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MORBIDITY AND MORTALITY WEEKLY REPORT

World No-Tobacco Day — May 31, 1996

World No-Tobacco Day is an annual international event that encourages governments, communities, and other groups to become more aware of the hazards of tobacco use and requests all persons who use tobacco to quit for at least 24 hours. This year's event will be held May 31, 1996; the theme is "Sports and the Arts Without Tobacco."

The World Health Organization (WHO), in collaboration with the United Nations' Educational, Scientific and Cultural Organization and the International Olympic Committee, is cosponsoring World No-Tobacco Day. This year's initiative extends the growing awareness among arts institutions and sports and other event organizers that their events and activities should not be linked to products that impair health and cause premature death (*1*).

Additional information about World No-Tobacco Day 1996 is available from the WHO Regional Office for the Americas (telephone [202] 861-3200); from the National Association of African Americans for Positive Imagery (telephone [215] 477-4113); and from CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion (telephone [770] 488-5705).

Reference

1. World Health Organization. World No-Tobacco Day, 31 May 1996 [Advisory kit]. Geneva: World Health Organization, 1996.

Tobacco Use and Usual Source of Cigarettes Among High School Students — United States, 1995

Approximately 90% of all initiation of tobacco use occurs among persons aged ≤18 years, and the prevalence of tobacco use among adolescents is increasing (*1,2*). Despite laws prohibiting the sale of tobacco to minors in all states and the District of Columbia, most minors are able to purchase tobacco products (*1,3*). To determine current prevalences of the use of cigarettes and smokeless tobacco products (i.e., chewing tobacco and snuff) by high school students, the usual source of cigarettes among those who smoked, and the percentage of students who were asked to show

Tobacco Use — Continued

proof of age when buying cigarettes, CDC analyzed data from the 1995 Youth Risk Behavior Survey (YRBS). This report summarizes the results of the analysis, which indicate a higher prevalence of smoking among high school students in 1995 than in 1993 and 1991, a doubling of the prevalence of current smoking among non-Hispanic black male students during 1991–1995, and that most high school students aged ≤17 years who buy cigarettes from stores are not asked to show proof of age.

YRBS, a component of CDC's Youth Risk Behavior Surveillance System (*4*), biennially measures the prevalence of priority health-risk behaviors among youth through representative national, state, and local surveys. The 1995 national YRBS used a three-stage sample design to obtain a representative sample of 10,904 students in grades 9–12 in the 50 states and the District of Columbia. The school-response rate was 70%, and the student-response rate was 86%. Data were weighted to provide national estimates, and SUDAAN was used to calculate standard errors for determining 95% confidence intervals.

Students completed a self-administered questionnaire about the number of days during the 30 days preceding the survey they had smoked cigarettes or used smokeless tobacco. Current cigarette and smokeless tobacco users were defined as students who reported product use on ≥1 of the 30 days preceding the survey. Frequent cigarette users were defined as students who reported cigarette use on ≥20 of the 30 days preceding the survey. Students also were asked "During the past 30 days, how did you usually get your own cigarettes?" and "When you bought cigarettes in a store during the past 30 days, were you ever asked to show proof of age?" Data were presented only for blacks, whites, and Hispanics because numbers for other racial/ethnic groups were too small for meaningful analysis.

Prevalence of Cigarette Use

The overall prevalences of current cigarette use and frequent cigarette use were 34.8% and 16.1%, respectively. The prevalence of current cigarette use was higher among non-Hispanic white (38.3%) and Hispanic students (34.0%) than among non-Hispanic black students (19.2%) (Table 1). Among non-Hispanic black students, males were more than twice as likely (27.8%) to be current smokers than were females (12.2%). The prevalence of current smoking was higher among students in grade 12 (38.2%) than in grade 9 (31.2%). Frequent cigarette smoking was more common among non-Hispanic white students (19.5%) than among non-Hispanic black (4.5%) or Hispanic students (10.0%); however, non-Hispanic black male students were approximately six times more likely (8.5%) than non-Hispanic black female students (1.3%) to be frequent smokers.

Prevalence of Smokeless Tobacco Use

The overall prevalence of current smokeless tobacco use was 11.4% (Table 1). The prevalence of current smokeless tobacco use was higher among male students (19.7%) than among female students (2.4%) and among non-Hispanic white students (14.5%) than non-Hispanic black (2.2%) or Hispanic students (4.4%). Non-Hispanic white male students were more likely (25.1%) than any other subgroup to report smokeless tobacco use.

Tobacco Use — Continued

TABLE 1. Percentage of high school students who used cigarettes or smokeless tobacco, by sex, race/ethnicity, and grade — United States, Youth Risk Behavior Survey, 1995*

	Cigarette use				Current smokeless tobacco use¶	
	Current†		Frequent§			
Category	%	(95% CI**)	%	(95% CI)	%	(95% CI)
Sex						
Female	34.3	(±3.1%)	15.9	(±3.0%)	2.4	(±1.3%)
Male	35.4	(±2.4%)	16.3	(±2.8%)	19.7	(±2.5%)
Race/Ethnicity††						
White, non-Hispanic	38.3	(±2.6%)	19.5	(±3.5%)	14.5	(±1.7%)
Female	39.8	(±3.2%)	20.8	(±3.8%)	2.5	(±1.1%)
Male	37.0	(±3.3%)	18.4	(±3.7%)	25.1	(±3.0%)
Black, non-Hispanic	19.2	(±3.0%)	4.5	(±1.8%)	2.2	(±1.0%)
Female	12.2	(±3.0%)	1.3	(±0.7%)	1.1	(±1.2%)
Male	27.8	(±5.6%)	8.5	(±3.4%)	3.5	(±1.4%)
Hispanic	34.0	(±5.2%)	10.0	(±3.3%)	4.4	(±1.8%)
Female	32.9	(±5.8%)	9.3	(±4.0%)	3.1	(±3.3%)
Male	34.9	(±8.2%)	10.7	(±4.2%)	5.8	(±2.4%)
Grade						
9	31.2	(±1.7%)	9.6	(±2.7%)	11.2	(±1.7%)
10	33.1	(±3.8%)	13.3	(±3.0%)	9.6	(±2.2%)
11	35.8	(±3.6%)	19.2	(±3.1%)	13.0	(±2.7%)
12	38.2	(±3.5%)	20.9	(±4.0%)	11.2	(±2.8%)
Total	**34.8**	**(±2.2%)**	**16.1**	**(±2.6%)**	**11.4**	**(±1.7%)**

* Sample sizes: 10,473 for current or frequent cigarette use and 10,772 for current smokeless tobacco use. Sample sizes differ because of missing data.
† Smoked cigarettes on ≥1 of the 30 days preceding the survey.
§ Smoked cigarettes on ≥20 of the 30 days preceding the survey.
¶ Used smokeless tobacco on ≥1 of the 30 days preceding the survey.
** Confidence interval.
†† Numbers for other racial/ethnic groups were too small for meaningful analysis.

Usual Source of Cigarettes

Among students aged ≤17 years in grades 9–12 who were current smokers, 38.7% reported that they usually bought cigarettes in a store and 2.2%, from vending machines (Table 2). One third (32.9%) reported that they usually borrowed cigarettes from someone else; 15.8%, that they usually gave "someone else money to buy them for me"; and 4.2%, that they usually stole cigarettes during the 30 days preceding the survey. Non-Hispanic white students were more likely (41.3%) than non-Hispanic black students (27.2%) to report usually obtaining cigarettes by buying them in stores. Students in grades 11 and 12 were more likely (50.8% and 50.4%, respectively) to usually buy cigarettes in stores than were students in grades 9 and 10 (22.2% and 34.6%, respectively), and students who smoked on ≥20 of the 30 days preceding the survey were more likely (60.9%) to usually buy cigarettes in stores than were students who smoked on 1–5 days (15.9%) or 6–19 days (35.2%) of the 30 days preceding the survey.

