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WEEKLY REPORT

Adverse Events Associated with Ingestion of Gamma-Butyrolactone — Minnesota, New Mexico, and Texas, 1998–1999

Products containing gamma-butyrolactone (GBL)* are marketed for many claimed purposes, including to induce sleep, release growth hormone, enhance sexual activity and athletic performance, relieve depression, and prolong life. GBL is converted by the body into gamma-hydroxybutyrate (GHB), a drug banned outside of clinical trials approved by the Food and Drug Administration (FDA). Recognized manifestations of GHB toxicity include bradycardia, hypothermia, central nervous system depression, and uncontrolled movements (*1*). This report describes seven cases of GBL toxicity involving the product "Revivarant," which is labeled as containing 1.82 g of GBL per fluid ounce, reported from two hospital emergency departments (EDs) in Minnesota during October–December 1998 and summarizes an additional 34 cases of GBL toxicity reported to poison centers in New Mexico and Texas during October 1998–January 1999.

Minnesota

Patient 1. On November 26, 1998, a 24-year-old man vomited and had seizures shortly after drinking 3–4 oz of Revivarant. His behavior became unusual, and he alternated between extreme agitation and profound calm. Paramedics noted that his skin was warm, flushed, and profusely diaphoretic, and he had bradycardia (pulse as low as 45 beats per minute [bpm]). Systolic blood pressure was 110 mm Hg. Transcutaneous oxygen saturations (SpO_2) were 96% on room air, and blood glucose by fingerstick was 90 mg/dL. During transport to an ED, he had periods of combativeness lasting 30 to 60 seconds followed by coma lasting 1–3 minutes. In the ED, he was unconscious with spontaneous eye opening, a positive withdrawal reflex, and no speech (Glasgow Coma Scale of 7); rectal temperature was 94.8 F (34.9 C). A urine toxicology screen and blood ethanol test were negative. He was intubated and admitted to the intensive-care unit (ICU) with a diagnosis of toxic encephalopathy. During the next 7 hours, his heart rate increased from 42 to 116 bpm and he became more alert. He had no recollection of events except for having ingested Revivarant. He was discharged with normal mental status.

*Also is known as dihydro-2(3H)-furanone; 4-butanolide; 2(3H)-furanone, dihydro; tetrahydro-2-furanone; and butyrolactone gamma.

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Patient 2. On December 12, 1998, a 46-year-old woman had a seizure and lost consciousness after drinking approximately 2.7 oz of Revivarant in conjunction with ethanol. Paramedics found her unconscious and in severe respiratory depression with a pulse of 54 bpm. Oxygen was administered by mask; she had an SpO_2 of 87%. On arrival in the ED, physical examination identified sinus bradycardia (54 bpm); temperature of 96.1 F (35.6 C); and miotic pupils. A serum ethanol level was 0.11%. She was admitted to the ICU, mechanically ventilated through the night, and awoke in improved condition the next morning; she was discharged with no memory of the events.

Patient 3. On November 8, 1998, a 31-year-old man drank approximately 1 oz of Revivarant, four beers, and a large sip of wine. Shortly thereafter, he gradually lost consciousness and subsequently fell. He regained consciousness but had involuntary muscle movements and episodes of confusion. Paramedics noted that he was ambulatory but confused. On physical examination in the ED, he was agitated, anxious, and unable to recall the preceding events. His shoulders twitched, and he had a small abrasion below his left eye. He had a pulse of 64 bpm and hypothermia (oral temperature of 95.2 F [35.1 C]). Breath ethanol level was 0.08%. He denied previous GBL use or illicit drug use. He recovered completely and was discharged.

Patients 4 and 5. On October 31, 1998, a 24-year-old man (patient 4) and a 26-year-old man (patient 5) each drank 10–13 oz of Revivarant while drinking alcohol at a bar. On leaving the bar, witnesses observed them fall and become unresponsive. On arrival at the ED, they alternated between somnolence and confusion. When awake, neither patient could consistently follow commands. Patient 4 had fecal incontinence. Vital signs for both patients were within normal limits. Breath ethanol levels were 0.09% (patient 4) and 0.15% (patient 5). Neither patient had a history of using medications or illicit drugs. After 2 hours of observation, the patients recovered but were unable to recall most of the evening's events.

Patients 6 and 7. On December 12, 1998, a 19-year-old woman (patient 6) and a 22-year-old woman (patient 7) were brought to an ED by friends because of vomiting and decreased levels of consciousness. These symptoms followed ingestion of Revivarant (2 oz by patient 6 and an unknown amount by patient 7). Patient 6 had drank one beer; patient 7 had had no ethanol. Vital signs were normal except for respiratory depression. On physical examination, patient 6 was lethargic and disoriented. Patient 7 exhibited intermittent periods of extreme agitation, necessitating chemical treatment and physical restraint, punctuated by moments of calm during which her attention focused on minor details. Mental changes for both patients resolved, and they were discharged approximately 4 hours after arrival.

New Mexico

From October 3, 1998, through January 29, 1999, the New Mexico Poison Center identified 14 cases of adverse events resulting in an ED visit among persons who had ingested GBL-containing products. Ten (71%) of the cases were reported in January. Patients' ages ranged from 14 to 36 years; nine were male. Products used included "Firewater" (11 cases), "Blue Nitro Vitality" (two), and "RenewTrient" (one). The approximate amount ingested ranged from 1 to 10 oz (mean: 3 oz). Five (36%) persons also had ingested ethanol and/or other drugs. Most of the patients were discharged from the ED within 13 hours of arrival; three were hospitalized. The most common

Gamma-Butyrolactone — Continued

symptoms and signs were nausea/vomiting (10 [71%]), obtundation (nine [64%]), bradycardia (seven [50%]), prolonged unconsciousness (six [43%]), syncope (six [43%]), seizures (four [29%]), confusion (four [29%]), combativeness (four [29%]), respiratory depression (three [21%]), amnesia (two [14%]), and euphoria (two [14%]). One person had cardiac arrest, one had respiratory arrest, and one had a motor-vehicle crash associated with the effects resulting from use of a GBL-containing product. No deaths were reported.

