

# MNWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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## Health Objectives for the Nation

### **Minors' Access to Tobacco — Missouri, 1992, and Texas, 1993**

Approximately 75% of adults who have regularly smoked cigarettes tried their first cigarette before their 18th birthday, and about half became regular smokers by age 18 years (1). Despite the importance of reducing smoking among adolescents, the prevalence of smoking among high school seniors has not decreased substantially from 1981 through 1991 (2). National health objectives for the year 2000 have targeted substantial reductions in smoking among persons aged <20 years (3), and reducing access to cigarettes through laws or statutes (4) is an important strategy in reaching this goal. This report describes the results of efforts in two states—Missouri and Texas—to characterize access of minors to cigarettes and other tobacco products.

#### **Missouri**

On August 28, 1992, a Missouri law (Missouri Revised Statute 407.925–407.932) went into effect prohibiting the sale of tobacco products to minors. From August 24 through August 27, before implementation of the law, the Missouri Coalition on Smoking and Health, the St. Louis University School of Public Health, and the Missouri Department of Health assessed how minors could purchase cigarettes over the counter (i.e., other than through vending machines).

The *1992–1993 Missouri Business Directory* was used to identify businesses that sold cigarettes—including convenience and grocery stores, pharmacies, and gasoline stations (stores that sold cigarettes only through vending machines were excluded)—in five central Missouri towns (1990 population range: 5600–21,000). In these communities, there were no ordinances prohibiting the sale of tobacco products to minors. Advance notification was given to the city attorney's office in each town.

Teams consisting of two minors (from among seven minors aged 13–14 years) and one adult were used for the assessment. Only one purchase attempt was made at each of 89 stores. During each purchase attempt, the adult entered the store first and noted whether there was any clearly displayed sign stating that cigarettes would not be sold to minors. The adult then observed while one of the minors entered the store and attempted to purchase cigarettes. A purchase attempt was considered successful if the vendor recorded the sale on the cash register and unsuccessful if the vendor refused to sell cigarettes for any reason. If the vendor recorded the sale, the minor stated

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that he or she did not have enough money and left the store. In 16 stores where the vendor refused to sell to the minor, the adult team member waited until the minor had left and then asked the vendor his or her reasons for refusing.

Of the 89 attempts, 41 (46.1%) were successful (Table 1). Girls were more successful than boys (55.6% versus 36.4%, respectively [ $p=0.1$ ]). Convenience and grocery stores were less likely to sell cigarettes to minors, although the number of other businesses (e.g., gasoline stations and pharmacies) included in the study was small. The likelihood of success was not significantly different for stores with and without warning signs (36.3% versus 47.4%, respectively [ $p=0.7$ ]), nor for stores that sold cigarettes from behind the counter only compared with stores with self-service displays (60.5% versus 40.7%, respectively [ $p=0.2$ ]).

Reasons vendors gave for not selling cigarettes to the minors included belief in the existence of a federal law, a state law, or "some type of law"; a store policy prohibiting sales to minors; and the opinion that some of the minors "just looked too young."

**Texas**

The sale of tobacco products to persons aged <18 years has been prohibited by law in Texas since September 1989 (Texas Health and Safety Code, Title 2, Sections 161.081–161.082). This law requires cigarette sales outlets to post signs stating the illegality of tobacco product sales to persons aged <18 years and that merchants convicted for such violations can be fined a maximum of \$200. In January 1993, the Texas Department of Health conducted a study in the Austin metropolitan area (1990 population: 781,572) to assess 1) minors' access to tobacco products (including smokeless tobacco) not sold in vending machines and 2) tobacco vendors' compliance with the sign ordinance.

**TABLE 1. Number of attempts and number and percentage of successful attempts by minors\* to purchase cigarettes — Missouri, 1992, and Texas, 1993**

Category	Missouri				Texas			
	No. attempts	No.	(%)	(95% CI) <sup>†</sup>	No. attempts	No.	(%)	(95% CI)
<b>Sex of buyer</b>								
Male	44	16	(36.4)	(±14.2)	26	16	(61.5)	(±18.7)
Female	45	25	(55.6)	(±14.5)	68	43	(63.2)	(±11.5)
<b>Type of store</b>								
Convenience <sup>§</sup>	49	20	(40.8)	(±13.8)	59	37	(62.7)	(±12.3)
Grocery	24	11	(45.8)	(±20.0)	11	8	(72.7)	(±26.4)
Other <sup>¶</sup>	16	10	(62.5)	(±23.8)	24	14	(58.3)	(±19.7)
<b>Warning sign**</b>								
Yes	11	4	(36.3)	(±28.5)	28	18	(64.3)	(±17.7)
No	78	37	(47.4)	(±11.1)	64	40	(62.5)	(±11.9)
<b>Total</b>	<b>89</b>	<b>41</b>	<b>(46.1)</b>	<b>(±10.4)</b>	<b>94</b>	<b>59</b>	<b>(62.8)</b>	<b>(± 9.8)</b>

\*Persons aged <18 years.

<sup>†</sup>Confidence interval.

<sup>§</sup>Includes stores that also sold gasoline.

<sup>¶</sup>Includes full-service gasoline stations, pharmacies, restaurants, and liquor stores.

\*\*Information on warning signs missing for two stores in Texas, one at which there was a successful purchase attempt.

*Tobacco — Continued*

The health department obtained a list of licensed tobacco vendors (excluding stores that sold cigarettes through vending machines only) from the Texas Department of the Treasury for the city of Austin and four nearby rural communities. Teams consisted of one to three minors (from among 16 minors aged 14–15 years and one aged 17 years) and one adult. Surveys were conducted in the same manner as those in Missouri.

Of 94 attempts to purchase cigarettes, 59 (62.8%) were successful; girls and boys were almost equally likely to succeed (63.2% versus 61.5%, respectively [ $p=0.9$ ]) (Table 1). The type of store where the purchase attempt occurred was not associated with the minors' ability to purchase cigarettes. Warning signs required by state law were posted in 28 (29.8%) stores; attempts were equally successful in stores with and without signs (64.3% versus 62.5%, respectively [ $p=0.9$ ]). Vendors asked minors their age in 15 (18.5%) of 81 attempts, asked to see age identification in 19 (22.8%) of 87 attempts, and asked who the tobacco was for in one (1.3%) of 79 attempts; in all of these queried attempts, the minors failed to purchase cigarettes.

Of the 71 attempts to buy smokeless tobacco products, 42 (59.2%) were successful. The likelihood of successful purchase attempts was similar for stores with and without warning signs (53.8% versus 63.0%, respectively [ $p=0.7$ ]).

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**Editorial Note:** The findings in Missouri and Texas are consistent with previous reports: cigarettes could be readily purchased by minors (5,6), and the presence of warning signs did not affect minors' success in purchasing cigarettes (7). Differences in the findings in the two states may reflect variations in the ages of minors, as well as the media coverage of the law in Missouri following passage in the state legislature.

In 1988, up to \$221 million (3% of tobacco industry profits) resulted from cigarette sales to youth, an activity illegal in most states (8). While most states have laws in place that restrict minors' access to tobacco, these laws are rarely enforced (9). Prevention of youth smoking may be enhanced by the recently enacted Synar Amendment to the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act\*. The Synar Amendment requires that all states enact and enforce a law prohibiting the sale or distribution of tobacco products to minors (persons aged <18 years) as a condition of receiving full Substance Abuse and Mental Health Services Administration block grant funds.

