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Drug-Susceptible Tuberculosis Outbreak in a State Correctional Facility Housing HIV-Infected Inmates — South Carolina, 1999–2000

During 1999–2000, South Carolina's Department of Corrections (SCDC), Department of Health and Environmental Control (DHEC), and CDC investigated an outbreak of drug-susceptible tuberculosis (TB) that occurred in a state correctional facility housing human immunodeficiency virus (HIV)-infected inmates. All culture-confirmed case-patients have been linked by IS6110-based DNA fingerprinting of *Mycobacterium tuberculosis* isolates (*1*). This report describes the outbreak investigation and illustrates the need for increased vigilance for TB in settings in which HIV-infected persons congregate.

During 1998, SCDC began mandatory HIV testing upon incarceration of all inmates with negative or unknown HIV serostatus, and in November 1998, began segregating HIV-infected prisoners, placing them in three dormitories of one prison with each dormitory partitioned into right and left sides. On admission to the facility, all inmates were screened for TB infection and disease with a tuberculin skin test (TST)* and chest radiography. TST-negative inmates undergo a TST annually.

During mid-August 1999, the source case-patient, a HIV-infected man aged 34 years housed on the right side of one of the dormitories (dormitory A), was diagnosed at a community hospital with sputum acid-fast bacilli (AFB) smear-positive pulmonary TB. His CD4 lymphocyte count was 17 cells/µL (normal range: 359–1519 cells/µL)], and he was not receiving antiretroviral therapy. In 1984, he had a documented TST reaction of 15mm; however, two attempts to treat his latent TB infection (LTBI) with isoniazid were discontinued because of gastrointestinal side effects. In early July 1999, 6 weeks before his TB diagnosis, he was taken to the same hospital with a 2-week history of fever, abdominal pain, and cough. His chest radiograph was normal; sputum specimens were not obtained for AFB smear and culture, and he was not placed in respiratory isolation. He was returned to the prison in mid-July without a definitive diagnosis. In late August, corrections medical staff learned of a second case of sputum smear-positive pulmonary TB in a former dormitory A inmate who had been released in July 1999.

SCDC and DHEC began a contact investigation of dormitory A inmates in early September 1999. Inmates who had had contact with a case-patient and had signs and symptoms of active TB were transferred from dormitory A to respiratory isolation for

*TST was defined as induration of ≥5mm in contacts and HIV-infected inmates. A TST conversion was defined as an increase of ≥5mm from the most recent TST.

Tuberculosis Outbreak — Continued

medical evaluation. The exposure period for identifying contacts was 6 weeks before signs of TB appeared in the source case-patient to the day the last sputum culture-positive case-patient left dormitory A (i.e., May 1–September 30, 1999). The exposed cohort comprised 323 men who had spent from 1 to 152 days (median: 135 days) in dormitory A during that period. Screening consisted of TST, chest radiograph, and symptom review for all dormitory A inmates; follow-up TST was conducted on remaining TST-negative inmates in December 1999 (Table 1).

As of November 2000, 31 current or former inmates had TB diagnosed (Figure 1). All case-patients were non-Hispanic black men born in the United States and HIV-infected. The median age was 36 years (range: 23–56 years); 19 cases were culture-confirmed and 19 isolates were tested by IS6110-based DNA fingerprinting and demonstrated a matching nine-band pattern. Of the 31 case-patients, 27 (87%) resided on the right side of dormitory A during the exposure period; four (13%) resided on the left. Five case-patients had TB diagnosed after being released from prison; all five were released before the source case-patient had TB diagnosed the previous August. A medical student who examined the source case-patient during the July hospitalization had sputum AFB smear-positive cavitary TB diagnosed in December; the DNA fingerprint of the student's isolate matched the outbreak pattern bringing the number of related cases to 32.

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Editorial Note: Persons infected with both HIV and *M. tuberculosis* are at high risk for developing TB disease and for an accelerated progression from TB infection to disease (*2,3*). Persons with HIV infection who are placed in settings such as prisons, hospital wards, group residences, and homeless shelters contribute to outbreaks of TB (*4,5*). In this report, the source case-patient was a longterm inmate who developed TB disease after a long period of LTBI and unsuccessful LTBI treatment. The outbreak demonstrates that rapid spread of *M. tuberculosis* to other inmates can be a consequence of segregated housing for HIV-infected inmates.

Because inmates transfer within and among correctional facilities and are released upon completion of their sentence regardless of medical status, correctional health and security records should display prisoners' *M. tuberculosis* infection, disease, and therapy status. Newly incarcerated inmates whose TST status is negative or unknown should be

TABLE 1. Tuberculin skin test (TST) results among correctional facility inmates housed in dormitory A — South Carolina, August 1999–January 2000

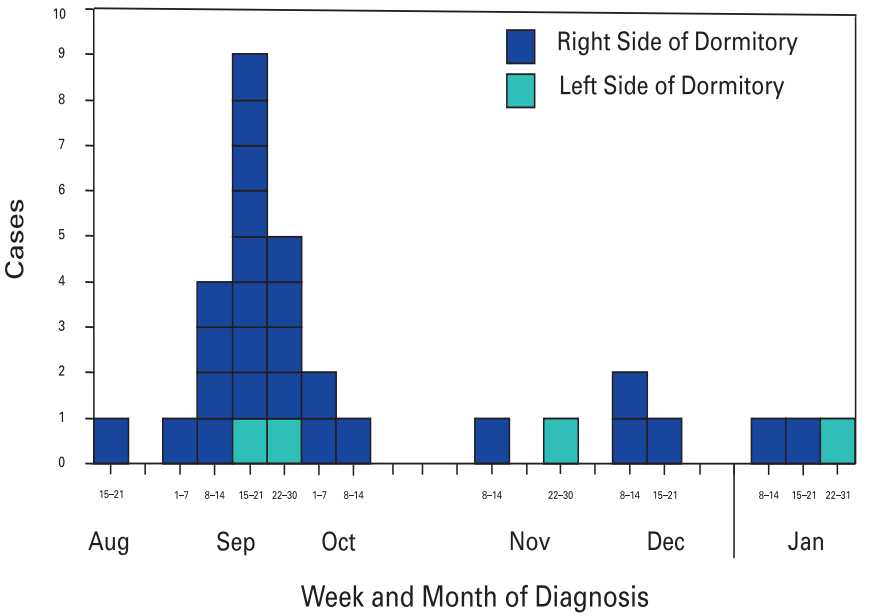
Results	Left side	Right side*
Previous positive	22	39
Screening incomplete	32	7
Screening complete	108	115
Negative	86	33
≥5mm or tuberculosis (TB) case	22	82
Percentage TST conversions or TB case†	20	71
Total exposed	**162**	**161**

* Side of residence of source case-patient.

† Number of inmates newly infected with *Mycobacterium tuberculosis* (i.e., TST conversion or TB case) divided by number of inmates with screening completed.

Tuberculosis Outbreak — Continued

FIGURE 1. Number of confirmed cases of tuberculosis among correctional facility inmates housed in dormitory A — South Carolina, August 1999–January 2000



screened for TB infection and disease with medical history and evaluation, TST, and chest radiography. Those with documented positive TST should undergo medical evaluation and chest radiography for signs and symptoms of TB. Medical personnel should attempt to confirm LTBI treatment completion, and treatment of LTBI in prison should be observed directly.

For new HIV-infected inmates, screening for TB infection and disease should be thorough; not all HIV-infected persons manifest a TST reaction in the presence of LTBI and may have atypical or negative findings of active disease on chest radiograph (*6–8*). Additional screening and control measures (e.g., sputum collection for AFB smear and culture and temporary respiratory isolation) may be necessary before the inmate can be housed with the prison population. Those with an undocumented history of LTBI treatment may need to complete a course of directly observed therapy with either a 9-month course of isoniazid or a 2-month course of a rifamycin and pyrazinamide (*9*).