TABLE 2. Percentage distribution of usual source of cigarettes during the 30 days preceding the survey and percentage asked for proof of age when buying cigarettes in a store, among high school students aged ≤17 years who currently smoked cigarettes*, by sex, race/ethnicity, grade, and frequency of cigarette smoking — United States, Youth Risk Behavior Survey, 1995

	Bought in a store†		Bought in a vending machine		Gave someone else money to buy		Borrowed from someone		Stole		Obtained some other way		Not asked to show proof of age when buying§	
Category	**%**	**(95% CI¶)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Sex														
Female	36.5	(±5.3%)	0.9	(±0.5%)	21.9	(±5.3%)	31.7	(± 3.6%)	1.8	(±1.3%)	7.1	(±2.1%)	81.0	(±5.5%)
Male	40.8	(±5.5%)	3.4	(±1.5%)	10.1	(±2.5%)	33.9	(± 5.8%)	6.4	(±2.1%)	5.4	(±1.3%)	74.7	(±4.1%)
Race/Ethnicity**														
White, non-Hispanic	41.3	(±5.7%)	1.8	(±0.8%)	17.8	(±4.6%)	31.5	(± 5.3%)	3.7	(±1.6%)	3.8	(±1.2%)	76.5	(±5.1%)
Black, non-Hispanic	27.2	(±7.6%)	6.1	(±4.4%)	7.3	(±5.7%)	41.0	(±10.1%)	7.9	(±3.9%)	10.4	(±3.9%)	86.0	(±6.6%)
Hispanic	32.6	(±6.3%)	2.1	(±1.4%)	11.7	(±4.9%)	33.1	(± 6.5%)	5.1	(±2.3%)	15.4	(±3.8%)	79.7	(±8.1%)
Grade														
9	22.2	(±5.1%)	3.9	(±2.2%)	16.2	(±4.5%)	43.0	(± 7.7%)	6.5	(±2.5%)	8.2	(±2.9%)	83.2	(±7.3%)
10	34.6	(±6.3%)	2.0	(±1.5%)	19.4	(±4.3%)	32.9	(± 5.7%)	3.3	(±2.0%)	7.8	(±2.6%)	75.3	(±5.5%)
11	50.8	(±6.5%)	1.6	(±1.2%)	13.2	(±4.5%)	27.2	(± 4.5%)	3.1	(±2.1%)	4.0	(±2.0%)	76.1	(±3.4%)
12	50.4	(±7.0%)	1.0	(±1.7%)	13.3	(±7.8%)	26.9	(± 6.7%)	4.1	(±3.2%)	4.4	(±4.2%)	77.9	(±9.7%)
Frequency of cigarette smoking††														
1– 5	15.9	(±3.4%)	1.9	(±1.4%)	6.6	(±3.4%)	63.1	(± 5.3%)	3.1	(±2.3%)	9.4	(±3.0%)	88.2	(±6.7%)
6–19	35.2	(±5.5%)	1.6	(±0.8%)	19.9	(±4.7%)	34.8	(± 4.6%)	2.3	(±1.7%)	6.3	(±2.9%)	81.9	(±6.9%)
≥20	60.9	(±7.8%)	2.4	(±1.5%)	21.9	(±6.8%)	6.6	(± 2.0%)	5.1	(±2.0%)	3.2	(±2.0%)	71.1	(±5.6%)
Total	**38.7**	**(±4.6%)**	**2.2**	**(±0.9%)**	**15.8**	**(±3.6%)**	**32.9**	**(± 4.0%)**	**4.2**	**(±1.4%)**	**6.2**	**(±1.6%)**	**77.5**	**(±4.0%)**

* Smoked cigarettes on ≥1 of the 30 days preceding the survey (n=2989).
† Convenience store, supermarket, or gas station.
§ Among students who ever bought cigarettes in a store during the 30 days preceding the survey (n=1904).
¶ Confidence interval.
** Numbers for other racial/ethnic groups were too small for meaningful analysis.
†† Number of days of the 30 days preceding the survey on which cigarettes were smoked.

Tobacco Use — Continued

Male students were more likely than female students to report usually buying cigarettes from a vending machine (3.4% and 0.9%, respectively). Female students were more likely (21.9%) to obtain cigarettes by giving someone else money to buy them than were male students (10.1%), non-Hispanic white students more likely (17.8%) than non-Hispanic black students (7.3%), and students who smoked on ≥20 of the 30 days preceding the survey more likely (21.9%) than students who smoked on 1–5 of the 30 days preceding the survey (6.6%).

Students in grade 9 were more likely (43.0%) to report borrowing as their usual source of cigarettes than were students in grades 11 or 12 (27.2% and 26.9%, respectively), and students who smoked on 1–5 of the 30 days preceding the survey were more likely (63.1%) to report borrowing than were students who smoked on ≥20 of the 30 days preceding the survey (6.6%). Male students were more likely (6.4%) to report stealing as a usual source of cigarettes than were female students (1.8%).

Among students aged ≤17 years who were current smokers, 77.5% reported never being asked for proof of age when buying cigarettes in a store during the 30 days preceding the survey.

Reported by: Office on Smoking and Health, and Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report extend findings of a previous report (*2*) and indicate that current cigarette smoking among students in grades 9–12 increased from 27.5% in 1991 (*1*) to 30.5% in 1993 (*4*) to 34.8% in 1995. In addition, the prevalence of current smoking among non-Hispanic black male students nearly doubled from 1991 (14.1%) (*1*) to 1995 (27.8%), but among non-Hispanic black female students remained stable (11.3% in 1991 [*1*] and 12.2% in 1995). Although reasons for differences in the prevalence of smoking among non-Hispanic black males and females are unknown, CDC is funding research activities to help explain these differences.

Differences in the prevalence of tobacco use and sources of cigarettes among racial/ethnic groups underscore the need to assess potential contributing factors such as attitudes of minors, parents, and vendors; enforcement of laws; community norms; marketing practices; and mass media exposure. For example, the finding in this report that non-Hispanic white high school students are more likely to smoke than non-Hispanic black students may be associated with several factors: black youth are less concerned than white youth about the potential weight-controlling effects of cigarette smoking; black parents may be more likely than white parents to advise their children not to smoke; and black community leaders may have responded to the targeting of their communities by tobacco marketing efforts with counter-messages and activities (*5*).

These YRBS findings also are consistent with previous documentation of the sources of the cigarettes obtained by minors and the high percentage of minors who have not been asked for proof of age when purchasing cigarettes (*1,3,6,7*; CDC, unpublished data, 1995). The low proportion of current smokers who usually obtained cigarettes from vending machines may have reflected the generally higher price of cigarettes sold from vending machines, the ease of purchase from over-the-counter sources, and the classification categories used in the questionnaire (*1,3,6*). Stealing has been reported previously as an important source of cigarettes for some minors (*1,6,7*) and is more common in stores that use industry-promoted self-service displays than in stores that use only behind-the-counter vendor-assisted displays (*6,7*;

Tobacco Use — Continued

R. Kropp, North Bay Health Center, unpublished data, 1995; K.M. Cummings, personal communication, 1996; M. Caldwell, personal communication, 1996).

Vendors requiring proof of age is an important method of preventing tobacco sales to minors (*1,6,7*; CDC, unpublished data, 1994). However, in 1995, most (77.5%) students who were current smokers reported that they had not been asked to show proof of age when buying cigarettes during the 30 days preceding the survey.

All states have enacted laws to restrict the access to tobacco products by youth, and most adults support enforcement of these laws. However, enforcement of these laws varies by jurisdiction and, in general, needs to be strengthened (*8*). Federal law (i.e., Synar Amendment*) and implementing regulations require states to develop a strategy and a time frame for achieving an inspection failure rate of ≤20% (*9*).