To reduce the use of tobacco products among minors, public policymakers (e.g., legislators, public health officials, and school officials) should consider the following strategies: 1) initiate efforts such as those in Missouri and Texas to monitor minors' ability to purchase tobacco products; 2) require individual tobacco-sales outlets to obtain licenses that may be revoked if tobacco products are sold to minors and require the levying of an established civil fine; 3) impose separate fines for failure to post

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\*Public Law 102-31.

*Tobacco — Continued*

warning signs stating the legal age of purchase; 4) require retailers to ask all purchasers of tobacco products to show proof of age; 5) increase excise taxes on tobacco products because higher prices can reduce consumption by minors; 6) restrict tobacco-product advertising targeted toward minors; and 7) ensure that health-education curricula in all primary, middle, and secondary schools include discussion of addiction, the short- and long-term risks of tobacco use, refusal skills, social factors influencing use, and the social consequences of use (3-5,10).

In Missouri, findings from the survey described in this report and a follow-up survey in August 1993 will be used to assess the impact of the new law and to strengthen efforts to reduce minors' access to tobacco products. In Texas, these findings will be used to support legislation for stronger enforcement of laws and penalties to restrict minors' access to tobacco products.

*References*

1. CDC. Cigarette smoking among youth—United States, 1989. *MMWR* 1991;40:712-5.
2. Johnston LD, O'Malley PM, Bachman JG. Smoking, drinking, and illicit drug use among American secondary school students, college students, and young adults, 1975-1991. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Drug Abuse, 1992.
3. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives. Washington, DC: US Dept of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50213.
4. Public Health Service. Model Sale of Tobacco Products to Minors Control Act. Washington, DC: US Department of Health and Human Services, Public Health Service, 1990.
5. CDC. Cigarette sales to minors—Colorado, 1989. *MMWR* 1990;39:794-5,801.
6. Altman D, Carol J, Chalkley C, et al. Report of the Tobacco Policy Research Study Group on access to tobacco products in the United States. *Tobacco Control* 1992;1(suppl):S45-S51.
7. DiFranza JR, Brown LJ. The Tobacco Institute's "It's the Law" campaign: has it halted illegal sales of tobacco to children? *Am J Public Health* 1992;82:1271-3.
8. DiFranza JR, Tye JB. Who profits from tobacco sales to children? *JAMA* 1990;263:2784-7.
9. Office of Evaluations and Inspections. Youth access to tobacco. Washington, DC: US Department of Health and Human Services, Office of the Inspector General, 1992; DHHS publication no. (OEI-02)91-00880.
10. CDC. Reducing the health consequences of smoking: 25 years of progress—a report of the Surgeon General. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, 1989; DHHS publication no.(CDC)89-8411.

## **Injuries to International Petroleum Drilling Workers, 1988-1990**

Occupationally related death rates among workers involved in oil and gas extraction activities have been higher than rates for workers from all U.S. industries combined (1). In 1991, nonfatal work-related injury (NFI) rates (2,3) for workers in the U.S. oil and gas field services industry (standard industrial classification [SIC] codes 138.1, 138.2, and 138.9)\* were 49% greater than rates for all workers in private industry and tended to be more severe, with a lost-workdays rate more than 2.8-fold higher than in private industry as a whole (2). To develop improved strategies for preventing fatal injuries (FIs) and NFIs among petroleum drilling workers, the Louisiana Office of

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\*U.S. Bureau of Labor Statistics or other government-compiled data for injury and illness incidence are not routinely available for some four-digit SIC categories. Analyses of 2- or 3-digit level data represent the combined experience of all constituent groups and may not accurately represent the experience of a specific subgroup.

*Petroleum Drilling — Continued*

Public Health (LOPH) analyzed data on injury-related incidents in the petroleum drilling industry during 1988–1990. This report summarizes the results of this study.

The LOPH analyzed data on injury-related incidents submitted voluntarily by 347 (87%) of 398 member drilling companies to the International Association of Drilling Contractors (IADC), an international trade association that represents the oil and gas drilling industry. U.S. workers represented by the IADC are categorized by the U.S. Bureau of Labor Statistics into SIC code 138.1.

The IADC defines an NFI as any work-related event that prevents an employee from returning to his/her regular job on the next regularly scheduled workday, including FIs if they occur on the job. For each incident, data reported to IADC include 1) whether the injury was fatal, 2) the geographic location of the worksite (U.S. or non-U.S.<sup>†</sup> and on land or water), 3) employee occupation, 4) body part injured, 5) injury type (e.g., “fall,” “struck by,” “caught in”), 6) equipment used, 7) operation at the time of injury, and 8) location at which injury occurred on the rig. Estimates of total person-hours were made from rig count and representative rig crew data. Geographic location- and occupation-specific incidence rates were then calculated in terms of total full-time equivalents (FTEs<sup>§</sup>) per job category and year.

Of the 5251 reports, 5218 (99%) involved NFIs (Table 1)—representing an overall 3-year rate for NFIs of 1.2 per 100 FTEs. The rate of reported NFIs in the United States (land and water combined) was four times the rate outside the United States (2 per 100 versus 0.5 per 100 FTEs). Rates of NFI were higher on water than on land for the United States (2.5 versus 1.9; [rate ratio (RR)=1.3]) and for sites outside the United States (1.2 versus 0.2; [RR=5]). Injuries to the upper extremities (i.e., fingers, hands, or arms) accounted for the largest proportion of reported NFIs (1631 [31%]).

Thirty-three (0.6%) reports were of FIs, representing an overall 3-year rate of 7.5 per 100,000 FTEs. Combined rates for land and water were similar for U.S. and non-U.S. sites (6.5 per 100,000 and 8.3 per 100,000 FTEs, respectively). However, in both locations, FIs occurred more commonly on water than on land (19.2 versus 4.0 for U.S. sites and 20.3 versus 3.9 for non-U.S. sites, respectively). Head and neck injuries accounted for the greatest proportion (11 [33%]) of reported FIs.

<sup>†</sup>Sites not regulated by the U.S. Coast Guard, individual states, or the U.S. Mineral Management Service.

<sup>§</sup>One FTE=2000 person-hours. This denominator is used to allow comparison of rates to those published by the U.S. Bureau of Labor Statistics.

**TABLE 1. Number and rate of petroleum drilling worker injuries, by geographic location, 1988–1990**

Injury type	Land				Water				Total	
	U.S.		Non-U.S.		U.S.		Non-U.S.			
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Nonfatal*	3273	1.9	388	0.2	785	2.5	772	1.2	5218	1.2
Fatal <sup>†</sup>	7	4.0	7	3.9	6	19.2	13	20.3	33	7.5
<b>Total</b>	<b>3280</b>	<b>1.9</b>	<b>395</b>	<b>0.2</b>	<b>791</b>	<b>2.5</b>	<b>785</b>	<b>1.2</b>	<b>5251</b>	<b>1.2</b>

\*Nonfatal injury rates per 100 full-time equivalents (FTEs); one FTE=2000 person-hours.

<sup>†</sup>Fatal injury rates per 100,000 FTEs.

*Petroleum Drilling — Continued*

Three job categories—floormen, roustabouts, and derrickmen—accounted for 3883 (74%) NFI reports and 21 (64%) FI reports. Rates of reported NFIs and FIs were 4–10.5 times higher among these workers than for other workers (Table 2). Workers in these three jobs directly handle the drilling pipe. However, roustabouts are generally employed on water-based rigs only.