The reasons cited by SCDC for segregating HIV-infected inmates included efforts to reduce the transmission of HIV to uninfected prisoners and to improve medical care for HIV-infected inmates. In 2000, the U.S. Supreme Court upheld a law that permits segregation of HIV-infected inmates in Alabama. As a result, more state correctional systems may adopt this practice (*10*); therefore, administrative and environmental controls should be strictly maintained. Unlike other acquired immunodeficiency syndrome-associated infections, *M. tuberculosis* is spread from person-to-person by aerosols and poses a risk for all exposed persons regardless of immune status. A diagnosis of infectious TB should be excluded promptly in all inmates with signs and/or symptoms compatible with TB, and

Tuberculosis Outbreak — Continued

respiratory isolation measures should be applied until infectious TB disease is excluded. For HIV-infected inmates with respiratory signs and symptoms, a diagnosis of infectious TB should be considered even in the presence of a negative chest radiograph. Correctional health-care providers need continuing education to maintain expertise in managing HIV and TB in settings where HIV-infected inmates are incarcerated.

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Update: West Nile Virus Activity — Eastern United States, 2000

Data reported to CDC through the West Nile Virus (WNV) Surveillance System have shown an increase in the geographic range of WNV activity in 2000 compared with 1999, the first year that WNV was reported in the Western Hemisphere (*1*). In response to this occurrence of WNV, 17 states along the Atlantic and Gulf coasts, New York City, and the District of Columbia conducted WNV surveillance, which included monitoring mosquitoes, sentinel chicken flocks, wild birds, and potentially susceptible mammals (e.g., horses and humans) (*2*). In 1999, WNV was detected in four states (Connecticut, Maryland, New Jersey, and New York) (*3*). In 2000, epizootic activity in birds and/or mosquitoes was reported from 12 states (Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, and Virginia) and the District of Columbia. Of the 13 jurisdictions, seven also reported severe neurologic WNV infections in humans, horses, and/or other mammal species. This report presents surveillance data reported to CDC from January 1 through November 15.

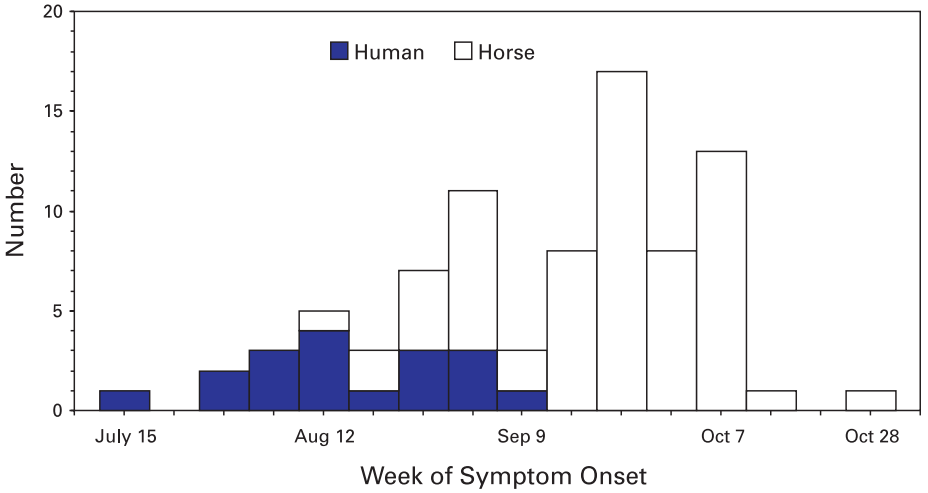
West Nile Virus Activity — Continued

During 2000, 18 (14 from New York and four from New Jersey) persons were hospitalized with severe central nervous system illnesses caused by WNV. Patients ranged in age from 36 to 87 years (mean: 62 years); 12 were men. Of the New York patients, 10 resided in Richmond County (Staten Island), two in Kings County (Brooklyn), one in Queens County, and one in New York County (Manhattan). Of the New Jersey patients, two resided in Hudson County, and one each in Bergen and Passaic counties. Epizootic activity in birds and/or mosquitoes preceded the onset of human illness in all of these counties. Diagnoses were confirmed either by ELISA for WNV-specific IgM in cerebrospinal fluid or by a four-fold rise in WNV-specific neutralizing antibody in paired serum samples. Dates of illness onset ranged from July 20 to September 13 (Figure 1). Of the 18 patients, one died (case fatality rate: 6%), and one is in a persistent vegetative state. In addition, WNV infection was documented in a mildly symptomatic woman residing in Fairfield County, Connecticut.

Veterinary surveillance has identified WNV infections in 65 horses with severe neurologic disease from 26 counties in seven states (27 horses in New Jersey; 24 in New York; seven in Connecticut; four in Delaware; and one each in Massachusetts, Pennsylvania, and Rhode Island). Illness onsets in these horses ranged from August 15 to October 29 (Figure 1). WNV infection has been confirmed in 26 other mammals; of these, 25 were from 10 counties in New York (14 bats, four rodents, three rabbits, two cats, two raccoons), and one was from Connecticut (skunk).

WNV was isolated from or WNV gene sequences were detected in 470 mosquito pools in 38 counties in five states (352 pools in New York, 54 in New Jersey, 46 in Pennsylvania, 14 in Connecticut, and four in Massachusetts). Of the 470 reported WNV-infected pools, *Culex* species accounted for 418, including 222 *Cx. pipiens/restuans*, 126 *Cx. pipiens*, 35 *Cx. salinarus*, 11 *Cx. restuans*, and 24 unspecified *Cx.* pools. *Ochlerotatus* species (formerly in *Aedes* genus) (*4*) accounted for 29 positive pools, including nine *Oc. japonicus*, nine *Oc. triseriatus*, eight *Oc. trivittatus*, and one each of three other *Oc.* species. *Aedes* species accounted for 18 positive pools, including

FIGURE 1. Number* of reported humans and horses with severe neurologic illness attributed to West Nile virus, by week of symptom onset — United States, 2000



* N=18 humans and 65 horses.

West Nile Virus Activity — Continued

16 *Ae. vexans*, one *Ae. albopictus*, and one unspecified *Ae.* pool. In addition, WNV was detected in three pools of *Culiseta melanura*, one pool of *Psorophora ferox*, and one pool of *Anopheles punctipennis*.

A total of 4139 WNV-infected dead birds were reported from 133 counties in 12 states (New York reported 1263 birds; New Jersey, 1125; Connecticut, 1116; Massachusetts, 442; Rhode Island, 87; Maryland, 50; Pennsylvania, 34; New Hampshire, seven; Virginia, seven; Delaware, one; North Carolina, one; and Vermont, one) and the District of Columbia (five). Crows were the most frequently reported WNV-infected species. Since 1999, WNV has been identified in 76 avian species in the United States. WNV infection also was documented in specimens collected from six previously seronegative sentinel chickens in six counties in two states (New Jersey, four and New York, two).

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Editorial Note: Although the WNV epizootic has persisted in the four states originally affected in 1999 and expanded into eight additional states and the District of Columbia, only 18 humans with severe neurologic illness attributed to WNV were reported in 2000 compared with 62 in 1999 (*5*). However, severe neurologic illness occurs in <1% of infected persons, suggesting that approximately 2000 persons may have been infected during 2000. Although some decrease in severe human illness may be attributable to vector-control and other prevention activities, experience in Europe shows that the incidence of human illness can be variable and outbreaks sporadic (*6*). Because widespread WNV epizootic activity probably will persist and expand in the United States, larger outbreaks of WNV infection and human illness are possible if adequate surveillance, prevention activities, and mosquito control are not established and maintained.

A major objective of WNV surveillance is to detect epizootic activity early so that intervention can occur before severe human illnesses. In 2000, all 18 persons with severe neurologic disease became ill after WNV-infected dead birds were identified in

West Nile Virus Activity — Continued

their county of residence, suggesting that avian surveillance data are a sensitive indicator of epizootic transmission that may portend human illness. However, of 133 counties reporting WNV-infected birds, only seven (5%) reported at least one person with severe neurologic illness. The presence of WNV-positive mosquito pools may indicate a greater potential for severe human illness as six (16%) of the 38 counties with positive pools reported at least one severely ill person. But these pools were identified before the onset of human illness in only five of these counties. Further analysis of 2000 surveillance data, including an assessment of the timing, number, and geographic location of WNV-infected birds, and an assessment of mosquito-trapping activities, infection rates, and species identified are required to further interpret these data.

As occurred in 1999, the number of reported WNV illnesses in horses peaked and persisted after human illnesses (*7*). Although more data are needed to determine the reasons for this relative delay, it appears that horses are not a sensitive sentinel for the prediction of human illness.