In August 1995, the Food and Drug Administration (FDA) proposed regulations to reduce for minors both access to and the appeal of cigarettes and smokeless tobacco products (*10*). The FDA is reviewing public comments on the proposed regulations, which would 1) require retailers to verify the age of persons who want to purchase cigarettes or smokeless tobacco products; 2) eliminate "impersonal" methods of sale and distribution that do not readily allow age verifications (e.g., mail orders, self-service displays, free samples, and vending machines); 3) limit advertising in publications with substantial youth readership to a text-only format; 4) ban outdoor advertising of tobacco products within 1000 feet of schools and playgrounds and limit remaining outdoor advertising to a text-only format; 5) prohibit the sale or distribution of all brand-identifiable nontobacco items and services; 6) prohibit the sponsorship of all events using tobacco brand names; and 7) establish an industry-funded education campaign.

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*Public Law 102-321, § 1926 (42 USC § 300x–26).

Compliance with the Clinical Laboratory Improvement Amendments of 1988 for Hemoglobin Screening — California, 1995

The Clinical Laboratory Improvement Amendments of 1988 (CLIA)* established standards for improving the quality of clinical laboratory testing in the United States (*1*). One intent of CLIA was the regulation of smaller, provider-based laboratories, such as those operated by health-care providers in the Child Health and Disability Prevention (CHDP) program.† In 1995, in conjunction with an assessment of county-specific variations in prevalence rates of anemia, the California Department of Health Services conducted a mail survey of CHDP providers to assess compliance with CLIA regulations for hemoglobin screening. This report summarizes the results of that survey, which indicate that, in California, many CHDP providers do not comply with CLIA-mandated quality-assurance practices for hemoglobin screening in their clinical laboratories.

Questionnaires were mailed to each of the 418 CHDP providers that submitted hemoglobin data for ≥100 children aged 6–59 months to the Pediatric Nutrition Surveillance System (PedNSS) during 1993. The questionnaires assessed the type of health-care practice, the method used for hemoglobin screening, and quality-assurance practices. Methods of hemoglobin screening were classified as waived or nonwaived based on CLIA standards. A waived test is one that is a "simple laboratory procedure which...has an insignificant risk of erroneous result." Clinical laboratories conducting only waived tests are exempt from routine federal inspections but must follow the manufacturers' recommendations for quality assurance (e.g., for specimen collection and handling, quality-control procedures, and frequency of calibration) and must obtain a certificate of waiver from the Health Care Financing Administration. A nonwaived test is moderately or highly complex and, therefore, requires a higher level of knowledge, training, and judgment to be performed properly. Clinical laboratories performing nonwaived tests are required to comply with a series of quality standards (including participation in a proficiency testing program) and to obtain a CLIA certificate of registration or accreditation.

Of the 418 CHDP providers surveyed, 344 (78%) returned a completed questionnaire; of these, 16 providers were excluded from analysis because nine used a contracted commercial laboratory to perform their hemoglobin measurements, and seven used hematocrit rather than hemoglobin assessment. Of the 328 providers, 239 (73%) reported performing hemoglobin determinations with a hemoglobinometer method classified as waived under CLIA (i.e., HemoCue™)§, and 89 (27%) reported nonwaived methods (Table 1). Of the providers using a nonwaived method, 59 used a color comparator (e.g., BMS Hemoglobinometer™ or American Optical Hb-Meter™); 23, an automated hematology analyzer (e.g., a Coulter counter); and seven, other instruments.

Of the 239 providers that used a waived hemoglobinometer, 147 (61.5%) reported performing quality-control checks on the instrument at least once daily as recom-

*Public Law 100-578 (42 USC § 201 note).

†CHDP is a state-based Early, Periodic Screening, Diagnosis, and Treatment program for low-income families that provides preventive health-screening services for persons aged 0–21 years.

§Use of trade names and commercial sources is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

CLIA — Continued

TABLE 1. Number and percentage of Child Health and Disability Prevention (CHDP)* providers performing daily quality-control checks and participating in a proficiency testing program, by hemoglobin screening method† — California, 1995

Hemoglobin screening method	Sample size	Perform daily quality-control checks		Participate in a proficiency testing program	
		No.	(%)	No.	(%)
Waived					
Hemoglobinometer	**239**	**147**	**(61.5)**	**75**	**(31.4)§**
Nonwaived	**89**	**37**	**(41.6)**	**37**	**(41.6)**
Color comparator	59	9	(15.3)¶	12	(20.3)
Automated hematology analyzer	23	22	(95.7)	22	(95.7)
Other	7	6	(85.7)	3	(42.9)

*CHDP is a state-based Early, Periodic Screening, Diagnosis, and Treatment program for low-income families that provides preventive health-screening services for persons aged 0–21 years.

†Based on the Clinical Laboratory Improvement Amendments of 1988 (CLIA), hemoglobin screening methods were classified as waived or nonwaived. A waived test is one that is a "simple laboratory procedure which...has an insignificant risk of erroneous result." A nonwaived test is moderately or highly complex and, therefore, requires a higher level of knowledge, training, and judgment to be performed properly.

§For health-care providers using waived methods for hemoglobin screening, proficiency testing is not required under CLIA.

¶Data were not available for one provider.

mended by the manufacturer (Table 1). Although not required under CLIA, 75 (31.4%) of these providers reported participation in a proficiency testing program for hemoglobin. Of the 89 providers that used nonwaived methods, 37 (41.6%) reported performing quality-control checks on the instrument at least once daily, and 37 (41.6%) reported participating in a required proficiency testing program (Table 1). Rates of quality-control checks and proficiency testing were lowest for providers that used color comparators (15.3% and 20.3%, respectively).

Rates of compliance with CLIA regulations varied by type of health-care practice and hemoglobin screening method. For providers using waived methods, the overall rate of compliance with quality-control regulations was 61.5% (range: 50.0% for hospital-based practices to 79.1% for "other.") (Table 2). For providers using nonwaived methods, the overall rate of compliance with CLIA regulations for quality control was 41.6% (range: 35.2% for private practices to 83.3% for hospital-based practices). The overall rate of compliance with proficiency testing was 41.6% (range: 33.8% for private practices to 100.0% for hospital-based practices).

Reported by: MA Gregory, MD, C Bouchard, MS, Children's Medical Svcs Br, A Brydon, MA, Laboratory Field Svcs, K Acree, MD, Chronic Disease Epidemiologist, California State Dept of Health Svcs. Div of Laboratory Systems, Public Health Practice Program Office; Div of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The Clinical Laboratory Improvement Act was enacted in 1967 and mandated efforts to assure the quality of clinical laboratory testing; in 1988, this federal legislation was amended to include additional criteria for regulation and accreditation and to expand its regulatory authority to include all 154,721 clinical laboratories

CLIA — Continued

TABLE 2. Percentage of Child Health and Disability Prevention (CHDP)* providers that perform daily quality-control checks and participate in a proficiency testing program, by type of health-care practice and hemoglobin screening method† — California, 1995

	Hemoglobin screening method					
	Waived			Nonwaived		
Type of practice	Sample size	Performs quality-control checks	Participates in a proficiency testing program§	Sample size	Performs quality-control checks	Participates in a proficiency testing program
Private	133	51.9%	30.1%	71	35.2%¶	33.8%
Hospital-based	6	50.0%	33.3%	6	83.3%	100.0%
HMO- or PPO-based**	18	77.8%	16.7%	0	—	—
County-based	39	69.2%	35.9%	7	42.9%	42.9%
Other	43	79.1%	37.2%	5	80.0%	80.0%
Total	**239**	**61.5%**	**31.4%**	**89**	**41.6%**	**41.6%**