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**Editorial Note:** An estimated 51,393 workers are employed in oil and gas drilling operations in the United States (4). The national health objectives for the year 2000 target the reduction of deaths from FIs among mine workers (which includes oil and gas drilling workers) to no more than 21 per 100,000 FTEs (objective 10.1a) and the reduction of NFIs to 6 per 100 FTEs (objective 10.2) (5). The year 2000 objective for FIs in this group is the highest target set among all U.S. workers and reflects recognition of the high risk for FIs among mine workers. The findings in this study suggest that overall NFI and FI rates for U.S. petroleum drilling workers (SIC code 138.1) are below these objectives.

Although rates of reported FIs in this study were similar for U.S. and non-U.S. workers, rates for reported NFIs were substantially higher for workers in the United States. Potential explanations for these differences include variations in work and safety conditions, working practices, reporting requirements and procedures, laws regarding compensation for work-related injuries, and medical care.

Risk factors that contribute to hazardous working conditions on land-based and water-based drilling rigs include high rates of job change and rig transfers, the young age of the workforce (6), and type A behavior (7). The findings in this report also indicate potential specific high-risk occupations within this industry.

Safety education of workers remains an important aspect of injury prevention. Re-designing equipment and/or implementing changes in selected working practices may reduce injuries and deaths. In addition, the use of four-digit SIC-code data helps in differentiating intra-industry risks. The systematic collection of injury data by trade associations such as the IADC assists in injury-prevention efforts and is an important contribution to worker safety and health.

**TABLE 2. Number and rates of nonfatal injuries\* and fatal injuries† among workers in the petroleum drilling industry, by occupation, 1988–1990**

Occupation	Nonfatal injuries			Fatal injuries		
	No.	Rate	(RR <sup>§</sup> )	No.	Rate	(RR)
Floormen	2538	4.2	(10.5)	11	18.1	(5.0)
Roustabouts	600	3.4	( 8.5)	6	33.9	(9.4)
Derrickmen	745	2.8	( 7.0)	4	14.9	(4.0)
Other	1335	0.4	(Referent)	12	3.6	(Referent)
<b>Total</b>	<b>5218</b>	<b>1.2</b>		<b>33</b>	<b>7.5</b>	

\*Nonfatal injury rates per 100 full-time equivalents (FTEs); one FTE=2000 person-hours.

†Fatal injury rates per 100,000 FTEs.

§Rate ratio.

*Petroleum Drilling — Continued**References*

1. CDC. Occupational mortality in the oil industry—Louisiana. MMWR 1980;29:230–1.
2. Bureau of Labor Statistics. Survey of occupational injuries and illnesses, 1991. Washington, DC: US Department of Labor, Bureau of Labor Statistics, December 1992; summary no. 92-9.
3. National Safety Council. Work injury and illness rates, 1991. Chicago: National Safety Council, 1992:5.
4. Bureau of Labor Statistics. Employment and wages annual averages, 1990. Washington, DC: US Department of Labor, Bureau of Labor Statistics, November 1991; bulletin no. 2393.
5. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991:104–5; DHHS publication no. (PHS)91-50213.
6. Mueller BA, Mohr DL, Rice JC, et al. Factors affecting individual injury experience among petroleum drilling workers. J Occ Med 1987;29:126–31.
7. Cooper CL, Sutherland VL. Job stress, mental health, and accidents among offshore workers in the oil and gas extraction industries. J Occ Med 1987;29:119–25.

*Current Trends***Update: Influenza Activity — United States, 1992–93 Season**

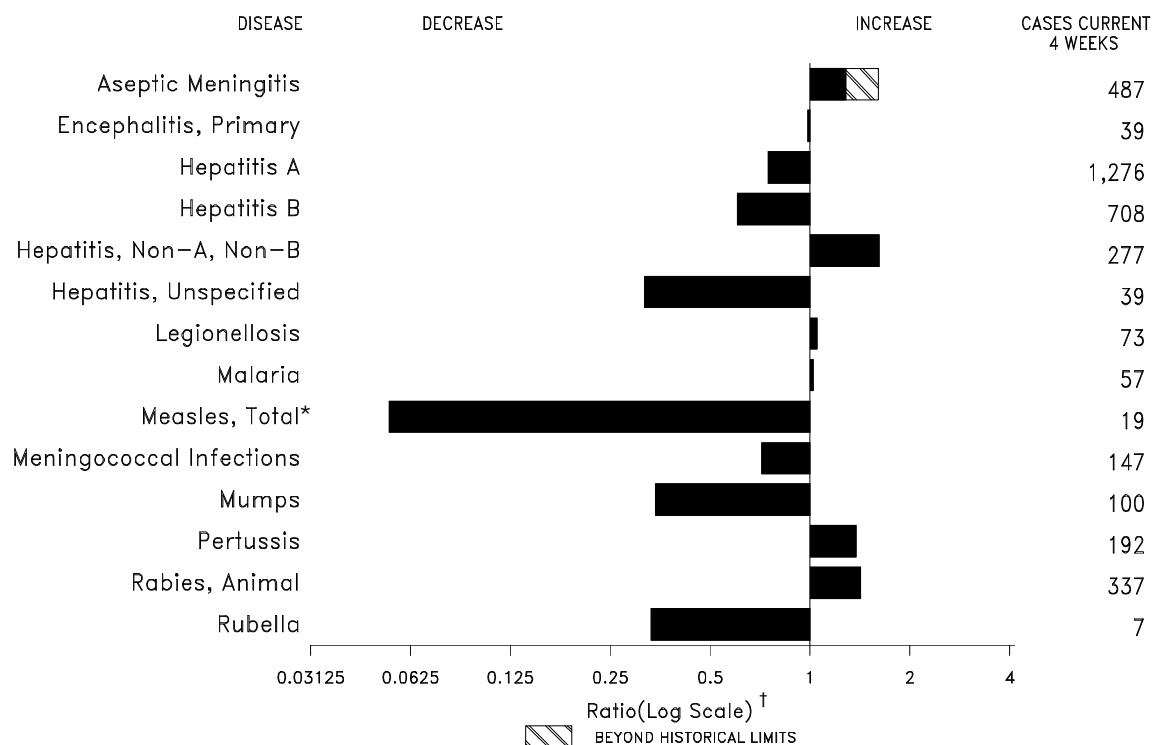
From September 27, 1992, through February 13, 1993, the World Health Organization collaborating laboratories in the United States reported 1042 influenza virus isolates. For the weeks ending December 5, 1992, through February 6, 1993, the ratio of specimens positive for influenza virus to total specimens submitted for respiratory virus testing increased from 0.02 to 0.2.

Weekly reports by state and territorial epidemiologists also indicated increasing levels of influenza-like illness (ILI) from December through mid-February. For the week ending February 13, 13 states reported sporadic ILI activity, 18 reported regional activity, and eight reported widespread activity.\* Most laboratory-confirmed outbreaks of influenza occurred among school-aged populations, and most were associated with influenza type B.

From September 27, 1992 (the beginning of the 1992–93 influenza surveillance period), through February 13, 1993, 965 (93%) of influenza virus isolates reported to CDC were influenza type B. Although influenza type A viruses had been circulating at relatively low levels, the number and proportion of influenza type A viruses increased from January to mid-February. From September 27, 1992, through January 16, 1993, 10 (2%) of the 554 influenza viruses reported were influenza type A compared with 67 (14%) of the 488 viruses reported for January 17 through February 13. Influenza type B and type A viruses have been detected in 43 and 29 states and the District of Columbia, respectively (Figure 1, page 137). Of the 77 influenza A viruses detected, 13 were subtyped as A(H1N1) and 30 as A(H3N2); 34 have not been subtyped. Influenza type B viruses isolated in the United States this season have been antigenically similar to the B/Panama/45/90-like virus included in the 1992–93 influenza vaccine.

