an interval of at least 24 hours within 14 days of paralysis onset and properly shipped to the laboratory.

§ Northwest Frontier Province.

¶ Other areas include Azad, Jammu, Kashmir (AJK), the Federally Administered Northern Areas (FANA), and Islamabad.

clusters (substrains) decreased from six in 2004 to three in 2005; one cluster of WPV1 has been identified in 2006.

**Reported by:** *Immunization, Vaccines, and Biologicals Dept, World Health Organization (WHO), Geneva, Switzerland. WHO Pakistan, Islamabad. Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC.*

**Editorial Note:** Pakistan and Afghanistan continue to progress toward polio eradication. Approximately 50% fewer cases were reported in Pakistan in 2005 than in 2004. For the first time since polio eradication measures began in Pakistan, no seasonal peak of cases was recorded during the 2005 autumn high-transmission season, indicating a decrease in WPV circulation after the SIAs. As of May 31, 2006, four cases had been reported in Pakistan, fewer than the number reported during any previous first quarter.\*\* Epidemiologic findings suggest that the geographic extent of WPV transmission narrowed at the end of 2005; therefore, transmission is now confined to a corridor linking central Pakistan with southern Afghanistan through Balochistan. The reduction in the biodiversity of viral isolates indicates that previous transmission chains have been interrupted.

Although the number of WPV cases in Afghanistan increased from five in 2004 to nine in 2005, transmission was confined to three (9.4%) of 32 provinces, all in the southern region; transmission in 2004 also was confined to three provinces (although different from the 2005 provinces). Three genetically different clusters of WPV3 circulated in the south in 2005, and at least one WPV3 strain persisted in 2006. Cross-border transmission of WPV1, particularly in Kandahar, increased toward the end of 2005. The likely reason for continued transmission in southern Afghanistan is the lack of security in that area, which hinders planning, implementation, and evaluation of SIAs.

Cultural ties between southeastern Afghanistan and bordering areas of Pakistan are close, particularly between the Kandahar area and Balochistan, where cross-border migration is common. Unless transmission is stopped in this region, preventing continued transmission will be difficult in other parts of the high-risk corridor of districts from Afghanistan to central Pakistan.

Stopping WPV transmission in Afghanistan and Pakistan calls for additional improvements in SIA quality, particularly higher coverage of mobile persons (e.g., nomads or migrants) in areas of Pakistan at high risk and improved access to children in southern Afghanistan. These improvements will require increased deployment of local health workers and volunteers and an appeal to those in the southern Afghanistan

conflict to reinstitute immediately a cease-fire to allow vaccinators to do their work undisturbed.

Progress in polio eradication has resulted from support from the international polio partnership<sup>††</sup> and political and health leaders at the national, provincial, and district levels. The goal of polio eradication can be achieved only if health and political leaders remain committed to and supportive of their national programs.

#### References

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<sup>††</sup> Polio eradication programs in Afghanistan and Pakistan are supported by Rotary International; WHO; UNICEF; CDC; the governments of Japan, Netherlands, and the United Kingdom; the United States Agency for International Development; the International Committee of the Red Cross; the International Federation of Red Cross and Red Crescent Societies; and the Bill & Melinda Gates Foundation.

#### Notice to Readers

### **International Standards for Tuberculosis Care and The Patients' Charter for Tuberculosis Care**

The Tuberculosis Coalition for Technical Assistance, funded by the U.S. Agency for International Development, has released the *International Standards for Tuberculosis Care (ISTC)* and *The Patients' Charter for Tuberculosis Care*. The publications were developed by partner health agencies, including CDC, for providers of tuberculosis care and their patients.