The continued geographic expansion of WNV indicates the need for expanded surveillance and prevention activities. Surveillance should include monitoring WNV infection in birds, humans, and veterinary species and in mosquitoes, particularly when WNV activity has been identified (*5*). Prevention should include programs that 1) eliminate mosquito-breeding habitats in public areas; 2) control mosquito larvae where these habitats cannot be eliminated; 3) promote the increased use of personal protection and the reduction of peridomestic conditions that support mosquito breeding; and 4) implement adult mosquito control when indicated by increasing WNV activity or the occurrence of human disease. In addition, because arbovirus infections are endemic in the continental United States, states should have a comprehensive plan and a functional arbovirus surveillance and response capacity that includes trained personnel with suitable laboratory support for identifying arbovirus activity, including WNV (*5*).

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Measles, Rubella, and Congenital Rubella Syndrome — United States and Mexico, 1997–1999

In 1996, the Immunization Working Group of the Mexico-United States Binational Commission was established to enhance coordination of disease surveillance, assure high vaccination coverage in both countries, and hasten the elimination of vaccine-preventable diseases. The United States and Mexico share the Pan American Health Organization (PAHO) goal of measles elimination by 2000 (*1*). The United States also established a goal of eliminating indigenous rubella and congenital rubella syndrome (CRS) by 2000 (*2*). This report summarizes the measles and rubella vaccination and surveillance data for the United States and Mexico for 1997–1999.

Measles in the United States

Measles epidemiology in the United States is monitored through the National Notifiable Diseases Surveillance System (NNDSS). Record low numbers of measles cases were reported in the United States for 1997 (138 cases), 1998 (100), and 1999 (100), corresponding to 0.5 cases per 100,000 population (Figure 1). Among these 338 cases, 116 (34%) were imported from other countries, 63 (19%) were epidemiologically linked to imported cases, and 39 (12%) showed virologic evidence of importation. The remaining 120 cases (36%) were not attributed to importation. None of the 338 cases reported during 1997–1999 was imported from Mexico. Surveillance quality indicators were implemented in 1996. In March 1999, a panel of experts concluded that measles was no longer endemic in the United States (*3*).

Measles vaccination levels among children aged 2 years increased from 61% in 1985 (CDC, unpublished data, 1998) to 91% in 1997 (*4*). As of the 1998–99 school year, state laws requiring a second dose for students in grades K-12 applied to 60% of U.S. students (CDC, unpublished data, 2000).

Measles in Mexico

Measles epidemiology in Mexico was monitored through the Single Epidemiological Surveillance System (SUIVE) until 1993, when the Febrile Exanthematic Disease Surveillance System (FEDSS) was established to incorporate laboratory information to distinguish among viral causes of rash illnesses.

During 1997–1999, no confirmed cases of measles were reported (*5*). National surveillance indicator goals to evaluate the quality of FEDSS were established in 1993, and by 1999, most goals had been met.

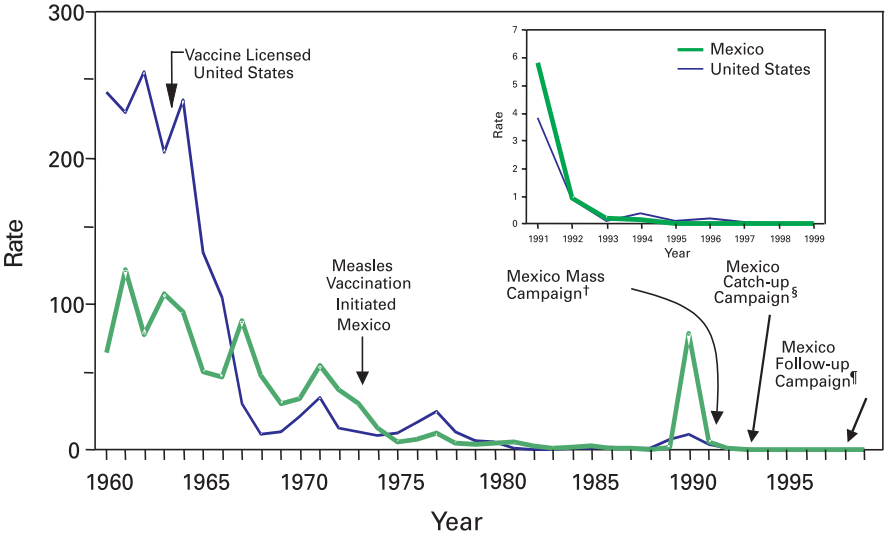
After 1990, when 68,782 cases (80 per 100,000) and 5,899 deaths were attributed to measles (*6*), multiple strategies have resulted in high vaccination coverage in children (Figure 1). In May 1998, the National Immunization Council replaced measles-only childhood vaccination with measles-mumps-rubella (MMR) vaccine, moving the first dose from 9 to 12 months and keeping the second dose at age 6 years. National Health Weeks are conducted three times a year, during which unvaccinated preschool and first-grade children are vaccinated. During 1997, among children aged 1 to 4 years, first-dose coverage was 97%, a level that was maintained during 1998–1999.

Rubella and CRS in the United States

Rubella and CRS incidence is monitored through NNDSS and the National Congenital Rubella Syndrome Registry. Rubella vaccine was licensed in 1969, and since 1979, has been administered in combination as MMR; rubella coverage closely approximates measles coverage.

Measles, Rubella, and Congenital Rubella Syndrome — Continued

FIGURE 1. Measles incidence rate*, by year — Mexico and United States, 1960–1999



*Per 100,000 population.

† In 1991, measles vaccine was administered house-to-house to children aged 9 to 59 months throughout Mexico.

§ In 1993, Mexico initiated the Pan American Health Organization measles elimination strategy to vaccinate children up to age 14 years regardless of vaccination or measles illness history.

¶ In 1998, Mexican children aged 1–4 years received measles vaccination irrespective of vaccination or measles illness history.

In the United States in 1997, 1998, and 1999, 172, 353, and 267 confirmed cases of rubella were reported, respectively, corresponding to <0.5 cases per 100,000 population (Figure 2). Most of these cases occurred among Hispanic men. Of the 788 cases for whom age was known, 676 (80.4%) were aged 15–44 years. Of the 790 case-patients for which sex was known, 507 (64.0%) were men. Of the 755 for whom ethnicity was reported, 587 (77.7%) were Hispanic; the percentage of reported rubella cases among Hispanics increased from 19.0% in 1991 to 77.6% in 1999. Since 1998, of the 340 outbreak-related cases with known country of origin, 273 (80.0%) occurred among persons who were non-U.S. born. Of the 661 cases for which importation status was known, 54 (8.2%) were internationally imported; of these, exposures occurred in Mexico, Central and South America, the Spanish-speaking Caribbean, Japan, and Russia.

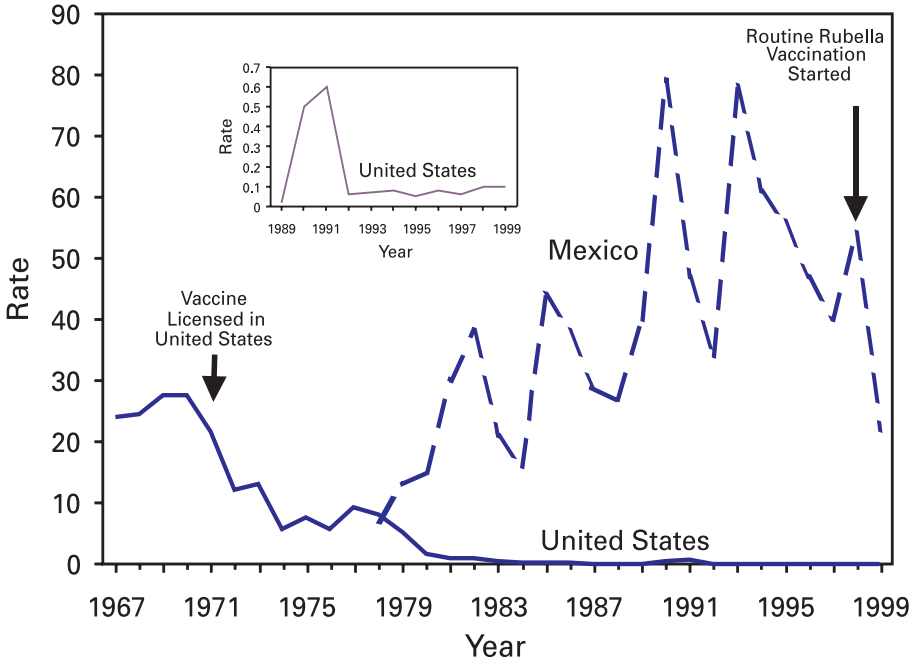
Of 24 infants with laboratory-confirmed CRS born during 1997–1999, 20 (83.3%) were born to Hispanic mothers, 14 (58.3%) were born to non-U.S.–born mothers, and 10 (41.7%) had maternal exposure to rubella outside the United States and were considered imported cases.