\*Levels of activity are: 1) *sporadic*—sporadically occurring ILI or culture-confirmed influenza, with no outbreaks detected; 2) *regional*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of less than 50% of the state's total population; 3) *widespread*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of 50% or more of the state's total population.

**FIGURE I. Notifiable disease reports, comparison of 4-week totals ending February 20, 1993, with historical data — United States**



\*The large apparent decrease in reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

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

**TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending February 20, 1993 (7th Week)**

	Cum. 1993		Cum. 1993
AIDS*	4,278	Measles: imported	3
Anthrax	-	indigenous	24
Botulism: Foodborne	-	Plague	-
Infant	6	Poliomyelitis, Paralytic <sup>§</sup>	-
Other	1	Psittacosis	12
Brucellosis	7	Rabies, human	-
Cholera	1	Syphilis, primary & secondary	3,646
Congenital rubella syndrome	1	Syphilis, congenital, age < 1 year	-
Diphtheria	-	Tetanus	2
Encephalitis, post-infectious	18	Toxic shock syndrome	24
Gonorrhea	49,550	Trichinosis	5
<i>Haemophilus influenzae</i> (invasive disease) <sup>†</sup>	151	Tuberculosis	1,621
Hansen Disease	13	Tularemia	7
Leptospirosis	9	Typhoid fever	50
Lyme Disease	294	Typhus fever, tickborne (RMSF)	15

\*Updated monthly; last update January 30, 1993.

<sup>†</sup>Of 139 cases of known age, 54 (39%) were reported among children less than 5 years of age.

<sup>§</sup>No cases of suspected poliomyelitis have been reported in 1993; 4 cases of suspected poliomyelitis were reported in 1992; 6 of the 9 suspected cases with onset in 1991 were confirmed; all were vaccine associated.



**TABLE II. Cases of selected notifiable diseases, United States, weeks ending February 20, 1993, and February 15, 1992 (7th Week)**

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	4,278	866	71	18	49,550	64,765	2,663	1,236	516	75	146	294
NEW ENGLAND	195	16	3	-	1,097	1,368	96	68	1	1	5	32
Maine	8	2	1	-	13	12	3	-	-	-	1	-
N.H.	8	1	-	-	9	-	2	10	-	-	-	5
Vt.	3	1	-	-	9	1	2	1	-	-	-	-
Mass.	102	10	2	-	444	559	57	49	1	1	4	9
R.I.	4	2	-	-	49	83	22	8	-	-	-	8
Conn.	70	-	-	-	573	713	10	-	-	-	-	10
MID. ATLANTIC	948	71	2	3	4,286	5,633	134	128	27	2	29	216
Upstate N.Y.	160	32	-	1	542	17	48	30	10	1	4	130
N.Y. City	677	5	-	-	925	2,963	10	1	-	-	-	-
N.J.	100	-	-	-	935	926	55	52	13	-	5	11
Pa.	11	34	2	2	1,884	1,727	21	45	4	1	20	75
E. N. CENTRAL	333	129	21	3	9,929	12,253	346	144	97	1	50	3
Ohio	85	57	10	-	3,721	4,021	68	35	3	-	27	3
Ind.	59	17	2	-	1,070	1,248	212	31	2	-	11	-
Ill.	118	14	2	-	2,753	3,905	30	8	1	-	-	-
Mich.	51	39	6	3	1,932	2,606	34	69	91	1	12	-
Wis.	20	2	1	-	453	473	2	1	-	-	-	-
W. N. CENTRAL	86	42	2	-	2,536	3,551	487	72	22	-	9	8
Minn.	19	2	2	-	320	407	49	5	1	-	-	1
Iowa	13	16	-	-	237	205	5	4	2	-	-	-
Mo.	39	11	-	-	1,401	2,170	336	50	14	-	3	-
N. Dak.	-	1	-	-	5	13	8	-	-	-	-	-
S. Dak.	1	1	-	-	27	32	4	-	-	-	-	-
Nebr.	3	1	-	-	-	8	60	2	5	-	5	-
Kans.	11	10	-	-	546	716	25	11	-	-	1	7
S. ATLANTIC	977	207	12	7	14,137	24,231	154	193	69	15	20	19
Del.	15	1	-	-	187	246	1	16	24	-	4	13
Md.	142	17	5	-	2,280	2,293	24	44	3	1	10	1
D.C.	106	5	-	-	934	1,096	1	3	-	-	3	1
Va.	13	30	4	2	762	2,971	27	17	1	5	-	1
W. Va.	3	3	2	-	92	128	-	3	1	3	-	1
N.C.	60	15	1	-	3,677	2,248	8	24	9	-	1	1
S.C.	55	1	-	-	1,037	1,600	2	5	-	-	-	-
Ga.	131	19	-	-	1,950	9,819	19	19	15	-	2	-
Fla.	452	116	-	5	3,218	3,830	72	62	16	6	-	1
E. S. CENTRAL	195	60	3	-	5,525	6,115	38	144	138	-	10	1
Ky.	16	28	-	-	661	671	23	11	3	-	2	-
Tenn.	107	13	3	-	1,710	1,909	10	117	133	-	6	1
Ala.	57	16	-	-	1,799	2,115	3	14	2	-	-	-
Miss.	15	3	-	-	1,355	1,420	2	2	-	-	2	-
W. S. CENTRAL	603	23	2	-	7,035	5,645	104	63	7	6	4	2
Ark.	16	5	-	-	823	921	6	4	1	-	-	1
La.	140	-	-	-	1,505	1,119	6	9	2	-	-	-
Okla.	38	-	1	-	344	658	7	-	3	1	4	1
Tex.	409	18	1	-	4,363	2,947	85	50	1	5	-	-
MOUNTAIN	103	34	3	3	1,388	1,509	489	75	30	16	10	-
Mont.	-	-	-	1	13	7	14	2	-	-	-	-
Idaho	2	2	-	-	14	16	45	6	-	-	1	-
Wyo.	1	-	-	-	6	5	2	1	6	-	2	-
Colo.	4	10	1	-	491	580	154	9	8	12	-	-
N. Mex.	10	8	1	2	149	114	44	28	11	-	-	-
Ariz.	31	11	1	-	467	516	158	18	3	3	2	-
Utah	17	-	-	-	10	20	69	3	1	1	-	-
Nev.	38	3	-	-	238	251	3	8	1	-	5	-
PACIFIC	838	284	23	2	3,617	4,460	815	349	125	34	9	13
Wash.	26	-	-	-	501	542	61	20	15	1	-	-
Oreg.	23	-	-	-	198	177	25	12	3	-	-	-
Calif.	776	272	21	2	2,824	3,541	626	315	104	31	8	13
Alaska	3	3	2	-	45	120	88	1	-	-	-	-
Hawaii	10	9	-	-	49	80	15	1	3	2	1	-
Guam	-	-	-	-	8	15	-	-	-	-	-	-
P.R.	127	8	-	-	53	1	3	18	3	-	-	-
V.I.	30	-	-	-	15	12	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	5	5	3	-	-	-	-	-
C.N.M.I.	-	2	-	-	9	5	-	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands

\*Updated monthly; last update January 30, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 20, 1993, and February 15, 1992 (7th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin- gococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total		1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
		1993	Cum. 1993	1993	Cum. 1993	Cum. 1992									
UNITED STATES	100	5	24	-	3	122	275	21	186	47	296	136	1	14	24
NEW ENGLAND	14	3	15	-	-	4	20	-	1	7	66	6	-	1	4
Maine	-	-	-	-	-	-	2	-	-	-	3	-	-	1	-
N.H.	1	-	-	-	-	-	4	-	-	3	51	3	-	-	-
Vt.	-	3	12	-	-	-	2	-	-	1	6	-	-	-	-
Mass.	7	-	-	-	-	2	11	-	-	3	3	3	-	-	-
R.I.	1	-	-	-	-	-	-	-	1	-	1	-	-	-	4
Conn.	5	-	3	-	-	2	1	-	-	-	2	-	-	-	-
MID. ATLANTIC	13	-	-	-	-	26	41	2	20	12	62	35	1	2	3
Upstate N.Y.	6	-	-	-	-	7	15	-	7	8	24	14	-	-	2
N.Y. City	2	-	-	-	-	3	3	-	-	-	-	-	-	-	-
N.J.	3	-	-	-	-	16	7	-	1	-	11	15	-	1	1
Pa.	2	-	-	-	-	-	16	2	12	4	27	6	1	1	-
E.N. CENTRAL	9	-	-	-	-	4	34	4	40	9	43	15	-	-	5
Ohio	2	-	-	-	-	3	9	2	20	7	32	-	-	-	-
Ind.	2	-	-	-	-	-	8	-	-	2	5	5	-	-	-
Ill.	3	-	-	-	-	-	10	-	6	-	4	-	-	-	5
Mich.	2	-	-	-	-	-	6	2	14	-	5	1	-	-	-
Wis.	-	-	-	-	-	1	1	-	-	-	1	5	-	-	-
W.N. CENTRAL	1	-	-	-	-	-	14	-	6	-	14	14	-	1	1
Minn.	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Iowa	1	-	-	-	-	-	2	-	2	-	-	1	-	-	-
Mo.	-	-	-	-	-	-	7	-	3	-	7	6	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	1	-	1	2	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-	3	2	-	-	-
Kans.	-	-	-	-	-	-	5	-	-	-	2	-	-	-	1
S. ATLANTIC	23	-	2	-	2	15	55	2	21	7	14	13	-	1	2
Del.	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Md.	5	-	-	-	1	1	2	-	7	4	7	6	-	-	-
D.C.	2	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Va.	1	-	-	-	1	4	5	1	7	-	1	2	-	-	-
W. Va.	-	-	-	-	-	-	1	-	2	-	1	-	-	-	-
N.C.	9	-	-	-	-	-	10	-	-	-	-	4	-	-	-
S.C.	-	-	-	-	-	-	5	-	1	-	-	-	-	-	-
Ga.	2	-	-	-	-	-	20	-	3	3	-	-	-	-	-
Fla.	3	-	2	-	-	10	10	1	4	-	2	1	-	1	1
E.S. CENTRAL	2	-	-	-	-	58	19	-	6	2	6	1	-	-	-
Ky.	-	-	-	-	-	43	4	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	8	-	3	-	1	-	-	-	-
Ala.	1	-	-	-	-	-	4	-	3	2	5	1	-	-	-
Miss.	1	-	-	-	-	15	3	-	-	-	-	-	-	-	-
W.S. CENTRAL	1	-	1	-	-	-	10	8	33	-	7	6	-	-	-
Ark.	-	-	-	-	-	-	2	-	1	-	-	3	-	-	-
La.	-	-	1	-	-	-	3	2	4	-	-	-	-	-	-
Okla.	1	-	-	-	-	-	-	-	2	-	7	3	-	-	-
Tex.	-	-	-	-	-	-	5	6	26	-	-	-	-	-	-
MOUNTAIN	4	-	1	-	-	-	21	1	18	9	20	13	-	2	-
Mont.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	1	-	3	-	-	4	-	1	-
Wyo.	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Colo.	3	-	-	-	-	-	2	-	2	8	8	5	-	-	-
N. Mex.	1	-	-	-	-	-	2	N	N	1	9	4	-	-	-
Ariz.	-	-	1	-	-	-	14	1	8	-	2	-	-	-	-
Utah	-	-	-	-	-	-	-	-	3	-	-	-	-	1	-
Nev.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
PACIFIC	33	2	5	-	1	15	61	4	41	1	64	33	-	7	9
Wash.	1	-	-	-	-	-	7	-	5	-	2	1	-	-	-
Oreg.	1	-	-	-	-	-	7	N	N	-	-	3	-	1	-
Calif.	30	-	1	-	-	8	44	4	33	1	58	28	-	4	9
Alaska	-	-	-	-	-	7	2	-	2	-	-	-	-	1	-
Hawaii	1	2	4	-	1	-	1	-	1	-	4	1	-	1	-
Guam	-	U	-	U	-	4	-	U	1	U	-	-	U	-	-
P.R.	-	-	18	-	-	21	3	-	-	-	-	1	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-

\*For measles only, imported cases include both out-of-state and international importations.

N: Not notifiable

U: Unavailable

† International

§ Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 20, 1993, and February 15, 1992 (7th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	3,646	4,214	24	1,621	1,929	7	50	15	621
NEW ENGLAND	62	92	4	69	14	-	6	2	150
Maine	-	-	-	3	-	-	-	-	-
N.H.	-	6	1	-	-	-	-	-	3
Vt.	-	-	-	-	-	-	-	-	3
Mass.	37	37	3	1	11	-	4	2	38
R.I.	1	3	-	54	-	-	-	-	-
Conn.	24	46	-	11	3	-	2	-	106
MID. ATLANTIC	238	553	3	308	461	-	4	1	197
Upstate N.Y.	21	35	2	5	56	-	-	-	120
N.Y. City	163	291	-	209	284	-	2	-	-
N.J.	43	76	-	49	65	-	1	1	58
Pa.	11	151	1	45	56	-	1	-	19
E.N. CENTRAL	486	612	10	179	212	2	4	-	3
Ohio	163	80	5	22	40	-	2	-	-
Ind.	45	31	1	14	20	1	1	-	-
Ill.	160	281	-	118	92	-	-	-	-
Mich.	80	108	4	14	52	1	1	-	-
Wis.	38	112	-	11	8	-	-	-	3
W.N. CENTRAL	234	209	3	20	57	1	-	-	35
Minn.	14	7	1	-	24	-	-	-	9
Iowa	14	1	1	5	4	-	-	-	4
Mo.	206	169	-	8	22	1	-	-	1
N. Dak.	-	1	-	-	1	-	-	-	6
S. Dak.	-	-	-	2	4	-	-	-	-
Nebr.	-	1	-	2	-	-	-	-	1
Kans.	-	30	1	3	2	-	-	-	14
S. ATLANTIC	1,090	1,265	2	234	345	-	9	2	206
Del.	20	32	-	-	3	-	-	-	21
Md.	57	100	-	43	47	-	3	-	58
D.C.	89	80	-	8	18	-	-	-	3
Va.	75	94	-	-	19	-	1	-	50
W. Va.	5	1	-	5	10	-	-	-	7
N.C.	336	282	1	51	46	-	-	2	4
S.C.	110	189	-	36	34	-	-	-	8
Ga.	194	272	-	91	54	-	1	-	55
Fla.	204	215	1	-	114	-	4	-	-
E. S. CENTRAL	481	534	-	100	115	2	-	3	10
Ky.	45	16	-	36	36	-	-	2	1
Tenn.	128	130	-	-	-	1	-	-	-
Ala.	118	240	-	52	45	1	-	-	9
Miss.	190	148	-	12	34	-	-	1	-
W.S. CENTRAL	926	508	-	9	13	-	-	7	6
Ark.	77	50	-	9	3	-	-	-	2
La.	340	242	-	-	-	-	-	-	-
Okla.	62	30	-	-	10	-	-	7	4
Tex.	447	186	-	-	-	-	-	-	-
MOUNTAIN	18	91	-	45	32	-	1	-	7
Mont.	-	2	-	-	-	-	-	-	1
Idaho	-	1	-	-	4	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	2
Colo.	9	16	-	-	-	-	-	-	-
N. Mex.	1	7	-	-	6	-	-	-	1
Ariz.	8	36	-	36	16	-	1	-	3
Utah	-	1	-	-	-	-	-	-	-
Nev.	-	28	-	9	6	-	-	-	-
PACIFIC	111	350	2	657	680	2	26	-	7
Wash.	6	14	-	32	27	-	-	-	-
Oreg.	7	6	-	6	5	-	-	-	-
Calif.	97	328	2	584	604	2	26	-	-
Alaska	-	-	-	-	10	-	-	-	7
Hawaii	1	2	-	35	34	-	-	-	-
Guam	-	1	-	1	10	-	-	-	-
P.R.	59	2	-	-	12	-	-	-	7
V.I.	11	9	-	1	1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	1	-	1	3	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,\* week ending  
February 20, 1993 (7th Week)