*CHDP is a state-based Early, Periodic Screening, Diagnosis, and Treatment program for low-income families that provides preventive health-screening services for persons aged 0–21 years.
†Based on the Clinical Laboratory Improvement Amendments of 1988 (CLIA), hemoglobin screening methods were classified as waived or nonwaived. A waived test is one that is a "simple laboratory procedure which...has an insignificant risk of erroneous result." A nonwaived test is moderately or highly complex and, therefore, requires a higher level of knowledge, training, and judgment to be performed properly.
§For health-care providers using waived methods for hemoglobin screening, proficiency testing is not required under CLIA.
¶Data were not available for one provider.
**Health maintenance organization or preferred provider organization.

in the United States. Quality assurance ensures accuracy and precision of test measures within a laboratory and comparability across facilities. Elements essential for quality assurance include adherence to manufacturers' directions; maintenance of appropriate temperatures; performance of daily quality-control checks; and, when applicable, participation in a proficiency testing program (*2*). Quality control includes the measurement of materials of a known value to ensure test accuracy; proficiency testing requires participating laboratories to test simulated patient specimens of unknown values and report results to the officiating program. For a hemoglobin screening method to be determined accurate through proficiency testing, 80% of the tested specimens must be within 7% of the target value.¶

The findings in this report indicate that, in California, many CHDP providers do not comply with CLIA-mandated quality-assurance practices for hemoglobin screening in their clinical laboratories. Neither the effect of inadequate quality assurance on the reliability of PedNSS screening hemoglobin data nor their usefulness in public health decision making have been determined. However, unreliable screening results can reduce the sensitivity of hemoglobin tests, resulting in the possible failure to diagnose and treat anemia in children with low hemoglobin values.

¶The average of all test values using similar methodology (i.e., peer group mean) for a given test or analyte.

CLIA — Continued

Although incomplete compliance with CLIA regulations for hemoglobin screening may be related to lack of provider knowledge about CLIA regulations, determinants for noncompliance must be further assessed (CHDP providers, personal communications, March 12–April 6, 1995). In California, possible methods to improve provider compliance with CLIA regulations for hemoglobin screening include 1) distributing through professional organizations information highlighting CLIA regulations and the value of appropriate quality assurance in hemoglobin testing, 2) requiring providers to demonstrate adherence to quality laboratory methods for hemoglobin testing as a criterion for participation as a provider in a state or federally funded program, and 3) requiring ongoing in-service education for providers and their laboratory technicians about CLIA regulations for continuation as a provider in a state or federally funded program.

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Mercury Exposure Among Residents Of a Building Formerly Used for Industrial Purposes — New Jersey, 1995

Potential sources of elemental mercury in residential settings include mercury switches, mercury-containing devices (e.g., thermostats and thermometers), and mercury obtained from laboratories, dental offices, or other industrial sources. In January 1995, pools of elemental mercury were found in a five-story factory building that had been converted to residential use in Hoboken, New Jersey; the building previously had been used to manufacture mercury vapor lamps. This report summarizes the investigation by the New Jersey Department of Health (NJDOH), the U.S. Environmental Protection Agency (EPA), the Agency for Toxic Substances and Disease Registry (ATSDR), the Hoboken Board of Health, and the Hudson Regional Health Commission (HRHC), which identified high levels of mercury vapor in the building and indicated that residents had been exposed to high levels of mercury.*

The five-story brick building included 17 condominium units and one attached townhouse with a total of 32 residents; six were children aged 9 months–8 years. Workers renovating an unoccupied condominium unit on the fifth floor initially found pools of mercury in the subflooring. The tenants' association hired a private contractor to remediate the contamination. During remediation, mercury-contaminated debris (e.g., wood flooring) was removed from the unit. In March 1995, a private consultant for the tenants' association found detectable levels of mercury vapor in units on all five floors. The highest levels of mercury were 5 $\mu g/m^3$ in breathing zone areas and 888 $\mu g/m^3$ in areas where liquid mercury was visible; both of those levels were recorded on the fifth floor. In comparison, for other residential properties known to have been contaminated with mercury, ATSDR has recommended indoor air mercury levels be <0.3 $\mu g/m^3$ (0.0003 mg/m^3) to protect public health (*1,2*).

*Copies of the health consultation report are available from ATSDR, telephone (404) 639-6066.

Mercury Exposure — Continued

In October 1995, drops of elemental mercury were observed in fourth-floor units, including on stove and countertop surfaces. Mercury vapor measured by a private consultant found levels on the fourth floor of 7 μg/m^3 to 26 μg/m^3. In late November, urine mercury levels for five residents of the two fourth-floor units ranged from 11 μg/L to 65 μg/L of urine (normal range: (0–20 μg/L). On December 15, NJDOH was notified of these findings, and on December 22, ATSDR and EPA were asked for assistance. Maximum air mercury levels detected by NJDOH were 10 μg/m^3–50 μg/m^3. With assistance from ATSDR, the Hoboken Board of Health, and HRHC, NJDOH analyzed urine specimens from 29 of the building's 32 residents; these samples indicated concentrations of mercury in the urine ranging from 5.7 μg/L to 102 μg/L. Of the 29 persons, 20 (69%) (including five of the six children), had urine mercury levels ≥20 μg/L; eight of these residents had urine mercury concentrations >56 μg/L.

On December 29, the Hoboken Board of Health, HRHC, NJDOH, and ATSDR provided the residents with results and interpretation of the urine tests and urged residents to relocate as soon as possible. Because the investigation indicated that residents in all parts of the building had been exposed to mercury vapors and because of the risks associated with vapors in the building and contaminated possessions, on January 3, ATSDR issued a health consultation report that the building was an imminent health hazard; on January 4, the city of Hoboken condemned the building. Inclement weather delayed moving and temporary relocation by EPA of the 32 residents and screening of their belongings for contamination until January 12, 1996. Residents were referred for medical evaluation at an environmental and occupational health specialty center. EPA is continuing the investigation to determine whether the building can be remediated.

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Editorial Note: Elemental mercury is a shiny, silver-white odorless liquid. Some evaporation of elemental mercury occurs at room temperature to form mercury vapor, a colorless, odorless gas; the evaporation is enhanced by heat. Mercury vapor, the source of the exposures described in this report, is more dense than air and, therefore, settles on or near the floor. Because of this effect, children especially are at risk for adverse effects of exposure to mercury (*3*).

Mercury affects the central and peripheral nervous systems and the kidneys. Fine tremors in the fingers, eyelids, and lips are early signs of mercury toxicity. With increasing exposure, tremors in the hands and arms may interfere with precise movements and impair skills such as handwriting. Common behavioral symptoms of mercury toxicity include depression, irritability, exaggerated response to stimuli, excessive shyness, insomnia, and emotional instability (*4*). In occupational exposure studies, workers with urine mercury concentrations >56 μg/L exhibited neurotoxic effects such as decreased performance on verbal concept formation and memory tests (*5*). Neurobehavioral tests and other standardized test batteries have been used to assess persons exposed to mercury and other neurotoxic agents in environmental and occupational settings (*6–10*).

Mercury Exposure — Continued

Because of the health effects associated with exposures to mercury and other hazardous substances, these risks must be considered when industrial sites are converted for residential use. The investigation in this report underscores that industrial contamination may not be discovered until after buildings have been converted to residential use. When mercury is discovered in any residential setting, it should be reported immediately to the local health department or poison-control center. Persons at risk for exposure in such settings include residents, former factory workers, and workers involved in the renovation of such buildings.