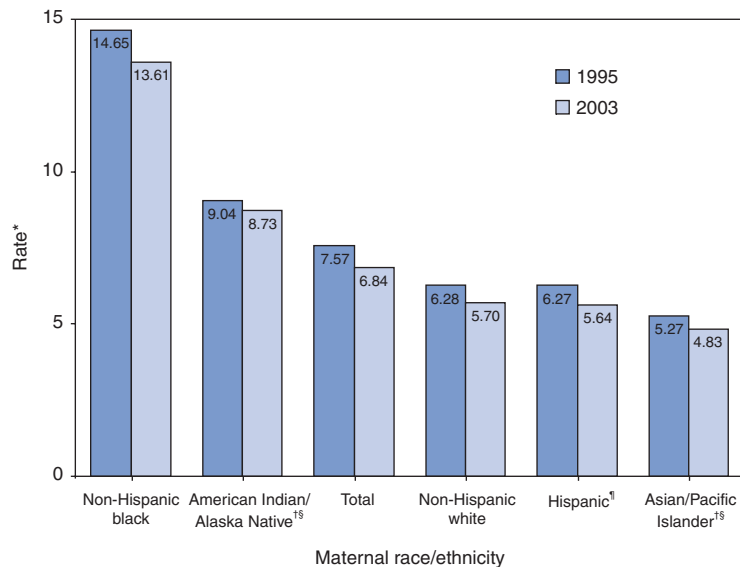
The *ISTC* describes the level of care that practitioners should strive to achieve while treating patients who have or are suspected of having tuberculosis. The standards were endorsed by leading international health agencies. The patients' charter outlines the rights and responsibilities of persons with tuberculosis and was designed to create a mutually beneficial relationship between patients and their health-care providers. The *ISTC* and charter are available at [http://www.stoptb.org/resource\\_center/documents.asp](http://www.stoptb.org/resource_center/documents.asp). Additional information is available from Philip C. Hopewell, MD, Division of Pulmonary and Critical Care Medicine, San Francisco General Hospital, 1001 Potrero Ave, San Francisco, CA 94110; telephone, 415-206-3510; e-mail, [phopewell@medsfgh.ucsf.edu](mailto:phopewell@medsfgh.ucsf.edu).

\*\* As of May 31, 2006; laboratory data were complete through mid-April.

# QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

## Infant Mortality Rates, by Maternal Race/Ethnicity — United States, 1995 and 2003



\* Deaths of infants aged <1 year per 1,000 live births.

<sup>†</sup> Includes persons of Hispanic and non-Hispanic origin.

<sup>§</sup> Difference not significant at  $p < 0.05$  (z test).

<sup>¶</sup> Persons of Hispanic origin might be of any race.

Infant mortality rates decreased significantly ( $p < 0.05$ , z test) in the United States from 1995 to 2003. The rate for non-Hispanic black mothers was significantly higher than for all other groups for both years; the rate for American Indian/Alaska Native mothers was significantly higher than for non-Hispanic whites, Hispanics, and Asians/Pacific Islanders for both years.

**SOURCE:** Mathews TJ, MacDorman MF. Infant mortality statistics from the 2003 period linked birth/infant death data set. Natl Vital Stat Rep 2006;54(15).

**TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 17, 2006 (24th Week)\***

Disease	Current week	Cum 2006	5-year weekly average†	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	—	1	0	19	16	20	28	39	
infant	—	32	2	90	87	76	69	97	
other (wound & unspecified)	—	22	0	33	30	33	21	19	
Brucellosis	—	42	2	122	114	104	125	136	
Chancroid	1	14	1	17	30	54	67	38	MD (1)
Cholera	—	—	0	6	5	2	2	3	
Cyclosporiasis§	—	26	11	734	171	75	156	147	
Diphtheria	—	—	0	—	—	1	1	2	
Domestic arboviral diseases§§:									
California serogroup	—	—	1	78	112	108	164	128	
eastern equine	—	—	0	21	6	14	10	9	
Powassan	—	—	0	1	1	—	1	N	
St. Louis	—	—	0	10	12	41	28	79	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	—	37	11	790	537	362	511	261	
human monocytic	4	69	7	522	338	321	216	142	MO (1), NC (1), TN (2)
human (other & unspecified)	3	12	2	121	59	44	23	6	MO (1), TN (2)
<i>Haemophilus influenzae</i> ,**									
invasive disease (age <5 yrs):									
serotype b	—	3	0	9	19	32	34	—	
nonsenotype b	1	43	3	135	135	117	144	—	OK (1)
unknown serotype	2	82	2	217	177	227	153	—	NY (1), DC (1)
Hansen disease§	5	26	2	88	105	95	96	79	HI (5)
Hantavirus pulmonary syndrome§	—	8	1	22	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal§	—	50	4	219	200	178	216	202	
Hepatitis C viral, acute	7	354	33	771	713	1,102	1,835	3,976	PA (1), MI (3), MO (2), OR (1)
HIV infection, pediatric (age <13 yrs)§††	—	52	6	380	436	504	420	543	
Influenza-associated pediatric mortality§§§¶¶	1	35	0	49	—	N	N	N	AZ (1)
Listeriosis	6	209	13	893	753	696	665	613	PA (1), OH (2), MD (1), VA (2)
Measles	1	22***	1	65	37	56	44	116	NY (1)
Meningococcal disease,††† invasive:									
A, C, Y, & W-135	3	122	5	294	—	—	—	—	CT (2), FL (1)
serogroup B	3	72	3	153	—	—	—	—	NC (3)
other serogroup	—	12	1	27	—	—	—	—	
Mumps	47	4,219	5	310	258	231	270	266	NY (1), PA (3), IN (1), IA (4), MO (3), NE (4), KS (13), DC (1), VA (2), TN (1), AL (8), TX (2), ID (2), CO (1), AZ (1)
Plague	—	1	0	7	3	1	2	2	
Poliomyelitis, paralytic	—	—	—	1	—	—	—	—	
Psittacosis§	—	9	0	19	12	12	18	25	
Q fever§	—	56	2	139	70	71	61	26	
Rabies, human	—	—	—	2	7	2	3	1	
Rubella	—	4	0	11	10	7	18	23	
Rubella, congenital syndrome	—	1	—	1	—	1	1	3	
SARS-CoV§§	—	—	—	—	—	8	N	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	58	3	129	132	161	118	77	OH (1)
<i>Streptococcus pneumoniae</i> ,§									
invasive disease (age <5 yrs)	9	551	14	1,224	1,162	845	513	498	NY (1), PA (1), OH (2), IN (1), MD (2), OK (1), CO (1)
Syphilis, congenital (age <1 yr)	1	95	8	361	353	413	412	441	LA (1)
Tetanus	1	9	1	26	34	20	25	37	IN (1)
Toxic-shock syndrome (other than streptococcal)§	—	45	2	95	95	133	109	127	
Trichinellosis	1	5	0	20	5	6	14	22	MD (1)
Tularemia§	—	18	4	154	134	129	90	129	
Typhoid fever	2	108	6	324	322	356	321	368	OH (1), NC (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	2	—	2	—	N	N	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	—	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.

¶¶ Of the 40 cases reported since October 2, 2005 (week 40), only 36 occurred during the current 2005–06 season.