Rubella and CRS in Mexico

Rubella epidemiology in Mexico has been monitored since 1978 as clinically diagnosed cases reported to SUIVE or, since 1993, as laboratory-confirmed cases evaluated by FEDSS; once confirmed as rubella, FEDSS also followed women infected during pregnancy to detect potential cases of CRS. In 1998, rubella vaccine was introduced into the childhood vaccination schedule as 2-dose MMR at age 1 and 6 years.

Measles, Rubella, and Congenital Rubella Syndrome — Continued

FIGURE 2. Rubella incidence rates*, by year — Mexico, 1978–1999, and United States, 1967–1999



* Per 100,000 population.

From 1978 through 1999, reported rubella cases peaked every 3–5 years, with the highest number of cases (65,591; rate: 79 per 100,000 population) reported in 1990. From 1997 to 1999, 38,042; 51,846; and 21,173 rubella cases, respectively, were reported to SUIVE (Figure 2). Compared with 1990, in 1999, reported rubella cases decreased 68%. During 1997–1999, 37,346 (33.6%) of the reported case-patients were aged 15–44 years. Of the 4650 cases of rash illness investigated by FEDSS during this time, 3277 (70.5%) were classified as rubella, and 1373 (29.5%) were classified as other rash illnesses. Surveillance among 266 pregnant women infected during rubella outbreaks from 1997 to 1999 detected 50 confirmed cases of CRS.

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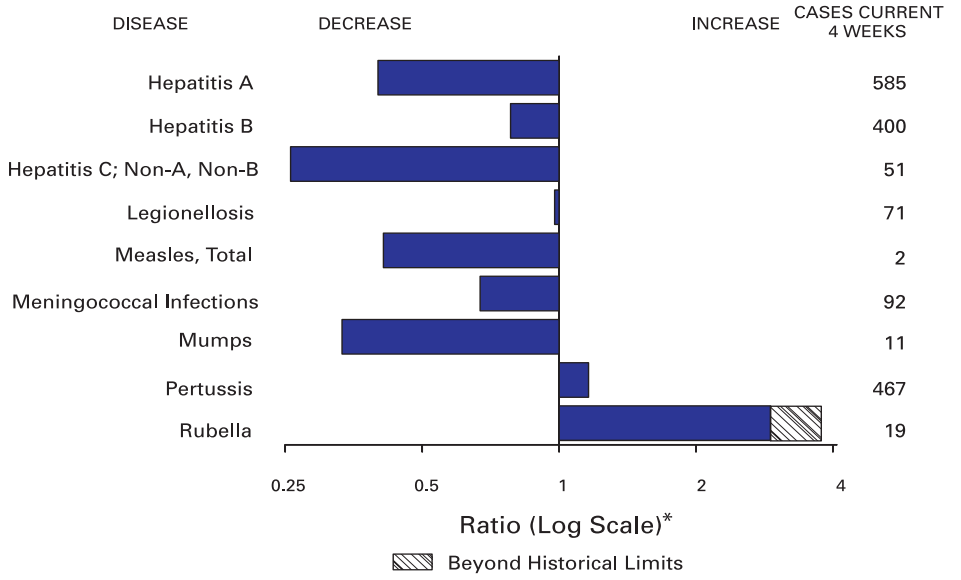
Editorial Note: Since the measles epidemic during 1989–1991, substantial progress has been made in vaccination programs in Mexico and the United States, as evidenced by the control of measles in both countries. Mexico reported no cases during 1997–1999, despite enhanced surveillance for measles that includes investigating >1500 suspected cases each year. In the United States, the low number of reported cases, the

(Continued on page 1059)

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending November 18, 2000, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending November 18, 2000 (46th Week)

	Cum. 2000		Cum. 2000
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	58	Psittacosis*	10
Cholera	2	Q fever*	21
Cyclosporiasis*	38	Rabies, human	1
Diphtheria	2	Rocky Mountain spotted fever (RMSF)	391
Ehrlichiosis: human granulocytic (HGE)*	161	Rubella, congenital syndrome	6
human monocytic (HME)*	92	Streptococcal disease, invasive, group A	2,466
Encephalitis: California serogroup viral*	101	Streptococcal toxic-shock syndrome*	66
eastern equine*	2	Syphilis, congenital¶	175
St. Louis*	3	Tetanus	24
western equine*	-	Toxic-shock syndrome	120
Hansen disease (leprosy)*	55	Trichinosis	14
Hantavirus pulmonary syndrome*†	27	Tularemia*	105
Hemolytic uremic syndrome, postdiarrheal*	171	Typhoid fever	292
HIV infection, pediatric*§	190	Yellow fever	-
Plague	6		

-: No reported cases.
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update October 29, 2000.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2000§	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	33,120	38,849	575,352	582,075	2,378	2,394	4,082	3,417	2,865	2,552
NEW ENGLAND	1,699	1,998	18,578	18,814	100	175	367	386	346	354
Maine	28	68	1,300	916	20	27	31	36	26	-
N.H.	29	46	885	875	21	17	35	32	34	33
Vt.	32	16	476	429	26	35	33	32	33	20
Mass.	1,061	1,318	7,777	7,977	30	68	157	169	156	182
R.I.	84	90	2,249	2,075	3	6	18	27	16	26
Conn.	465	460	5,891	6,542	-	22	93	90	81	93
MID. ATLANTIC	7,189	10,137	52,147	58,573	171	525	377	338	234	130
Upstate N.Y.	694	1,192	N	N	118	153	277	264	58	3
N.Y. City	3,765	5,371	22,154	24,079	10	227	10	17	10	17
N.J.	1,461	1,845	7,436	11,006	12	44	90	57	106	63
Pa.	1,269	1,729	22,557	23,488	31	101	N	N	60	47
E.N. CENTRAL	3,190	2,603	93,304	98,361	759	605	945	933	533	502
Ohio	489	437	22,758	26,140	252	62	254	229	203	212
Ind.	324	282	11,286	10,742	57	39	131	95	77	64
Ill.	1,597	1,202	25,282	28,950	7	85	182	489	-	84
Mich.	604	550	22,111	20,352	94	49	135	120	103	78
Wis.	176	132	11,867	12,177	349	370	243	N	150	64
W.N. CENTRAL	767	865	31,786	33,418	351	194	642	499	540	524
Minn.	153	159	6,502	6,701	132	74	198	160	171	181
Iowa	75	70	4,294	4,263	75	55	179	106	139	77
Mo.	349	410	10,486	11,836	29	24	104	42	92	61
N. Dak.	2	6	628	825	15	18	19	16	20	18
S. Dak.	7	13	1,617	1,363	15	7	54	44	57	60
Nebr.	65	58	3,084	3,057	76	14	62	101	45	112
Kans.	116	149	5,175	5,373	9	2	26	30	16	15
S. ATLANTIC	9,203	10,705	113,163	123,669	438	347	349	309	258	178
Del.	183	146	2,551	2,455	6	-	1	6	1	3
Md.	1,131	1,322	11,648	11,758	10	17	30	41	1	4
D.C.	695	493	2,822	N	16	7	1	1	U	U
Va.	598	752	14,053	12,727	17	26	69	69	56	57
W. Va.	56	61	1,442	1,623	3	3	14	14	12	9
N.C.	609	692	19,452	19,759	25	25	87	68	65	52
S.C.	703	899	8,746	16,717	-	-	21	19	14	14
Ga.	1,050	1,466	23,255	30,034	161	123	40	30	36	1
Fla.	4,178	4,874	29,194	28,596	200	146	86	61	73	38
E.S. CENTRAL	1,644	1,717	43,278	40,625	44	33	124	133	94	102
Ky.	169	242	7,083	6,630	5	6	42	46	31	34
Tenn.	706	671	13,115	12,710	11	10	53	55	45	43
Ala.	420	420	13,134	11,124	15	12	11	24	9	21
Miss.	349	384	9,946	10,161	13	5	18	8	9	4
W.S. CENTRAL	3,413	4,086	88,847	82,461	122	83	178	135	223	142
Ark.	159	185	5,153	5,414	13	2	57	15	38	14
La.	606	744	16,177	14,746	10	24	9	14	46	14
Okla.	291	125	8,083	7,290	17	10	19	36	14	27
Tex.	2,357	3,032	59,434	55,011	82	47	93	70	125	87
MOUNTAIN	1,232	1,512	32,990	29,326	170	91	412	309	233	236
Mont.	12	13	1,221	1,393	10	10	30	24	-	-
Idaho	19	20	1,665	1,558	23	8	70	63	-	43
Wyo.	9	11	700	670	5	1	17	15	9	16
Colo.	291	289	8,441	5,698	71	12	158	111	104	88
N. Mex.	126	79	4,237	4,392	20	39	23	12	16	6
Ariz.	403	743	11,402	10,908	11	12	49	32	37	21
Utah	117	128	2,029	1,910	26	N	52	35	67	47
Nev.	255	229	3,295	2,797	4	9	13	17	-	15
PACIFIC	4,783	5,226	101,259	96,828	223	341	688	375	404	384
Wash.	445	304	11,202	10,695	N	N	219	144	173	173
Oreg.	146	185	4,361	5,359	19	91	152	67	111	68
Calif.	4,072	4,631	80,884	76,249	204	250	274	150	108	131
Alaska	21	13	2,150	1,673	-	-	28	1	1	1
Hawaii	99	93	2,662	2,852	-	-	15	13	11	11
Guam	15	12	-	432	-	-	N	N	U	U
P.R.	1,134	1,174	3,481	U	-	-	6	5	U	U
V.I.	31	35	U	U	U	U	U	U	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	U	U	U	U	U	U	U