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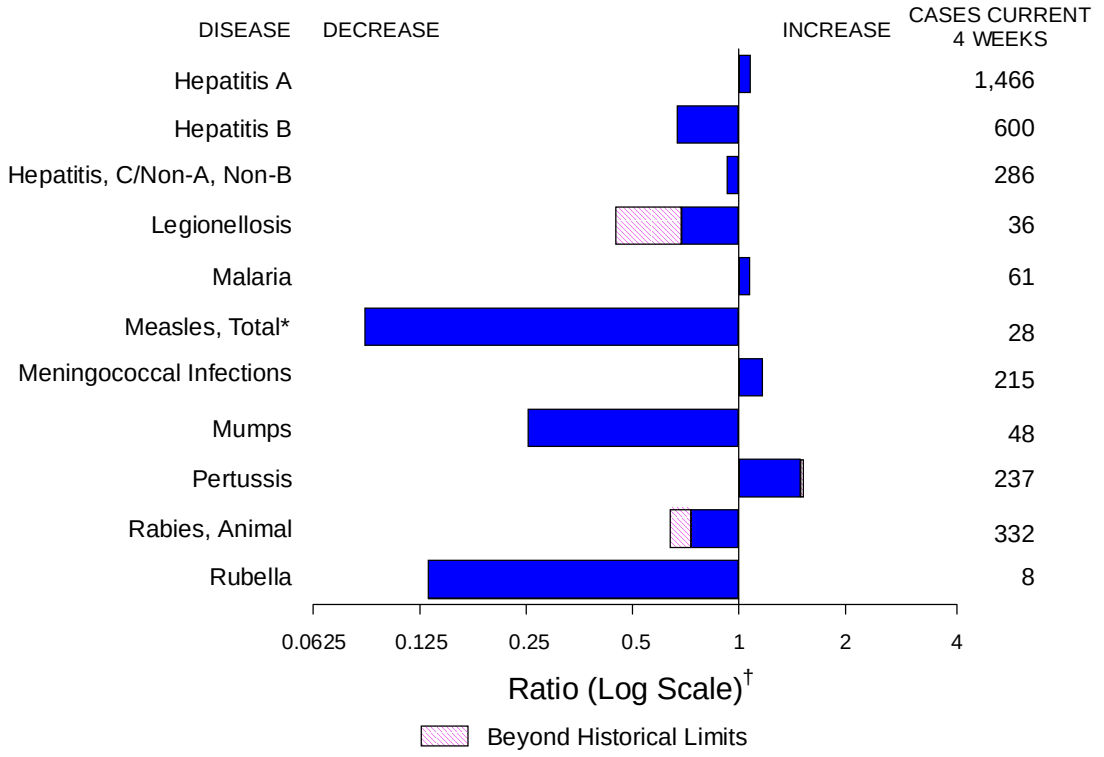
FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending May 18, 1996, with historical data — United States



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

†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 selected notifiable diseases, United States, cumulative, week ending May 18, 1996 (20th Week)

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric*§	92
Brucellosis	24	Plague	-
Cholera	1	Poliomyelitis, paralytic¶	-
Congenital rubella syndrome	1	Psittacosis	10
Cryptosporidiosis*	549	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	61
Encephalitis: California*	-	Streptococcal toxic-shock syndrome*	10
eastern equine*	1	Syphilis, congenital**	-
St. Louis*	-	Tetanus	5
western equine*	-	Toxic-shock syndrome	55
Hansen Disease	35	Trichinosis	11
Hantavirus pulmonary syndrome*†	5	Typhoid fever	108

*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 to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (NCHSTP) (proposed), last update April 30, 1996.
¶No suspected cases of polio reported for 1996.
**Updated quarterly from reports to the Division of STD Prevention, NCHSTP. First quarter 1996 is not yet available.
-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending May 18, 1996, and May 20, 1995 (20th Week)

Reporting Area	AIDS*		Chlamydia	*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB		Legionellosis	
				NETSS†	PHLIS§						
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	21,920	28,773	96,112	310	139	100,352	147,937	1,365	1,545	263	461
NEW ENGLAND	878	1,442	3,656	29	16	2,959	1,981	50	50	13	5
Maine	15	23	-	3	-	18	30	-	-	1	1
N.H.	25	47	274	1	1	58	40	3	5	-	-
Vt.	8	13	-	5	5	24	17	20	4	1	-
Mass.	490	637	2,574	11	10	851	1,131	24	40	6	3
R.I.	61	120	808	3	-	208	203	3	1	5	1
Conn.	279	602	-	6	-	1,800	560	-	-	N	N
MID. ATLANTIC	5,707	7,413	13,201	34	22	11,092	16,183	136	140	58	59
Upstate N.Y.	568	828	N	23	11	2,361	3,445	116	66	13	16
N.Y. City	3,281	3,943	4,121	-	-	2,608	6,128	1	1	-	1
N.J.	1,143	1,661	1,892	11	5	2,192	1,310	-	63	7	13
Pa.	715	981	7,188	N	6	3,931	5,300	19	10	38	29
E.N. CENTRAL	1,874	2,210	14,213	74	30	15,593	30,548	167	132	82	159
Ohio	438	497	3,513	24	8	2,028	9,771	4	5	38	72
Ind.	309	195	3,963	15	6	2,791	3,143	6	-	20	38
Ill.	758	889	-	19	2	6,593	7,876	22	43	2	17
Mich.	257	493	4,101	16	14	2,911	7,251	135	84	19	15
Wis.	112	136	2,636	N	-	1,270	2,507	-	-	3	17
W.N. CENTRAL	548	673	9,622	56	24	4,615	7,944	91	27	17	29
Minn.	109	148	-	13	13	U	1,152	-	2	1	-
Iowa	44	40	1,486	9	4	411	581	71	3	4	9
Mo.	237	277	5,119	9	-	3,070	4,608	14	10	1	8
N. Dak.	4	1	2	1	1	1	11	-	1	-	2
S. Dak.	7	7	545	2	-	79	82	-	1	2	-
Nebr.	40	51	760	6	1	153	387	2	7	7	8
Kans.	107	149	1,710	16	5	901	1,123	4	3	2	2
S. ATLANTIC	5,803	7,434	20,065	16	4	38,094	41,998	93	103	36	75
Del.	114	153	-	-	-	561	774	1	-	-	-
Md.	658	1,119	2,402	N	1	4,905	4,859	-	2	6	14
D.C.	373	461	N	-	-	1,684	1,868	-	-	1	3
Va.	317	547	4,537	N	1	3,677	4,195	5	3	9	4
W. Va.	31	35	-	N	-	160	223	6	20	1	3
N.C.	266	404	-	6	2	7,318	9,467	18	25	3	14
S.C.	283	400	-	1	-	4,375	4,447	14	8	3	14
Ga.	871	890	4,632	4	-	8,722	8,105	-	11	-	9
Fla.	2,890	3,425	8,494	5	-	6,692	8,060	49	34	13	14
E.S. CENTRAL	776	917	10,755	9	4	11,013	16,351	277	526	21	13
Ky.	120	118	2,573	-	-	1,582	1,738	11	12	3	3
Tenn.	283	379	4,802	4	4	4,265	5,138	239	512	9	6
Ala.	244	261	3,380	2	-	5,166	6,441	1	2	-	3
Miss.	129	159	U	3	-	U	3,034	26	-	9	1
W.S. CENTRAL	2,096	2,490	4,838	12	4	7,220	17,662	157	80	2	8
Ark.	97	108	-	6	2	1,017	1,805	1	1	-	2
La.	559	360	2,574	4	2	2,926	4,547	60	47	-	2
Okla.	55	130	2,264	1	-	1,449	U	58	20	2	3
Tex.	1,385	1,892	-	1	-	1,828	11,310	38	12	-	1
MOUNTAIN	648	900	3,338	35	16	2,672	3,492	235	180	12	50
Mont.	8	8	-	3	-	13	32	9	7	1	2
Idaho	10	22	615	11	4	34	52	67	23	-	1
Wyo.	2	5	268	-	-	10	20	80	69	2	2
Colo.	181	268	-	12	5	626	1,151	4	30	4	23
N. Mex.	43	81	-	2	-	352	401	33	27	-	4
Ariz.	197	266	1,420	N	7	1,366	1,281	27	13	3	5
Utah	79	58	254	5	-	49	-	10	6	1	3
Nev.	128	192	781	2	-	222	555	5	5	1	10
PACIFIC	3,590	5,294	16,424	45	19	7,094	11,778	159	307	22	63
Wash.	313	457	3,877	11	5	900	952	26	78	1	5
Oreg.	189	163	-	12	10	177	165	3	22	-	-
Calif.	3,025	4,508	12,117	22	-	5,695	10,099	53	197	21	53
Alaska	10	45	N	-	-	200	305	2	1	-	-
Hawaii	53	121	430	N	4	122	257	75	9	-	5
Guam	3	-	90	N	-	22	42	-	-	-	-
P.R.	423	953	N	5	U	106	235	19	60	-	-
V.I.	6	19	N	-	U	-	15	-	-	-	-
Amer. Samoa	-	-	-	-	U	-	8	-	-	-	-
C.N.M.I.	-	-	N	-	U	11	12	-	-	-	-