Reporting Area	All Causes, By Age (Years)						P&I <sup>†</sup> Total	Reporting Area	All Causes, By Age (Years)						P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	707	494	124	57	16	16	72	S. ATLANTIC	1,522	919	307	204	47	42	95
Boston, Mass.	184	111	42	17	5	9	29	Atlanta, Ga.	183	100	35	30	5	13	6
Bridgeport, Conn.	57	43	10	3	1	-	5	Baltimore, Md.	284	163	65	40	11	5	32
Cambridge, Mass.	26	21	5	-	-	-	2	Charlotte, N.C.	98	57	19	15	6	1	2
Fall River, Mass.	31	24	4	2	1	-	3	Jacksonville, Fla.	113	76	17	13	4	3	4
Hartford, Conn.	61	39	9	10	1	2	2	Miami, Fla.	105	57	27	16	-	5	1
Lowell, Mass.	27	23	4	-	-	-	2	Norfolk, Va.	75	48	14	6	7	-	9
Lynn, Mass.	18	14	2	1	-	1	-	Richmond, Va.	83	53	20	7	2	1	7
New Bedford, Mass.	32	27	4	-	1	-	2	Savannah, Ga.	67	51	8	4	2	2	5
New Haven, Conn.	56	35	10	10	-	1	6	St. Petersburg, Fla.	71	58	5	6	1	1	1
Providence, R.I.	43	29	9	2	3	-	4	Tampa, Fla.	178	122	31	20	2	1	16
Somerville, Mass.	6	4	-	2	-	-	1	Washington, D.C.	235	112	61	44	7	10	12
Springfield, Mass.	60	47	9	1	1	2	5	Wilmington, Del.	30	22	5	3	-	-	-
Waterbury, Conn.	30	22	6	-	2	-	1	E.S. CENTRAL	760	485	161	73	21	20	53
Worcester, Mass.	76	55	10	9	1	1	10	Birmingham, Ala.	139	80	26	18	7	8	7
MID. ATLANTIC	2,386	1,680	400	225	43	38	153	Chattanooga, Tenn.	62	41	14	6	1	-	3
Albany, N.Y.	53	35	15	1	2	-	3	Knoxville, Tenn.	94	58	23	10	-	3	12
Allentown, Pa.	22	18	3	1	-	-	1	Lexington, Ky.	57	29	19	3	3	3	4
Buffalo, N.Y.	96	67	22	3	2	2	2	Memphis, Tenn.	174	119	30	14	9	2	10
Camden, N.J.	36	21	9	5	-	1	1	Mobile, Ala.	42	34	6	2	-	-	6
Elizabeth, N.J.	26	22	2	2	-	-	-	Montgomery, Ala.	56	42	11	2	-	1	3
Erie, Pa.§	38	32	2	3	1	-	5	Nashville, Tenn.	136	82	32	18	1	3	8
Jersey City, N.J.	74	49	10	11	1	3	4	W.S. CENTRAL	1,491	969	276	157	50	39	124
New York City, N.Y.	1,440	1,019	227	153	26	15	88	Austin, Tex.	64	41	11	10	2	-	10
Newark, N.J.	91	43	28	16	2	2	7	Baton Rouge, La.	72	61	3	4	2	2	6
Paterson, N.J.	31	15	8	6	1	1	2	Corpus Christi, Tex.	67	46	12	8	-	1	3
Philadelphia, Pa.	U	U	U	U	U	U	U	Dallas, Tex.	190	121	38	19	8	4	5
Pittsburgh, Pa.§	121	86	22	4	1	8	10	El Paso, Tex.	70	55	10	3	1	1	6
Reading, Pa.	19	11	3	2	2	1	-	Ft. Worth, Tex.	125	84	15	14	5	7	10
Rochester, N.Y.	135	104	23	4	1	3	12	Houston, Tex.	433	244	103	59	15	12	62
Schenectady, N.Y.	18	18	-	-	-	-	-	Little Rock, Ark.	73	48	13	8	3	1	1
Scranton, Pa.§	20	18	-	1	1	-	-	New Orleans, La.	U	U	U	U	U	U	U
Syracuse, N.Y.	83	58	17	6	1	1	6	San Antonio, Tex.	215	139	38	23	9	6	13
Trenton, N.J.	35	25	2	6	1	1	5	Shreveport, La.	79	60	13	4	1	1	3
Utica, N.Y.	20	15	4	-	1	-	1	Tulsa, Okla.	103	70	20	5	4	4	5
Yonkers, N.Y.	28	24	3	1	-	-	6	MOUNTAIN	888	607	165	68	25	22	76
E.N. CENTRAL	1,981	1,262	364	149	53	153	107	Albuquerque, N.M.	82	51	12	12	2	4	3
Akron, Ohio	45	28	11	2	2	2	-	Colo. Springs, Colo.	50	34	13	2	1	-	10
Canton, Ohio	35	23	10	-	1	1	4	Denver, Colo.	106	75	17	9	3	2	8
Chicago, Ill.	257	63	27	39	21	107	6	Las Vegas, Nev.	158	99	41	11	4	3	8
Cincinnati, Ohio	91	61	19	9	-	2	5	Ogden, Utah	38	30	5	-	3	-	4
Cleveland, Ohio	163	104	40	8	7	4	5	Phoenix, Ariz.	163	107	31	14	4	7	17
Columbus, Ohio	163	116	32	11	1	3	6	Pueblo, Colo.	27	22	4	-	1	-	2
Dayton, Ohio	115	89	18	7	1	-	14	Salt Lake City, Utah	105	67	19	13	2	4	12
Detroit, Mich.	234	141	57	23	4	9	6	Tucson, Ariz.	159	122	23	7	5	2	12
Evansville, Ind.	44	39	4	1	-	-	2	PACIFIC	2,056	1,373	371	204	60	40	169
Fort Wayne, Ind.	51	34	9	3	-	5	3	Berkeley, Calif.	23	16	3	2	1	1	-
Gary, Ind.	22	12	7	2	1	-	-	Fresno, Calif.	140	92	30	10	6	2	12
Grand Rapids, Mich.	69	47	15	5	-	2	4	Glendale, Calif.	19	13	4	1	-	-	2
Indianapolis, Ind.	166	108	35	15	7	1	11	Honolulu, Hawaii	80	59	13	6	2	-	5
Madison, Wis.	38	28	6	2	-	2	-	Long Beach, Calif.	95	61	18	6	4	6	12
Milwaukee, Wis.	130	90	25	6	4	5	14	Los Angeles, Calif.	521	334	95	65	17	4	29
Peoria, Ill.	63	45	16	1	-	1	4	Pasadena, Calif.	37	27	6	3	-	1	3
Rockford, Ill.	79	57	11	7	2	2	8	Portland, Ore.	136	95	22	11	3	5	8
South Bend, Ind.	58	48	2	3	2	3	2	Sacramento, Calif.	185	134	31	13	3	4	21
Toledo, Ohio	94	78	13	1	-	2	10	San Diego, Calif.	117	76	23	11	4	2	12
Youngstown, Ohio	64	51	7	4	-	2	3	San Francisco, Calif.	177	94	36	38	4	5	5
W.N. CENTRAL	762	561	115	48	16	22	62	San Jose, Calif.	171	112	41	9	5	4	30
Des Moines, Iowa	77	58	12	3	2	2	9	Santa Cruz, Calif.	28	22	2	3	1	-	7
Duluth, Minn.	32	25	4	2	-	1	4	Seattle, Wash.	162	112	26	18	3	3	3
Kansas City, Kans.	33	21	6	5	1	-	-	Spokane, Wash.	61	51	4	2	2	2	5
Kansas City, Mo.	120	91	17	8	1	3	10	Tacoma, Wash.	104	75	17	6	5	1	15
Lincoln, Nebr.	42	33	6	1	1	1	8	TOTAL	12,553 <sup>‡</sup>	8,350	2,283	1,185	331	392	911
Minneapolis, Minn.	128	98	18	8	2	2	14								
Omaha, Nebr.	101	80	10	5	3	3	6								
St. Louis, Mo.	113	77	22	7	1	6	7								
St. Paul, Minn.	56	34	13	5	1	3	2								
Wichita, Kans.	60	44	7	4	4	1	2								