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

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update October 29, 2000.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2000§	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 2000	Cum. 1999
UNITED STATES	300,986	320,596	2,649	2,598	867	906	610	12,093	14,131
NEW ENGLAND	5,202	5,872	14	15	49	70	47	4,128	4,267
Maine	79	70	2	2	2	3	2	-	41
N.H.	91	98	-	-	2	8	2	59	20
Vt.	60	44	4	7	5	14	3	29	23
Mass.	2,117	2,210	3	3	15	25	25	1,089	750
R.I.	568	522	5	3	8	9	1	530	464
Conn.	2,287	2,928	-	-	17	11	14	2,421	2,969
MID. ATLANTIC	32,577	35,285	607	116	193	226	146	6,131	7,496
Upstate N.Y.	6,407	5,965	61	52	85	58	80	3,403	3,489
N.Y. City	9,699	10,965	-	-	-	43	27	21	133
N.J.	5,081	6,952	510	-	14	18	20	1,448	1,611
Pa.	11,390	11,403	36	64	94	107	19	1,259	2,263
E.N. CENTRAL	56,587	61,957	199	855	228	242	104	315	568
Ohio	13,841	16,129	12	3	106	68	52	82	43
Ind.	5,355	5,659	1	1	37	39	7	32	17
Ill.	16,937	20,477	16	47	9	30	11	11	17
Mich.	15,401	14,229	170	788	49	63	29	-	11
Wis.	5,053	5,463	-	16	27	42	5	190	480
W.N. CENTRAL	14,595	14,736	444	263	55	49	14	361	290
Minn.	2,571	2,530	5	10	7	9	5	267	178
Iowa	1,031	1,068	2	-	13	12	3	30	22
Mo.	7,138	7,340	421	249	24	17	5	41	63
N. Dak.	39	74	-	1	-	2	1	1	1
S. Dak.	260	164	-	-	2	3	-	-	-
Nebr.	1,187	1,288	6	3	4	6	-	4	11
Kans.	2,369	2,272	10	-	5	-	-	18	15
S. ATLANTIC	83,585	94,541	113	147	180	129	100	918	1,210
Del.	1,537	1,509	-	-	10	17	2	140	135
Md.	8,094	8,982	18	21	63	32	22	503	837
D.C.	2,328	3,297	3	1	5	4	-	8	4
Va.	9,297	8,527	3	10	31	30	7	139	112
W. Va.	465	510	14	17	N	N	4	29	17
N.C.	15,964	17,567	17	33	15	14	-	44	67
S.C.	10,737	13,104	3	22	4	11	9	9	6
Ga.	15,161	20,616	3	1	7	1	21	-	-
Fla.	20,002	20,429	52	42	45	20	35	46	32
E.S. CENTRAL	31,245	32,421	391	286	31	46	19	46	96
Ky.	3,132	3,005	34	21	18	18	3	11	17
Tenn.	10,404	10,222	88	108	10	22	12	28	55
Ala.	10,227	9,841	8	1	3	4	4	6	20
Miss.	7,482	9,353	261	156	-	2	-	1	4
W.S. CENTRAL	46,970	47,300	423	507	16	30	15	44	54
Ark.	2,812	2,965	9	27	-	1	1	4	4
La.	11,972	11,788	291	285	6	8	-	3	9
Okla.	3,619	3,600	8	15	3	3	6	1	7
Tex.	28,567	28,947	115	180	7	18	8	36	34
MOUNTAIN	9,037	8,561	293	192	44	42	33	30	16
Mont.	45	48	5	5	1	-	-	-	-
Idaho	77	78	3	7	5	2	-	3	3
Wyo.	43	27	211	62	2	-	1	9	3
Colo.	2,617	2,243	28	32	15	11	8	11	3
N. Mex.	953	874	13	32	1	1	2	-	1
Ariz.	3,790	3,924	18	40	8	6	13	-	2
Utah	207	200	2	6	12	16	4	3	2
Nev.	1,305	1,167	13	8	-	6	5	4	2
PACIFIC	21,188	19,923	165	217	71	72	132	120	134
Wash.	2,023	1,873	29	19	18	17	7	9	10
Oreg.	652	773	27	19	N	N	5	15	12
Calif.	17,866	16,600	107	179	53	53	117	94	112
Alaska	305	268	-	-	-	1	-	2	-
Hawaii	342	409	2	-	-	1	3	N	N
Guam	-	48	-	1	-	-	-	-	-
P.R.	596	300	1	-	1	-	-	N	N
V.I.	U	U	U	U	U	U	-	U	U
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	U	U	U	U	U	U	-	U	U

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	1,101	1,298	5,269	6,028	33,205	34,988	26,945	29,993
NEW ENGLAND	60	57	752	803	1,978	2,004	1,874	2,044
Maine	6	3	126	160	115	123	83	99
N.H.	1	2	21	45	128	125	128	128
Vt.	3	4	55	86	104	87	109	79
Mass.	23	20	245	199	1,118	1,080	1,022	1,104
R.I.	8	4	56	89	122	121	128	149
Conn.	19	24	249	224	391	468	404	485
MID. ATLANTIC	216	383	947	1,192	3,688	4,809	3,775	4,729
Upstate N.Y.	77	65	650	840	1,117	1,213	1,145	1,227
N.Y. City	76	225	U	U	855	1,327	816	1,366
N.J.	33	52	179	168	774	1,055	670	1,029
Pa.	30	41	118	184	942	1,214	1,144	1,107
E.N. CENTRAL	114	156	145	163	4,635	4,968	2,995	4,302
Ohio	20	18	50	35	1,353	1,192	1,279	987
Ind.	6	20	-	13	587	484	513	433
Ill.	46	70	22	10	1,303	1,481	1	1,439
Mich.	31	40	67	84	809	922	841	905
Wis.	11	8	6	21	583	889	361	538
W.N. CENTRAL	56	73	489	677	2,161	2,055	2,220	2,218
Minn.	27	41	83	103	495	522	590	659
Iowa	3	13	72	145	338	232	291	211
Mo.	10	13	50	29	644	683	812	808
N. Dak.	2	-	107	134	55	44	70	60
S. Dak.	1	-	87	167	90	89	97	113
Nebr.	7	1	2	4	202	177	91	156
Kans.	6	5	88	95	337	308	269	211
S. ATLANTIC	298	307	2,162	1,950	7,363	8,010	4,914	5,943
Del.	5	1	49	50	102	153	126	141
Md.	100	88	376	367	738	782	673	823
D.C.	15	18	-	-	60	70	U	U
Va.	49	67	520	523	915	1,162	816	944
W. Va.	4	2	107	103	150	159	137	144
N.C.	34	26	517	403	1,010	1,208	1,003	1,218
S.C.	2	15	142	132	666	608	502	477
Ga.	26	22	306	204	1,381	1,373	1,453	1,540
Fla.	63	68	145	168	2,341	2,495	204	656
E.S. CENTRAL	44	23	191	243	2,127	1,984	1,484	1,358
Ky.	18	7	20	35	353	374	230	263
Tenn.	11	8	97	87	584	529	644	550
Ala.	14	7	74	119	615	553	521	454
Miss.	1	1	-	2	575	528	89	91
W.S. CENTRAL	18	15	72	451	3,710	3,459	3,854	2,557
Ark.	3	3	20	14	671	618	587	226
La.	7	10	-	-	248	686	629	555
Okla.	8	2	52	86	360	417	233	325
Tex.	-	-	-	351	2,431	1,738	2,405	1,451
MOUNTAIN	47	42	233	201	2,582	2,742	1,932	2,365
Mont.	1	4	64	55	87	70	-	1
Idaho	3	3	9	-	110	112	-	97
Wyo.	-	1	50	42	59	66	37	56
Colo.	22	17	-	1	670	669	609	655
N. Mex.	-	3	19	9	217	348	182	277
Ariz.	9	6	72	78	737	819	673	737
Utah	6	4	10	8	465	476	431	493
Nev.	6	4	9	8	237	182	-	49
PACIFIC	248	242	278	348	4,961	4,957	3,897	4,477
Wash.	31	24	-	-	538	601	547	768
Oreg.	39	20	7	4	286	390	330	429
Calif.	167	185	248	337	3,868	3,602	2,783	2,991
Alaska	-	1	23	7	57	53	23	31
Hawaii	11	12	-	-	212	311	214	258
Guam	-	-	-	-	-	36	U	U
P.R.	4	-	76	68	501	556	U	U
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