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

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (proposed), last update April 30, 1996.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending May 18, 1996, and May 20, 1995 (20th Week)

Reporting Area	Lyme Disease		Malaria		Meningococcal Disease		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	1,273	1,917	361	379	1,476	1,402	3,751	6,526	5,834	6,348	1,937	2,564
NEW ENGLAND	54	166	13	16	52	65	63	85	143	147	227	669
Maine	2	1	3	1	9	5	-	2	4	-	-	-
N.H.	2	11	1	1	1	13	1	1	4	5	33	79
Vt.	-	2	1	-	3	6	-	-	-	1	65	92
Mass.	24	15	5	4	19	21	29	33	58	81	41	254
R.I.	21	35	3	2	-	-	-	1	20	17	22	92
Conn.	5	102	-	8	20	20	33	48	57	43	66	152
MID. ATLANTIC	1,068	1,435	87	96	118	170	166	364	998	1,384	293	583
Upstate N.Y.	561	750	22	20	36	50	24	34	118	147	156	224
N.Y. City	156	131	38	45	20	21	53	187	503	759	-	-
N.J.	77	154	22	21	30	42	46	73	255	253	58	141
Pa.	274	400	5	10	32	57	43	70	122	225	79	218
E.N. CENTRAL	15	66	31	51	197	212	623	1,050	677	554	16	6
Ohio	13	5	6	2	75	57	228	358	108	105	3	1
Ind.	2	7	4	4	32	31	93	101	72	47	1	-
Ill.	-	3	7	34	46	56	199	396	427	380	1	2
Mich.	-	1	10	6	26	41	41	117	39	-	6	2
Wis.	U	50	4	5	18	27	62	78	31	22	5	1
W.N. CENTRAL	36	30	10	9	115	84	168	317	142	226	183	129
Minn.	1	-	3	3	10	16	27	18	27	50	11	8
Iowa	16	1	1	-	25	16	10	25	19	33	97	41
Mo.	2	14	4	4	52	33	122	258	55	85	11	12
N. Dak.	-	-	-	-	2	-	-	-	2	1	16	14
S. Dak.	-	-	-	-	3	3	-	-	13	8	37	30
Nebr.	-	1	-	2	10	6	5	7	7	8	3	-
Kans.	17	14	2	-	13	10	4	9	19	41	8	24
S. ATLANTIC	48	149	78	78	303	228	1,356	1,658	991	1,010	966	838
Del.	1	19	2	1	2	2	16	7	20	20	26	40
Md.	24	87	20	20	25	17	228	155	106	165	232	166
D.C.	1	1	3	8	5	2	68	47	51	38	2	5
Va.	-	10	8	15	27	27	192	271	82	62	221	152
W. Va.	3	12	1	1	8	4	1	1	23	39	38	38
N.C.	10	10	7	6	34	41	419	447	125	113	246	162
S.C.	2	5	3	-	32	31	173	270	40	123	21	50
Ga.	-	4	8	10	81	52	117	297	240	10	118	123
Fla.	7	1	26	17	89	52	142	163	304	440	62	102
E.S. CENTRAL	18	12	10	9	96	83	701	1,563	423	511	71	109
Ky.	2	2	1	-	17	22	55	86	93	110	17	8
Tenn.	6	7	5	4	9	23	425	316	74	171	28	44
Ala.	1	1	1	5	35	21	221	232	161	154	26	55
Miss.	9	2	3	-	35	17	U	929	95	76	-	2
W.S. CENTRAL	7	30	10	5	176	148	482	1,133	678	692	23	47
Ark.	4	2	-	1	23	19	130	177	26	77	3	22
La.	-	-	-	1	33	20	215	422	-	12	10	9
Okla.	2	14	-	-	14	19	63	-	30	-	10	16
Tex.	1	14	10	3	106	90	74	534	622	603	-	-
MOUNTAIN	-	1	24	24	90	111	45	102	194	251	33	41
Mont.	-	-	2	2	3	2	-	3	7	3	5	17
Idaho	-	-	-	1	11	5	1	-	3	6	-	-
Wyo.	-	-	2	-	3	5	1	-	1	1	12	14
Colo.	-	-	12	13	14	23	15	62	25	5	1	-
N. Mex.	-	-	1	3	18	23	-	1	29	26	1	-
Ariz.	-	-	3	2	26	41	25	17	87	115	12	9
Utah	-	-	3	2	9	5	-	-	10	10	-	-
Nev.	-	1	1	1	6	7	3	19	32	85	2	1
PACIFIC	27	28	98	91	329	301	147	254	1,588	1,573	125	142
Wash.	1	1	6	8	45	49	2	6	85	96	-	-
Oreg.	7	1	8	6	61	55	4	6	37	21	-	-
Calif.	18	26	79	69	217	190	141	241	1,378	1,360	117	136
Alaska	-	-	1	1	4	5	-	1	24	29	8	6
Hawaii	1	-	4	7	2	2	-	-	64	67	-	-
Guam	-	-	-	-	1	3	2	1	28	5	-	-
P.R.	-	-	-	-	3	12	54	128	58	86	10	27
V.I.	-	-	-	-	-	-	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	2	-	-
C.N.M.I.	-	-	-	-	-	-	1	2	-	13	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 18, 1996, and May 20, 1995 (20th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (viral), by type				Measles (Rubeola)			
			A		B		Indigenous		Imported†	
	Cum. 1996*	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
UNITED STATES	520	534	9,554	9,843	3,258	3,756	12	110	-	14
NEW ENGLAND	12	29	124	81	56	84	-	5	-	1
Maine	2	1	10	13	2	2	-	-	-	-
N.H.	7	7	3	5	4	9	-	-	-	-
Vt.	-	1	3	3	2	1	-	1	-	-
Mass.	3	7	64	32	17	30	-	3	-	1
R.I.	-	-	4	10	4	7	-	-	-	-
Conn.	-	13	40	18	27	35	-	1	-	-
MID. ATLANTIC	78	57	620	609	495	503	-	4	-	4
Upstate N.Y.	24	15	162	133	128	125	-	-	-	-
N.Y. City	10	14	267	290	233	172	-	4	-	3
N.J.	26	9	121	84	88	128	-	-	-	-
Pa.	18	19	70	102	46	78	-	-	-	1
E.N. CENTRAL	73	99	833	1,312	351	456	1	4	-	3
Ohio	48	50	385	732	49	43	-	2	-	-
Ind.	3	14	131	60	57	97	-	-	-	-
Ill.	14	25	130	264	57	123	1	1	-	1
Mich.	3	10	136	155	164	163	-	-	-	2
Wis.	5	-	51	101	24	30	-	1	-	-
W.N. CENTRAL	20	29	720	585	192	245	-	6	-	1
Minn.	7	11	35	63	13	20	-	4	-	1
Iowa	6	2	175	32	69	17	-	-	-	-
Mo.	5	13	319	414	83	175	-	2	-	-
N. Dak.	-	-	21	12	-	2	-	-	-	-
S. Dak.	1	-	34	11	-	1	-	-	-	-
Nebr.	1	1	84	12	8	14	-	-	-	-
Kans.	-	2	52	41	19	16	-	-	-	-
S. ATLANTIC	127	142	380	431	494	497	-	2	-	-
Del.	1	-	5	7	1	3	-	1	-	-
Md.	30	40	79	79	118	109	-	1	-	-
D.C.	4	-	15	4	15	10	-	-	-	-
Va.	4	14	58	74	57	35	-	-	-	-
W. Va.	4	6	10	10	11	21	-	-	-	-
N.C.	14	18	43	49	129	116	-	-	-	-
S.C.	3	-	29	15	38	20	-	-	-	-
Ga.	60	31	13	43	7	49	-	-	-	-
Fla.	7	33	128	150	118	134	-	-	-	-
E.S. CENTRAL	9	4	738	503	320	413	-	-	-	-
Ky.	2	1	14	25	26	42	-	-	-	-
Tenn.	1	-	516	401	204	319	-	-	-	-
Ala.	5	3	89	46	20	52	-	-	-	-
Miss.	1	-	119	31	70	-	-	-	-	-
W.S. CENTRAL	19	24	1,719	1,018	324	385	-	-	-	2
Ark.	-	4	231	85	31	17	-	-	-	-
La.	-	1	48	32	40	64	-	-	-	-
Okla.	18	15	717	213	38	49	-	-	-	-
Tex.	1	4	723	688	215	255	-	-	-	2
MOUNTAIN	60	47	1,261	1,665	370	311	1	10	-	1
Mont.	-	-	50	25	4	9	-	-	-	-
Idaho	1	2	119	172	53	38	1	1	-	-
Wyo.	30	2	17	58	14	8	-	-	-	-
Colo.	5	7	U	207	U	51	-	2	-	1
N. Mex.	7	6	203	315	143	132	-	-	-	-
Ariz.	9	16	431	475	88	40	-	3	-	-
Utah	6	5	364	363	54	22	-	-	-	-
Nev.	2	9	77	50	14	11	-	4	-	-
PACIFIC	122	103	3,159	3,639	656	862	10	79	-	2
Wash.	1	4	217	224	46	62	10	14	-	-
Oreg.	17	12	452	783	31	49	-	1	-	-
Calif.	102	85	2,426	2,546	575	740	-	1	-	1
Alaska	-	-	27	15	2	5	-	63	-	-
Hawaii	2	2	37	71	2	6	-	-	-	1
Guam	-	-	2	2	-	-	U	-	U	-
P.R.	1	3	41	21	164	132	-	1	-	-
V.I.	-	-	-	-	-	2	U	-	U	-
Amer. Samoa	-	-	-	5	-	-	U	-	U	-
C.N.M.I.	10	3	1	14	5	6	U	-	U	-