\*\*\* One measles case was reported from another country 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 June 17, 2006, and June 18, 2005 (24th 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>	105	236	2,153	2,595	4,061	11	25	125	452	545
<b>New England</b>	5	51	780	181	656	—	1	12	24	25
Connecticut	—	9	753	95	43	—	0	10	4	—
Maine	—	2	26	29	35	—	0	1	2	2
Massachusetts	—	10	205	11	539	—	0	3	13	17
New Hampshire	5	5	21	38	32	—	0	1	4	3
Rhode Island	—	0	12	—	3	—	0	8	—	2
Vermont†	—	1	5	8	4	—	0	1	1	1
<b>Mid. Atlantic</b>	83	151	1,176	1,680	2,193	—	5	15	69	151
New Jersey	—	21	312	300	963	—	1	7	13	35
New York (Upstate)	60	74	1,150	796	407	—	1	11	11	22
New York City	—	3	33	—	104	—	3	8	33	76
Pennsylvania	23	34	376	584	719	—	1	2	12	18
<b>E.N. Central</b>	—	10	160	138	406	—	3	8	46	55
Illinois	—	0	13	—	40	—	1	5	11	31
Indiana	—	0	4	3	3	—	0	3	6	3
Michigan	—	1	7	9	4	—	0	2	8	10
Ohio	—	1	5	17	19	—	1	3	16	6
Wisconsin	—	9	145	109	340	—	0	3	5	5
<b>W.N. Central</b>	1	9	98	74	110	—	0	32	21	27
Iowa	—	0	8	10	32	—	0	1	1	4
Kansas	—	0	2	3	2	—	0	1	—	2
Minnesota	—	6	96	52	71	—	0	30	14	11
Missouri	—	0	2	4	5	—	0	2	3	10
Nebraska†	1	0	2	5	—	—	0	2	1	—
North Dakota	—	0	3	—	—	—	0	1	1	—
South Dakota	—	0	1	—	—	—	0	1	1	—
<b>S. Atlantic</b>	14	28	124	412	609	9	6	16	146	107
Delaware	—	9	37	163	248	—	0	1	3	1
District of Columbia	1	0	2	8	3	—	0	2	—	2
Florida	—	1	5	14	10	—	1	6	23	18
Georgia	—	0	1	—	2	4	1	6	47	20
Maryland†	8	16	87	184	275	—	1	9	34	38
North Carolina	—	0	5	9	22	—	0	8	11	13
South Carolina†	1	0	3	4	8	—	0	2	4	3
Virginia†	4	3	22	30	40	5	1	9	23	11
West Virginia	—	0	44	—	1	—	0	2	1	1
<b>E.S. Central</b>	1	0	4	2	10	1	0	3	11	10
Alabama†	—	0	1	—	—	1	0	2	6	3
Kentucky	—	0	2	—	1	—	0	2	1	3
Mississippi	—	0	0	—	—	—	0	1	2	—
Tennessee†	1	0	4	2	9	—	0	2	2	4
<b>W.S. Central</b>	—	0	5	3	38	1	2	31	30	41
Arkansas	—	0	1	—	2	—	0	2	1	3
Louisiana	—	0	0	—	3	—	0	1	—	2
Oklahoma	—	0	0	—	—	—	0	6	2	2
Texas†	—	0	5	3	33	1	1	29	27	34
<b>Mountain</b>	—	0	4	4	3	—	1	9	18	27
Arizona	—	0	4	2	—	—	0	9	4	5
Colorado	—	0	0	—	—	—	0	2	6	14
Idaho†	—	0	1	—	1	—	0	0	—	—
Montana	—	0	0	—	—	—	0	1	1	—
Nevada†	—	0	2	—	—	—	0	1	—	2
New Mexico†	—	0	1	—	—	—	0	1	—	1
Utah	—	0	1	2	1	—	0	2	7	4
Wyoming	—	0	1	—	1	—	0	1	—	1
<b>Pacific</b>	1	3	19	101	36	—	4	12	87	102
Alaska	—	0	1	—	2	—	0	2	8	3
California	—	3	19	100	25	—	3	10	61	80
Hawaii	N	0	0	N	N	—	0	4	—	9
Oregon†	1	0	3	1	9	—	0	2	6	3
Washington	—	0	3	—	—	—	0	5	12	7
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	—	1
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 June 17, 2006, and June 18, 2005 (24th Week)\***