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

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	Shigellosis* NETSS Cum. 2000	Shigellosis* NETSS Cum. 1999	Shigellosis* PHLIS Cum. 2000	Shigellosis* PHLIS Cum. 1999	Syphilis (Primary & Secondary) Cum. 2000	Syphilis (Primary & Secondary) Cum. 1999	Tuberculosis Cum. 2000	Tuberculosis Cum. 1999
UNITED STATES	18,753	14,807	9,427	8,938	5,317	5,917	10,800	13,555
NEW ENGLAND	362	803	332	782	67	54	354	378
Maine	10	5	12	-	1	-	12	16
N.H.	6	16	8	16	2	1	16	13
Vt.	4	6	-	4	-	3	4	3
Mass.	250	691	220	674	42	32	217	207
R.I.	26	23	28	23	4	2	28	39
Conn.	66	62	64	65	18	16	77	100
MID. ATLANTIC	1,862	966	1,141	675	242	262	1,980	2,298
Upstate N.Y.	708	252	180	68	13	18	257	291
N.Y. City	675	319	457	220	109	112	1,078	1,184
N.J.	296	226	313	213	42	62	482	469
Pa.	183	169	191	174	78	70	163	354
E.N. CENTRAL	3,566	2,843	1,015	1,541	1,038	1,094	1,138	1,420
Ohio	366	382	271	133	67	84	205	225
Ind.	1,456	295	139	99	330	389	102	118
Ill.	913	1,157	2	867	303	373	577	701
Mich.	618	434	549	377	295	208	182	287
Wis.	213	575	54	65	43	40	72	89
W.N. CENTRAL	2,185	1,083	1,726	718	57	117	401	466
Minn.	679	207	750	225	13	9	128	177
Iowa	504	59	297	49	11	9	32	40
Mo.	613	662	431	326	25	83	164	164
N. Dak.	42	3	49	2	-	-	2	6
S. Dak.	7	13	4	10	-	-	16	17
Nebr.	125	78	84	61	2	6	22	16
Kans.	215	61	111	45	6	10	37	46
S. ATLANTIC	2,733	2,235	1,040	503	1,772	1,900	2,244	2,663
Del.	21	14	20	10	8	8	14	25
Md.	191	147	104	52	254	328	212	239
D.C.	72	51	U	U	46	43	29	49
Va.	428	122	323	61	121	142	247	247
W. Va.	4	8	3	5	2	5	27	37
N.C.	352	193	249	88	435	428	269	424
S.C.	123	115	82	61	196	237	109	218
Ga.	239	211	164	80	351	390	469	530
Fla.	1,303	1,374	95	146	359	319	868	894
E.S. CENTRAL	1,047	1,098	485	634	792	1,028	789	913
Ky.	450	224	96	145	78	94	110	164
Tenn.	331	622	334	420	475	580	280	311
Ala.	87	110	49	59	110	194	270	274
Miss.	179	142	6	10	129	160	129	164
W.S. CENTRAL	2,709	2,414	2,563	1,061	742	939	887	1,695
Ark.	193	73	52	26	89	75	156	147
La.	134	196	156	116	195	277	74	208
Okla.	116	503	35	154	118	165	123	161
Tex.	2,266	1,642	2,320	765	340	422	534	1,179
MOUNTAIN	1,190	1,031	659	700	218	204	424	459
Mont.	7	9	-	-	-	1	17	13
Idaho	44	24	-	12	1	1	11	12
Wyo.	5	3	2	1	1	-	4	3
Colo.	254	184	170	148	11	2	68	66
N. Mex.	156	125	99	93	21	11	36	52
Ariz.	532	540	311	377	178	183	176	190
Utah	76	58	77	63	1	2	41	37
Nev.	116	88	-	6	5	4	71	86
PACIFIC	3,099	2,334	466	2,324	389	319	2,583	3,263
Wash.	418	105	339	103	60	64	213	223
Oreg.	157	87	95	81	6	6	25	99
Calif.	2,480	2,111	-	2,107	322	245	2,139	2,726
Alaska	8	3	3	3	-	1	90	51
Hawaii	36	28	29	30	1	3	116	164
Guam	-	17	U	U	-	-	-	62
P.R.	26	131	U	U	154	137	238	172
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.
*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	*H. influenzae*, Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2000†	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	2000	Cum. 2000	2000	Cum. 2000	Cum. 2000	Cum. 1999
UNITED STATES	1,069	1,047	11,148	14,578	5,924	6,128	1	59	-	18	77	92
NEW ENGLAND	93	86	329	314	86	136	-	3	-	4	7	11
Maine	1	7	21	12	5	1	-	-	-	-	-	-
N.H.	12	17	18	17	15	15	U	2	U	1	3	1
Vt.	7	5	10	19	6	4	-	-	-	3	3	-
Mass.	36	35	114	126	12	42	-	1	-	-	1	8
R.I.	4	5	23	21	20	33	-	-	-	-	-	-
Conn.	33	17	143	119	28	41	-	-	-	-	-	2
MID. ATLANTIC	164	180	1,003	1,076	780	780	-	14	-	5	19	5
Upstate N.Y.	91	73	214	242	127	162	-	9	-	-	9	2
N.Y. City	33	55	320	359	390	238	-	5	-	4	9	3
N.J.	30	47	100	140	57	121	-	-	-	-	-	-
Pa.	10	5	369	335	206	259	-	-	-	1	1	-
E.N. CENTRAL	134	172	1,297	2,657	640	634	1	9	-	-	9	4
Ohio	49	54	242	598	96	84	-	2	-	-	2	-
Ind.	27	22	114	96	44	35	-	-	-	-	-	2
Ill.	48	70	486	719	110	52	-	4	-	-	4	1
Mich.	7	19	442	1,173	389	434	1	3	-	-	3	1
Wis.	3	7	13	71	1	29	-	-	-	-	-	-
W.N. CENTRAL	62	68	675	845	502	307	-	3	-	1	4	1
Minn.	35	43	177	94	35	49	-	-	-	1	1	1
Iowa	1	2	65	132	34	38	-	2	-	-	2	-
Mo.	16	10	297	514	372	185	-	-	-	-	-	-
N. Dak.	2	1	3	3	2	2	-	-	-	-	-	-
S. Dak.	1	2	2	9	1	1	-	-	-	-	-	-
Nebr.	3	4	33	48	37	19	-	-	-	-	-	-
Kans.	4	6	98	45	21	13	U	1	U	-	1	-
S. ATLANTIC	275	214	1,363	1,655	1,186	998	-	4	-	-	4	20