*Of 109 cases among children aged <5 years, serotype was reported for 27 and of those, 5 were type b.
†For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 18, 1996, and May 20, 1995 (20th Week)

Reporting Area	Measles (Rubeola), cont'd. Total		Mumps			Pertussis			Rubella		
	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
UNITED STATES	124	190	10	242	360	94	1,075	1,011	3	67	38
NEW ENGLAND	6	4	-	-	4	1	172	158	-	8	6
Maine	-	-	-	-	2	-	8	18	-	-	-
N.H.	-	-	-	-	-	-	17	12	-	-	1
Vt.	1	-	-	-	-	-	7	5	-	2	-
Mass.	4	2	-	-	1	1	137	116	-	4	2
R.I.	-	2	-	-	-	-	-	-	-	-	-
Conn.	1	-	-	-	1	-	3	7	-	2	3
MID. ATLANTIC	8	3	1	28	49	-	88	89	-	4	3
Upstate N.Y.	-	-	1	9	14	-	49	51	-	3	-
N.Y. City	7	-	-	4	7	-	14	15	-	1	2
N.J.	-	3	-	-	7	-	-	6	-	-	1
Pa.	1	-	-	15	21	-	25	17	-	-	-
E.N. CENTRAL	7	6	3	64	60	5	134	112	-	3	-
Ohio	2	-	-	26	19	1	56	37	-	-	-
Ind.	-	-	-	5	5	2	12	9	-	-	-
Ill.	2	-	2	15	18	2	49	23	-	1	-
Mich.	2	4	1	18	18	-	12	31	-	2	-
Wis.	1	2	-	-	-	-	5	12	-	-	-
W.N. CENTRAL	7	1	-	3	23	3	52	69	-	1	-
Minn.	5	-	-	1	2	3	35	27	-	-	-
Iowa	-	-	-	-	4	-	2	1	-	1	-
Mo.	2	1	-	-	14	-	9	16	-	-	-
N. Dak.	-	-	-	2	-	-	-	5	-	-	-
S. Dak.	-	-	-	-	-	-	1	7	-	-	-
Nebr.	-	-	-	-	3	-	1	3	-	-	-
Kans.	-	-	-	-	-	-	4	10	-	-	-
S. ATLANTIC	2	1	3	28	58	2	113	98	-	12	6
Del.	1	-	-	-	-	-	7	5	-	-	-
Md.	1	-	2	12	16	-	45	12	-	-	-
D.C.	-	-	-	-	-	-	-	2	-	1	-
Va.	-	-	-	3	13	-	5	7	-	-	-
W. Va.	-	-	-	-	-	-	2	-	-	-	-
N.C.	-	-	-	-	16	-	25	49	-	-	-
S.C.	-	-	1	4	6	-	5	10	-	1	-
Ga.	-	-	-	2	-	2	6	-	-	-	-
Fla.	-	1	-	7	7	-	18	13	-	10	6
E.S. CENTRAL	-	-	-	11	10	1	37	26	-	-	-
Ky.	-	-	-	-	-	-	23	2	-	-	-
Tenn.	-	-	-	1	-	-	9	4	-	-	-
Ala.	-	-	-	4	4	1	2	20	-	-	-
Miss.	-	-	-	6	6	-	3	-	N	N	N
W.S. CENTRAL	2	2	-	11	26	1	21	51	1	2	2
Ark.	-	2	-	-	5	-	2	7	-	-	-
La.	-	-	-	8	6	-	3	1	-	1	-
Okla.	-	-	-	-	-	-	4	7	-	-	-
Tex.	2	-	-	3	15	1	12	36	1	1	2
MOUNTAIN	11	57	-	19	13	22	142	237	-	2	4
Mont.	-	-	-	-	1	-	4	3	-	-	-
Idaho	1	-	-	-	2	17	65	71	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-
Colo.	3	17	-	1	-	-	18	33	-	-	-
N. Mex.	-	29	N	N	N	-	26	23	-	-	-
Ariz.	3	10	-	1	1	5	9	96	-	1	3
Utah	-	-	-	2	2	-	3	9	-	-	1
Nev.	4	1	-	15	7	-	17	2	-	1	-
PACIFIC	81	116	3	78	117	59	316	171	2	35	17
Wash.	14	16	-	8	9	33	120	30	-	1	-
Oreg.	1	1	N	N	N	-	25	13	-	-	1
Calif.	2	97	3	54	96	25	162	115	2	32	14
Alaska	63	-	-	2	11	-	-	-	-	-	-
Hawaii	1	2	-	14	1	1	9	13	-	2	2
Guam	-	-	U	2	3	U	-	-	U	-	-
P.R.	1	7	-	1	1	-	-	8	-	-	-
V.I.	-	-	U	-	2	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 121 U.S. cities,* week ending May 18, 1996 (20th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	611	418	104	58	17	14	29
Boston, Mass.	183	101	46	21	9	6	9
Bridgeport, Conn.	39	23	7	5	2	2	1
Cambridge, Mass.	23	18	4	1	-	-	2
Fall River, Mass.	35	31	3	1	-	-	-
Hartford, Conn.	45	30	4	8	1	2	2
Lowell, Mass.	20	14	3	1	1	1	-
Lynn, Mass.	14	11	1	2	-	-	-
New Bedford, Mass.	28	20	4	3	1	-	1
New Haven, Conn.	33	26	4	3	-	-	3
Providence, R.I.	64	47	12	3	1	1	-
Somerville, Mass.	1	-	1	-	-	-	-
Springfield, Mass.	39	31	2	4	1	1	3
Waterbury, Conn.	35	29	3	1	1	1	1
Worcester, Mass.	52	37	10	5	-	-	7
MID. ATLANTIC	2,460	1,663	470	226	47	54	132
Albany, N.Y.	43	32	6	4	1	-	3
Allentown, Pa.	17	14	3	-	-	-	-
Buffalo, N.Y.	77	59	13	3	-	2	3
Camden, N.J.	27	20	3	2	1	1	1
Elizabeth, N.J.	18	11	5	1	1	-	-
Erie, Pa.§	46	35	8	1	-	2	2
Jersey City, N.J.	36	21	8	6	-	1	1
New York City, N.Y.	1,292	858	254	131	26	23	53
Newark, N.J.	64	30	20	8	3	3	2
Paterson, N.J.	25	19	2	3	1	-	1
Philadelphia, Pa.	400	246	85	43	10	16	27
Pittsburgh, Pa.§	60	49	7	4	-	-	8
Reading, Pa.	8	7	1	-	-	-	1
Rochester, N.Y.	128	98	19	7	1	3	9
Schenectady, N.Y.	17	12	3	2	-	-	-
Scranton, Pa.§	28	25	3	-	-	-	3
Syracuse, N.Y.	98	70	20	4	2	2	12