Reporting area	West Nile virus disease <sup>†</sup>									
	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>	—	1	155	4	12	—	0	203	—	34
<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 <sup>§</sup>	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	0	10	—	—	—	0	4	—	—
New Jersey	—	0	1	—	—	—	0	2	—	—
New York (Upstate)	—	0	7	—	—	—	0	2	—	—
New York City	—	0	2	—	—	—	0	2	—	—
Pennsylvania	—	0	3	—	—	—	0	2	—	—
<b>E.N. Central</b>	—	0	39	—	2	—	0	18	—	—
Illinois	—	0	25	—	—	—	0	16	—	—
Indiana	—	0	2	—	1	—	0	1	—	—
Michigan	—	0	14	—	—	—	0	3	—	—
Ohio	—	0	9	—	1	—	0	4	—	—
Wisconsin	—	0	3	—	—	—	0	2	—	—
<b>W.N. Central</b>	—	0	26	—	2	—	0	80	—	6
Iowa	—	0	3	—	—	—	0	5	—	—
Kansas	—	0	3	—	—	N	0	3	N	N
Minnesota	—	0	5	—	—	—	0	5	—	—
Missouri	—	0	4	—	1	—	0	3	—	—
Nebraska <sup>§</sup>	—	0	9	—	—	—	0	24	—	1
North Dakota	—	0	4	—	—	—	0	15	—	—
South Dakota	—	0	7	—	1	—	0	33	—	5
<b>S. Atlantic</b>	—	0	6	—	—	—	0	4	—	1
Delaware	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	1	—	—	—	0	1	—	—
Florida	—	0	2	—	—	—	0	4	—	—
Georgia	—	0	3	—	—	—	0	3	—	1
Maryland <sup>§</sup>	—	0	2	—	—	—	0	1	—	—
North Carolina	—	0	1	—	—	—	0	1	—	—
South Carolina <sup>§</sup>	—	0	1	—	—	—	0	0	—	—
Virginia <sup>§</sup>	—	0	0	—	—	—	0	1	—	—
West Virginia	—	0	0	—	—	N	0	0	N	N
<b>E.S. Central</b>	—	0	10	1	1	—	0	5	—	1
Alabama <sup>§</sup>	—	0	1	—	—	—	0	2	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	9	1	1	—	0	5	—	1
Tennessee <sup>§</sup>	—	0	3	—	—	—	0	1	—	—
<b>W.S. Central</b>	—	0	32	2	2	—	0	22	—	6
Arkansas	—	0	3	—	—	—	0	2	—	2
Louisiana	—	0	20	—	—	—	0	9	—	2
Oklahoma	—	0	6	—	—	—	0	3	—	—
Texas <sup>§</sup>	—	0	16	2	2	—	0	13	—	2
<b>Mountain</b>	—	0	16	1	2	—	0	39	—	7
Arizona	—	0	8	—	1	—	0	8	—	1
Colorado	—	0	5	1	—	—	0	13	—	5
Idaho <sup>§</sup>	—	0	2	—	—	—	0	3	—	—
Montana	—	0	3	—	—	—	0	9	—	—
Nevada <sup>§</sup>	—	0	3	—	—	—	0	8	—	—
New Mexico <sup>§</sup>	—	0	3	—	1	—	0	4	—	1
Utah	—	0	6	—	—	—	0	8	—	—
Wyoming	—	0	2	—	—	—	0	1	—	—
<b>Pacific</b>	—	0	50	—	3	—	0	90	—	13
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	50	—	3	—	0	89	—	13
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon <sup>§</sup>	—	0	1	—	—	—	0	2	—	—
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.

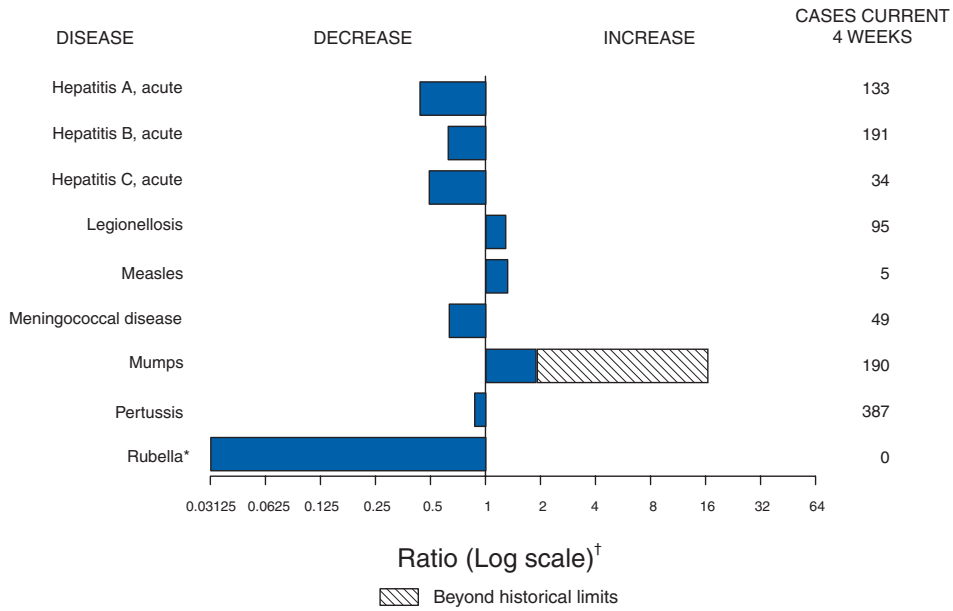
\* Incidence data for reporting years 2005 and 2006 are provisional.

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

<sup>§</sup> 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 June 17, 2006, with historical data**



\* No rubella cases were reported for the current 4-week period yielding a ratio for week 24 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.

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