Del.	-	-	-	2	-	1	-	-	-	-	-	-
Md.	74	56	200	268	111	136	-	-	-	-	-	-
D.C.	-	5	24	54	29	25	-	-	-	-	-	-
Va.	37	18	142	164	147	86	-	2	-	-	2	18
W. Va.	9	7	53	39	14	22	U	-	U	-	-	-
N.C.	23	31	129	148	219	211	-	-	-	-	-	-
S.C.	15	5	72	43	21	63	-	-	-	-	-	-
Ga.	64	55	280	440	218	149	-	-	-	-	-	-
Fla.	53	37	463	497	427	305	-	2	-	-	2	2
E.S. CENTRAL	46	59	359	370	405	438	-	-	-	-	-	2
Ky.	12	7	45	64	65	45	-	-	-	-	-	2
Tenn.	22	33	129	145	199	205	-	-	-	-	-	-
Ala.	11	16	52	53	49	79	-	-	-	-	-	-
Miss.	1	3	133	108	92	109	-	-	-	-	-	-
W.S. CENTRAL	57	59	2,122	2,798	688	1,033	-	-	-	-	-	12
Ark.	2	2	107	61	75	76	-	-	-	-	-	5
La.	11	14	56	203	87	161	-	-	-	-	-	-
Okla.	42	39	243	460	145	129	-	-	-	-	-	-
Tex.	2	4	1,716	2,074	381	667	-	-	-	-	-	7
MOUNTAIN	103	98	899	1,142	490	520	-	12	-	1	13	2
Mont.	1	3	7	17	6	17	-	-	-	-	-	-
Idaho	4	1	30	40	6	27	-	-	-	-	-	-
Wyo.	1	1	39	8	25	13	-	-	-	-	-	-
Colo.	17	14	189	207	101	91	-	2	-	1	3	-
N. Mex.	21	18	68	47	97	166	-	-	-	-	-	-
Ariz.	44	50	439	631	188	125	-	-	-	-	-	1
Utah	11	8	57	56	24	31	-	3	-	-	3	-
Nev.	4	3	70	136	43	50	U	7	U	-	7	1
PACIFIC	135	111	3,101	3,721	1,147	1,282	-	14	-	7	21	35
Wash.	7	6	258	308	107	65	-	2	-	1	3	5
Oreg.	29	37	168	224	107	102	-	-	-	-	-	12
Calif.	32	51	2,651	3,156	913	1,084	-	11	-	3	14	17
Alaska	44	9	11	11	9	16	-	1	-	-	1	-
Hawaii	23	8	13	22	11	15	-	-	-	3	3	1
Guam	-	-	-	1	-	4	U	-	U	-	-	1
P.R.	4	2	202	306	219	221	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. - : No reported cases.
*For imported measles, cases include only those resulting from importation from other countries.
†Of 225 cases among children aged <5 years, serotype was reported for 95 and of those, 22 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 18, 2000, and November 20, 1999 (46th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999
UNITED STATES	1,843	2,111	4	291	328	93	5,836	5,750	-	148	244
NEW ENGLAND	120	101	-	4	8	13	1,420	753	-	13	7
Maine	8	5	-	-	-	-	41	-	-	-	-
N.H.	12	12	U	-	1	U	116	91	U	2	-
Vt.	3	5	-	-	1	9	219	67	-	-	-
Mass.	70	58	-	1	4	-	982	533	-	9	7
R.I.	9	6	-	1	2	1	17	33	-	1	-
Conn.	18	15	-	2	-	3	45	29	-	1	-
MID. ATLANTIC	174	208	-	23	40	16	586	897	-	9	34
Upstate N.Y.	61	64	-	10	10	14	295	667	-	2	20
N.Y. City	33	53	-	4	12	-	51	54	-	7	7
N.J.	38	48	-	3	1	-	35	26	-	-	4
Pa.	42	43	-	6	17	2	205	150	-	-	3
E.N. CENTRAL	327	376	-	30	44	4	651	514	-	1	2
Ohio	85	126	-	7	17	-	312	190	-	-	-
Ind.	44	57	-	1	4	-	93	71	-	-	1
Ill.	72	99	-	6	11	2	74	85	-	1	1
Mich.	100	59	-	16	8	2	91	60	-	-	-
Wis.	26	35	-	-	4	-	81	108	-	-	-
W.N. CENTRAL	158	211	-	18	13	12	532	430	-	3	128
Minn.	20	47	-	-	1	-	317	188	-	1	5
Iowa	33	37	-	7	7	3	53	82	-	-	30
Mo.	83	82	-	4	1	9	79	71	-	1	2
N. Dak.	2	4	-	-	1	-	6	18	-	-	-
S. Dak.	5	11	-	-	-	-	7	6	-	-	-
Nebr.	7	10	-	4	-	-	31	9	-	1	90
Kans.	8	20	U	3	3	U	39	56	U	-	1
S. ATLANTIC	280	358	-	42	47	9	452	402	-	92	35
Del.	1	10	-	-	-	-	8	5	-	1	-
Md.	26	50	-	10	6	-	106	113	-	-	1
D.C.	-	4	-	-	2	-	3	1	-	-	-
Va.	38	50	-	9	10	8	106	50	-	-	-
W. Va.	12	8	U	-	-	U	1	3	U	-	-
N.C.	36	42	-	7	8	-	98	93	-	82	34
S.C.	21	43	-	10	4	-	29	17	-	7	-
Ga.	43	59	-	2	4	-	38	40	-	-	-
Fla.	103	92	-	4	13	1	63	80	-	2	-
E.S. CENTRAL	122	147	-	7	14	3	104	93	-	5	2
Ky.	26	30	-	1	-	3	53	29	-	1	-
Tenn.	52	60	-	2	-	-	31	40	-	1	-
Ala.	32	35	-	2	10	-	19	21	-	3	2
Miss.	12	22	-	2	4	-	1	3	-	-	-
W.S. CENTRAL	125	198	3	30	39	4	327	207	-	6	15
Ark.	13	32	3	5	-	1	34	24	-	-	5
La.	35	62	-	4	10	-	12	9	-	1	-
Okla.	26	33	-	-	1	-	40	40	-	-	1
Tex.	51	71	-	21	28	3	241	134	-	5	9
MOUNTAIN	140	128	-	21	26	11	721	709	-	2	16
Mont.	4	4	-	1	-	-	35	2	-	-	-
Idaho	7	9	-	-	3	2	59	144	-	-	-
Wyo.	-	4	-	2	-	-	6	2	-	-	-
Colo.	34	33	-	1	6	7	424	268	-	1	1
N. Mex.	10	14	-	1	N	-	82	129	-	-	-
Ariz.	75	41	-	4	8	2	79	99	-	1	13
Utah	7	15	-	6	4	-	24	56	-	-	1
Nev.	3	8	U	6	5	U	12	9	U	-	1
PACIFIC	397	384	1	116	97	21	1,043	1,745	-	17	5
Wash.	54	61	-	10	2	13	376	628	-	7	-
Oreg.	70	72	N	N	N	-	113	56	-	-	-
Calif.	257	238	1	85	80	8	501	1,009	-	10	5
Alaska	8	7	-	7	2	-	22	5	-	-	-
Hawaii	8	6	-	14	13	-	31	47	-	-	-
Guam	-	1	U	-	3	U	-	2	U	-	-
P.R.	9	12	-	-	-	6	12	23	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U