Trenton, N.J.	33	22	5	5	-	1	4
Utica, N.Y.	14	12	2	-	-	-	-
Yonkers, N.Y.	29	23	3	2	1	-	2
E.N. CENTRAL	2,086	1,416	412	157	51	48	135
Akron, Ohio	47	38	5	2	-	2	-
Canton, Ohio	41	30	7	4	-	-	3
Chicago, Ill.	418	251	105	37	13	10	35
Cincinnati, Ohio	92	64	22	4	-	2	8
Cleveland, Ohio	129	83	25	17	2	2	5
Columbus, Ohio	233	150	46	24	4	9	8
Dayton, Ohio	129	100	19	6	3	1	12
Detroit, Mich.	195	116	41	26	9	3	13
Evansville, Ind.	45	34	6	3	2	-	3
Fort Wayne, Ind.	51	34	11	2	2	2	5
Gary, Ind.	18	7	8	2	-	1	1
Grand Rapids, Mich.	50	42	5	1	2	-	2
Indianapolis, Ind.	129	90	25	7	-	7	8
Madison, Wis.	51	36	9	5	1	-	5
Milwaukee, Wis.	123	86	30	3	2	2	7
Peoria, Ill.	52	38	5	3	2	4	1
Rockford, Ill.	57	45	7	2	3	-	3
South Bend, Ind.	57	43	8	1	4	1	6
Toledo, Ohio	102	75	20	4	2	1	8
Youngstown, Ohio	67	54	8	4	-	1	2
W.N. CENTRAL	783	557	133	51	14	19	60
Des Moines, Iowa	105	72	23	3	2	5	8
Duluth, Minn.	30	22	7	-	-	1	3
Kansas City, Kans.	36	16	12	4	2	2	1
Kansas City, Mo.	99	64	18	6	-	2	5
Lincoln, Nebr.	35	23	8	4	-	-	2
Minneapolis, Minn.	165	130	21	8	2	4	17
Omaha, Nebr.	86	64	10	9	2	1	4
St. Louis, Mo.	109	75	17	10	3	4	11
St. Paul, Minn.	47	36	9	1	1	-	4
Wichita, Kans.	71	55	8	6	2	-	5
S. ATLANTIC	1,274	780	266	144	40	43	80
Atlanta, Ga.	169	93	40	28	4	4	1
Baltimore, Md.	172	107	33	24	6	2	20
Charlotte, N.C.	84	56	10	11	3	4	8
Jacksonville, Fla.	154	92	25	24	5	7	3
Miami, Fla.	111	57	26	21	4	3	5
Norfolk, Va.	61	36	17	1	2	5	5
Richmond, Va.	90	53	20	5	5	7	3
Savannah, Ga.	58	35	12	6	4	1	8
St. Petersburg, Fla.	56	36	15	2	1	2	2
Tampa, Fla.	169	124	31	8	2	4	22
Washington, D.C.	134	88	27	13	2	4	3
Wilmington, Del.	16	3	10	1	2	-	-
E.S. CENTRAL	726	480	141	64	22	19	60
Birmingham, Ala.	120	73	21	13	7	6	4
Chattanooga, Tenn.	69	50	15	4	-	-	7
Knoxville, Tenn.	65	43	9	8	5	-	9
Lexington, Ky.	70	49	14	4	1	2	6
Memphis, Tenn.	171	105	35	16	6	9	13
Mobile, Ala.	51	37	9	4	1	-	3
Montgomery, Ala.	33	24	8	1	-	-	4
Nashville, Tenn.	147	99	30	14	2	2	14
W.S. CENTRAL	1,414	917	270	152	40	35	90
Austin, Tex.	88	56	15	13	2	2	10
Baton Rouge, La.	55	45	4	4	-	2	-
Corpus Christi, Tex.	61	40	12	5	4	-	3
Dallas, Tex.	196	123	36	22	9	6	6
El Paso, Tex.	69	48	13	5	3	-	7
Ft. Worth, Tex.	86	60	17	4	3	2	4
Houston, Tex.	366	215	83	47	7	14	30
Little Rock, Ark.	U	U	U	U	U	U	U
New Orleans, La.	134	84	27	19	3	1	-
San Antonio, Tex.	207	138	34	24	4	7	15
Shreveport, La.	58	39	12	5	2	-	6
Tulsa, Okla.	94	69	17	4	3	1	9
MOUNTAIN	951	661	142	92	33	22	55
Albuquerque, N.M.	100	67	19	13	1	-	3
Colo. Springs, Colo.	55	39	7	5	1	3	3
Denver, Colo.	139	90	18	20	7	4	8
Las Vegas, Nev.	149	104	23	17	4	1	5
Ogden, Utah	21	17	2	1	-	1	1
Phoenix, Ariz.	191	123	40	13	9	5	11
Pueblo, Colo.	27	22	4	1	-	-	4
Salt Lake City, Utah	124	87	15	12	7	3	13
Tucson, Ariz.	145	112	14	10	4	5	7
PACIFIC	1,776	1,252	287	154	41	40	143
Berkeley, Calif.	15	5	7	-	1	2	2
Fresno, Calif.	68	57	7	2	2	-	6
Glendale, Calif.	43	35	5	3	-	-	4
Honolulu, Hawaii	68	55	7	6	-	-	8
Long Beach, Calif.	64	48	9	6	-	-	16
Los Angeles, Calif.	652	450	104	59	18	21	40
Pasadena, Calif.	26	20	2	4	-	-	3
Portland, Oreg.	130	99	17	8	5	1	4
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	135	93	19	12	5	5	9
San Francisco, Calif.	125	75	27	18	3	2	11
San Jose, Calif.	173	121	27	14	5	6	21
Santa Cruz, Calif.	34	27	5	2	-	-	6
Seattle, Wash.	115	72	28	12	1	2	4
Spokane, Wash.	60	46	10	4	-	-	7
Tacoma, Wash.	68	49	13	4	1	1	2
TOTAL	12,081¶	8,144	2,225	1,098	305	294	784

*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.
†Pneumonia and influenza.
§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.
¶Total includes unknown ages.
U: Unavailable -: no reported cases

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