\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. 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.

<sup>†</sup>Pneumonia and influenza.

<sup>‡</sup>Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

<sup>§</sup>Total includes unknown ages.

U: Unavailable.



*Influenza Activity — Continued*

or antigen detection should be obtained from ill residents before amantadine is administered. Facilities that do not have information regarding resources available for laboratory diagnosis of influenza should contact their local or state health department.

Influenza surveillance data are updated weekly throughout the influenza season, and summaries are available by computer to subscribers of the Public Health Network and to health-care providers and the public through the CDC Voice Information System, telephone (404) 332-4555.

*Reference*

1. ACIP. Prevention and control of influenza: recommendations of the Immunization Practices Advisory Committee (ACIP). *MMWR* 1992;41(no. RR-9).

*Epidemiologic Notes and Reports*

### **Health Status of Haitian Migrants — U.S. Naval Base, Guantanamo Bay, Cuba, November 1991–April 1992**

In November 1991, following a military coup in Haiti, thousands of Haitians fled that country in small open boats. Most migrants were intercepted by U.S. Coast Guard cutters and taken to the U.S. Naval Base at Guantanamo Bay (GTMO), Cuba (Figure 1), where the U.S. Department of Defense (DOD) established a joint task force (JTF) migrant relief operation.\* This report summarizes the results of health assessments of migrants conducted by the JTF.

JTF personnel provided all medical care and carried out the medical screening required for entry into the United States. For this report, medical data examined were obtained from medical screening on arrival at GTMO, outpatient clinic logs, inpatient hospital records, and results of chest radiographs and laboratory tests required for entry. Results of arrival screening, outpatient visits, and hospital admissions were reviewed weekly to calculate rates for the major categories of illness (e.g., "respiratory," "gastrointestinal," and "dermatologic"). Possible cases of highly contagious illnesses (e.g., varicella and measles) were reported to a designated JTF medical officer immediately.

During November 1991–April 1992, approximately 18,000 migrants received medical care from the JTF. During that period, the camp population fluctuated between approximately 3,000 and 12,000. Overall, an estimated 75% of the migrants were male. Based on persons in the camp during the first month, 6% were 0–9 years of age; 19%, 10–19 years; 48%, 20–29 years; 20%, 30–39 years; and 7%, ≥40 years.

Most persons had been at sea approximately 2–3 days when intercepted; on arrival at GTMO, none were considered to have been overtly malnourished. Acute medical problems encountered by Coast Guard shipboard health-care workers included minor injuries (e.g., abrasions), dehydration, and skin infections. Outpatient visits after arrival primarily were for acute minor illnesses; rates were highest for dermatologic complaints (9 cases per 1,000 persons per week) and respiratory infections (6 per 1,000 per week).

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\*Consisting of DOD, the U.S. Department of Justice, the Public Health Service (including CDC), and other agencies.

*Haitian Migrants — Continued*

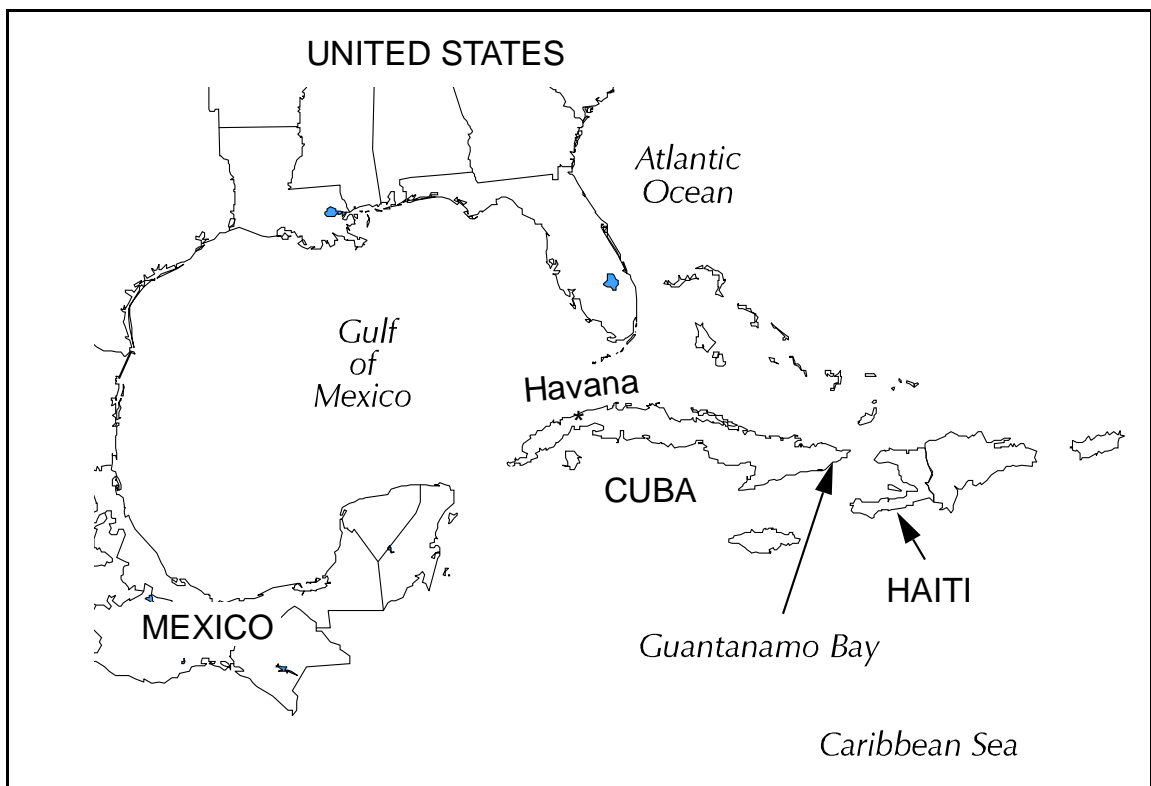
Approximately 2000 persons were treated at the main medical treatment facility, including many who were admitted to ensure compliance with medication schedules because language differences impeded recall and follow-up of patients. Of 1030 patients discharged from the facility from December 16, 1991, through April 4, 1992, fever/malaria (suspected, probable, and confirmed) was diagnosed in 360 (35%); otitis media, upper respiratory infection, or viral syndrome in 100 (10%); active tuberculosis (TB) in 88 (9%); measles in 58 (6%); pneumonia in 40 (4%); varicella in 40 (4%); cellulitis or abscess in 23 (2%); filariasis in 16 (2%); and "other" in 305 (30%). Two deaths occurred during hospitalization (one woman who had an ectopic pregnancy, and one stillborn infant), and 22 live infants were born.