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

TABLE IV. Deaths in 122 U.S. cities,* week ending November 18, 2000 (46th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	472	349	81	25	8	7	33
Boston, Mass.	U	U	U	U	U	U	U
Bridgeport, Conn.	48	38	6	3	1	-	4
Cambridge, Mass.	17	13	2	1	-	1	1
Fall River, Mass.	30	25	4	1	-	-	2
Hartford, Conn.	48	28	11	3	1	3	1
Lowell, Mass.	14	9	3	2	-	-	2
Lynn, Mass.	12	8	3	-	1	-	1
New Bedford, Mass.	27	22	3	2	-	-	2
New Haven, Conn.	47	32	7	3	3	2	3
Providence, R.I.	79	56	18	4	1	-	-
Somerville, Mass.	7	5	1	1	-	-	-
Springfield, Mass.	39	25	10	3	-	1	6
Waterbury, Conn.	32	27	4	1	-	-	1
Worcester, Mass.	72	61	9	1	1	-	10
MID. ATLANTIC	2,028	1,458	376	133	31	29	125
Albany, N.Y.	54	42	6	2	3	1	8
Allentown, Pa.	25	22	1	1	1	-	2
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	41	26	8	4	1	2	4
Elizabeth, N.J.	20	16	1	3	-	-	1
Erie, Pa.§	59	42	12	4	-	1	7
Jersey City, N.J.	36	26	5	3	1	1	-
New York City, N.Y.	1,167	845	222	74	11	14	58
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	28	12	11	3	1	1	-
Philadelphia, Pa.	163	95	45	15	5	3	6
Pittsburgh, Pa.§	61	42	12	4	1	2	6
Reading, Pa.	19	16	1	1	1	-	1
Rochester, N.Y.	141	110	20	8	1	2	7
Schenectady, N.Y.	26	20	4	1	1	-	4
Scranton, Pa.§	30	19	7	4	-	-	2
Syracuse, N.Y.	115	92	14	3	4	2	16
Trenton, N.J.	25	18	5	2	-	-	2
Utica, N.Y.	18	15	2	1	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,140	1,502	386	139	61	52	130
Akron, Ohio	63	46	11	3	-	3	5
Canton, Ohio	41	31	4	5	-	1	5
Chicago, Ill.	353	229	68	30	17	9	-
Cincinnati, Ohio	141	103	21	10	3	4	8
Cleveland, Ohio	140	90	41	3	4	2	15
Columbus, Ohio	156	114	28	7	4	3	7
Dayton, Ohio	138	110	16	6	3	3	5
Detroit, Mich.	248	145	57	26	11	9	18
Evansville, Ind.	28	21	5	1	1	-	3
Fort Wayne, Ind.	59	46	9	2	2	-	6
Gary, Ind.	24	11	9	3	-	1	1
Grand Rapids, Mich.	48	36	7	3	1	1	9
Indianapolis, Ind.	218	141	43	21	6	7	16
Lansing, Mich.	34	30	3	1	-	-	1
Milwaukee, Wis.	100	72	17	3	3	5	7
Peoria, Ill.	61	46	6	4	2	3	8
Rockford, Ill.	50	43	4	1	2	-	5
South Bend, Ind.	53	43	8	1	1	-	-
Toledo, Ohio	111	89	17	4	1	-	4
Youngstown, Ohio	74	56	12	5	-	1	7
W.N. CENTRAL	762	554	121	53	15	19	59
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	27	19	4	4	-	-	3
Kansas City, Kans.	29	17	8	3	1	-	4
Kansas City, Mo.	108	66	19	14	5	4	6
Lincoln, Nebr.	45	40	4	1	-	-	4
Minneapolis, Minn.	207	154	35	14	1	3	21
Omaha, Nebr.	63	49	9	2	2	1	5
St. Louis, Mo.	114	80	18	4	4	8	9
St. Paul, Minn.	84	72	8	3	-	1	3
Wichita, Kans.	85	57	16	8	2	2	4
S. ATLANTIC	1,238	814	259	120	21	24	87
Atlanta, Ga.	154	98	38	10	3	5	8
Baltimore, Md.	170	99	46	22	2	1	19
Charlotte, N.C.	96	63	24	5	2	2	5
Jacksonville, Fla.	163	108	33	17	1	4	14
Miami, Fla.	113	80	21	12	-	-	10
Norfolk, Va.	44	28	8	5	1	2	2
Richmond, Va.	67	29	19	12	4	3	5
Savannah, Ga.	44	34	10	-	-	-	4
St. Petersburg, Fla.	85	59	16	4	3	3	7
Tampa, Fla.	177	123	29	18	5	2	11
Washington, D.C.	102	78	15	7	-	2	2
Wilmington, Del.	23	15	-	8	-	-	-
E.S. CENTRAL	926	612	211	64	24	15	61
Birmingham, Ala.	156	99	38	11	3	5	9
Chattanooga, Tenn.	106	69	27	7	1	2	6
Knoxville, Tenn.	127	86	22	13	5	1	9
Lexington, Ky.	75	51	18	4	2	-	3
Memphis, Tenn.	184	131	32	14	5	2	14
Mobile, Ala.	102	70	25	3	3	1	5
Montgomery, Ala.	38	23	12	3	-	-	4
Nashville, Tenn.	138	83	37	9	5	4	11
W.S. CENTRAL	1,542	1,015	322	131	42	32	103
Austin, Tex.	91	59	25	6	-	1	4
Baton Rouge, La.	79	53	18	6	1	1	3
Corpus Christi, Tex.	49	33	11	3	2	-	5
Dallas, Tex.	183	106	46	20	3	8	16
El Paso, Tex.	116	75	30	7	3	1	1
Ft. Worth, Tex.	104	74	26	2	-	2	3
Houston, Tex.	405	251	77	52	18	7	29
Little Rock, Ark.	95	66	14	10	2	3	6
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	239	162	49	17	8	3	23
Shreveport, La.	24	14	5	2	1	2	1
Tulsa, Okla.	157	122	21	6	4	4	12
MOUNTAIN	1,113	745	231	91	20	25	53
Albuquerque, N.M.	150	102	26	18	4	-	8
Boise, Idaho	43	28	11	1	1	2	1
Colo. Springs, Colo.	58	40	10	5	1	2	-
Denver, Colo.	100	57	25	8	3	7	6
Las Vegas, Nev.	224	142	62	16	4	-	10
Ogden, Utah	40	36	3	1	-	-	2
Phoenix, Ariz.	193	126	46	13	1	7	10
Pueblo, Colo.	34	24	9	-	-	1	2
Salt Lake City, Utah	104	73	15	11	1	3	9
Tucson, Ariz.	167	117	24	18	5	3	5
PACIFIC	2,093	1,503	385	126	49	28	158
Berkeley, Calif.	17	13	2	2	-	-	1
Fresno, Calif.	96	70	19	5	1	1	11
Glendale, Calif.	33	26	6	-	1	-	1
Honolulu, Hawaii	90	59	18	10	1	2	4
Long Beach, Calif.	67	50	12	4	-	1	16
Los Angeles, Calif.	584	414	100	45	16	9	27
Pasadena, Calif.	20	16	4	-	-	-	1
Portland, Oreg.	149	106	29	9	5	-	9
Sacramento, Calif.	166	113	38	10	5	-	11
San Diego, Calif.	233	170	37	15	7	3	18
San Francisco, Calif.	102	69	26	5	-	2	13
San Jose, Calif.	198	149	31	6	7	5	13
Santa Cruz, Calif.	31	26	5	-	-	-	2
Seattle, Wash.	129	88	28	7	4	2	11
Spokane, Wash.	84	67	12	3	-	2	14
Tacoma, Wash.	94	67	18	5	2	1	6
TOTAL	12,314¶	8,552	2,372	882	271	231	809

U: Unavailable. -:No reported cases.

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

†Pneumonia and influenza.

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

¶Total includes unknown ages.

Measles, Rubella, and Congenital Rubella Syndrome — Continued

preponderance of importation-related cases, the geographic isolation of each case, and the lack of a recurring viral measles strain indicate that measles is no longer endemic in the United States (*3*). The consistent detection of imported measles cases is evidence of the sensitivity of U.S. measles surveillance. The benefit of concurrent improvements in measles control is demonstrated by the absence of imported cases from Mexico into the United States during 1997–1999.

The United States is on the verge of eliminating indigenous rubella and CRS. However, rubella outbreaks continue to occur, primarily among Hispanics from countries where no national routine rubella vaccination program exists or where a program has been implemented only recently. Because universal rubella vaccination in Mexico was introduced in 1998, ongoing rubella and CRS surveillance will be important to document the impact of the new program. After successfully implementing measles-rubella (MR) vaccination among health-care personnel, Mexico implemented MR vaccination campaigns among at-risk adolescents and adults, including junior and senior high school students and teachers in October 2000. Mass vaccination of adolescents and adults will accelerate the decline in rubella and CRS cases and prevent the re-entry of measles.

Measles remains a leading cause of morbidity and mortality worldwide. The United States and Mexico have achieved the PAHO goal of eliminating endemic transmission of measles. For countries undertaking measles elimination, integrating rubella control into measles elimination activities is a preferred strategy because of the similar surveillance activities and intervention target groups for MR/MMR vaccine (*7*). In countries where the health burden from rubella has been documented and where immunity among women of childbearing age can be assured, implementing a universal childhood rubella vaccination program with >80% coverage will lead to a decline in rubella and CRS (*7*).

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