Malaria was the most common discharge diagnosis for patients admitted with fever; monthly rates of smear-positive falciparum malaria in febrile patients varied from 18% to 48%. All 235 patients with laboratory-confirmed malaria responded well to oral chloroquine treatment.

Based on microscopic examination of peripheral blood smears, 29 cases of clinically suspected filariasis were confirmed. Of these, 25 patients were infected with *Mansonella ozzardi*, two with *Wuchereria bancrofti*, and two with both species. This disease commonly manifested as scrotal swelling. The one female patient had elephantiasis of the leg.

Two outbreaks of infectious disease (one each of varicella [during January 27–February 18] and measles [during February 4–March 13]) occurred at GTMO. The measles outbreak was controlled by use of a measles-mumps-rubella (MMR) vaccination program targeted first at children aged <5 years, then at all migrants in the camps. During

**FIGURE 1. Location of U.S. Naval Base at Guantanamo Bay, Cuba, and Haiti**



*Haitian Migrants — Continued*

the vaccination program, all persons received age-appropriate vaccines (i.e., diphtheria and tetanus toxoids and pertussis vaccine or diphtheria and tetanus toxoids, oral polio vaccine, MMR, and *Haemophilus influenzae* type b conjugate vaccine).

Syphilis, human immunodeficiency virus (HIV), and TB tests, as required by the Immigration Act of 1990,<sup>†</sup> were performed for 7315 persons aged  $\geq 15$  years. Of these, 366 (5%) had serologic evidence of past or present syphilis infection and 479 (7%) were positive for HIV. Of the approximately 7700 persons aged  $\geq 2$  years who received chest radiographs, abnormalities suggested pulmonary TB in approximately 5%. Of those, approximately 30% had findings suggestive of active infection and were evaluated further with sputum smears and cultures. Antimicrobial sensitivity testing of the 29 *Mycobacterium tuberculosis* isolates identified six (21%) that were resistant to isoniazid.

*Reported by: DS Herip, CDR, MC, DD Slaten, LCDR, MC, Epidemiology Dept, Navy Environmental and Preventive Medicine Unit No. 2, Norfolk, Virginia. Div of Quarantine, National Center for Prevention Svcs, CDC.*

**Editorial Note:** The joint efforts of the DOD and the Public Health Service at GTMO addressed both the acute health and public health needs of this large group of Haitian migrants. Previous collaborative efforts have played a role in providing emergency health care in circumstances such as the Cuban migration of 1980 and the aftermath of Hurricane Andrew in August 1992 (1-3).

Specific needs in these circumstances include the treatment of acute conditions, provision of vaccinations, and controlling and preventing transmission of TB and other infectious diseases. In addition, information on the demographic characteristics and health status of migrant populations can be distributed to resettlement agencies and state and local health departments in advance of entry of migrants. This information may assist in planning for and addressing acute-care problems (e.g., intestinal parasites, TB, malaria, filariasis, and vaccination needs) during resettlement.

Additional information about the JTF is available from Commander Donald Herip or Lieutenant Commander Douglas Slaten, Epidemiology Department, Navy Environmental and Preventive Medicine Unit No. 2, Building X-336, Norfolk, VA 23511-6288; telephone (804) 444-7671; fax (804) 444-1191.

*References*

1. CDC. Health status of the Cuban refugees. MMWR 1980;29:217-8.
2. CDC. Follow-up on the health status of the Cuban refugees. MMWR 1980;29:255-6.
3. CDC. Rapid health needs assessment following Hurricane Andrew—Florida and Louisiana, 1992. MMWR 1992;41:685-8.

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<sup>†</sup>8 U.S.C. 1101 et seq as amended.



## Notices to Readers

### **International Congress on the Health Effects of Hazardous Waste**

The Agency for Toxic Substances and Disease Registry will sponsor the first International Congress on the Health Effects of Hazardous Waste during May 3 through May 6, 1993, in Atlanta. The objective of the congress is to promote the exchange of findings and recommendations about human exposure to and health effects resulting from hazardous waste.

Presentations and discussions will focus on populations at risk, exposure assessment (including environmental measurements, modeling, and use of biologic markers), health effects resulting from exposure to toxic substances (including toxicologic studies, health effects studies, diagnostic strategies, and risk analysis), risk communication, technology and information transfer, health implications of emerging technologies, gaps in data, and research needs.

Additional information is available from Howard Frumkin, M.D., M.P.H., Emory University School of Public Health, telephone (404) 727-3697; fax (404) 727-8744.

### **Eighth National Conference on Chronic Disease Prevention and Control**

CDC, the Association of State and Territorial Health Officials, and the Association of State and Territorial Chronic Disease Program Directors will cosponsor the Eighth National Conference on Chronic Disease Prevention and Control on November 17 through November 19, 1993, in Kansas City, Missouri. The Kansas Department of Health will host the conference, which is open to the public. The conference will emphasize interactions among federal, state, and local health departments; voluntary health agencies; and professional organizations.

Abstracts are invited on chronic disease epidemiology, interventions, and intervention assessment and evaluation. Deadline for submission is May 3. Additional information is available from CDC's National Center for Chronic Disease Prevention and Health Promotion, Mailstop K-43, 4770 Buford Highway, NE, Atlanta, GA 30341-3724; telephone (404) 488-5390; fax (404) 488-5962.

### **Erratum: Vol. 41, No. RR-13**

In the *MMWR Recommendations and Reports*, "Famine-Affected, Refugee, and Displaced Populations: Recommendations for Public Health Issues," on page 52, the section under "Choice of Vaccine" should read: *Standard titer measles vaccine is recommended. High titer measles vaccines are not recommended because of concerns about their safety.*

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The data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. Inquiries about the *MMWR* Series, including material to be considered for publication, should be directed to: Editor, *MMWR* Series, Mailstop C-08, Centers for Disease Control and Prevention, Atlanta, GA 30333; telephone (404) 332-4555.

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