Texas

From October 2, 1998, through January 24, 1999, Texas poison-control centers identified 20 adverse events resulting in ED visits among persons who had ingested GBL-containing products. Twelve (60%) of the cases were reported in January. Patients' ages ranged from 11 to 41 years; 13 were male. Products known to have been used included "RenewTrient" (six cases), "Revivarant" (four), "Revivarant-G" (two), and "Blue Nitro Vitality" (two). Ten persons also ingested ethanol and/or other drugs. Ten patients were admitted to the hospital from the ED. The most common symptoms and signs were obtundation (13 [65%]), prolonged unconsciousness (nine [45%]), respiratory depression (nine [45%]), anxiety/nervousness (seven [35%]), nausea/vomiting (six [30%]), confusion (six [30%]), tremors/twitching (four [20%]), tachycardia (three [15%]), and combativeness (three [15%]). One person had respiratory arrest; no deaths were reported.

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Editorial Note: GBL is metabolized to GHB in the body, but because of better absorption GBL has greater bioavailability than GHB on an equimolar basis (*2*). Clinical effects of GHB appear to be dose-related and include reports of vomiting, hypotonia, tremors, seizures, aggression, impairment of judgment, coma, respiratory depression, hypothermia, and bradycardia (*1*). GHB mixed with ethanol acts synergistically to produce central nervous system and respiratory depression (*3*). Symptoms usually resolve with supportive care within 2–96 hours (*4*). Death occurring when GHB was the sole intoxicant also has been reported (*5*). Toxic effects of GBL would be expected to be similar or identical to those of GHB, but previous clinical experience is limited (*6,7*). There is no antidote for GHB; treatment consists of supportive therapy until symptoms of toxicity subside. A withdrawal syndrome, which can include insomnia, tremor, and anxiety, has been reported following discontinuance of GHB in chronic, high-dose users (*8*).

GBL is an industrial and household solvent of acrylate polymers, and unintentional poisonings have been reported (*6,9*). It also is marketed as a dietary supplement at health food stores and on the World-Wide Web under several trade names. Although

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labeled as dietary supplements, GBL-containing products are illegally marketed, unapproved new drugs that have been involved in at least 55 reports of adverse events, including one death (*10*). On January 21, 1999, FDA asked manufacturers to recall their GBL-containing products and warned consumers through press releases to avoid taking these products (*10*). Public education efforts should inform consumers that FDA review procedures for drugs are different than those used for dietary supplements. Consumers should be alert to the potential dangers of these products and understand that terms such as "natural" do not necessarily imply safety. Physicians should counsel patients about these products and be prepared to recognize and treat the toxic reactions that some might produce. Chronic GBL users should be monitored for withdrawal symptoms when discontinuing use of the product. Depending on the severity of the withdrawal symptoms, medical intervention may be required. Physicians are encouraged to report serious adverse events associated with these products to FDA's MedWatch program, telephone (800) 332-1088.

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Decline in Cigarette Consumption Following Implementation of a Comprehensive Tobacco Prevention and Education Program — Oregon, 1996–1998

In November 1996, residents of Oregon approved a ballot measure increasing the cigarette tax by 30¢ (to 68¢ per pack). The measure stipulated that 10% of the additional tax revenue be allocated to the Oregon Health Division (OHD) to develop and implement a tobacco-use prevention program. In 1997, OHD created Oregon's

Cigarette Consumption — Continued

Tobacco Prevention and Education Program (TPEP), a comprehensive, community-based program modeled on the successful tobacco-use prevention programs in California and Massachusetts (*1,2*). To assess the effects of the tax increase and TPEP in Oregon, OHD evaluated data on the number of packs of cigarettes taxed before (1993–1996) and after (1997–1998) the ballot initiative and implementation of the program. Oregon's results also were compared with national data. This report summarizes the results of the analysis, which indicate that consumption of cigarettes in Oregon declined substantially after implementation of the excise tax and TPEP and exceeded the national rate of decline.

OHD obtained data on the sale of Oregon cigarette tax stamps from the Oregon Department of Revenue for 1993–1998. OHD also obtained data on the proportion of revenue received at the old and new rates after the tax change (February 1997) to calculate the number of packs sold each month. Per capita consumption was calculated by dividing the number of packs sold by the total population of Oregon each year (*3*).

National comparison estimates were generated using data from the Tobacco Institute on state tax receipts for wholesale cigarette deliveries. Reliable figures were available through December 1997 (*4*). Data from Oregon and the other three states (Arizona, California, and Massachusetts) with tobacco-use prevention programs funded through state initiatives were excluded from the comparison estimates. National per capita consumption was calculated by dividing the total number of packs sold by the total population in the remaining 46 states and the District of Columbia (*5*). Calculations for Oregon for 1996–1998 represent the 1 year before and the 2 years after the tax increase.

From 1993 to 1996, taxable per capita consumption of cigarettes increased 2.2% in Oregon and decreased 0.6% in the 46 remaining states and the District of Columbia. In Oregon, from 1996 to 1998, taxable per capita cigarette consumption declined 11.3% (from 92 packs to 82 packs) (Figure 1). Despite a 2.7% increase in the state's population, 25 million fewer cigarette packs were sold in Oregon in 1998 than in 1996. In the United States during 1996–1997, per capita consumption declined 1.0% (from 93 packs to 92 packs).

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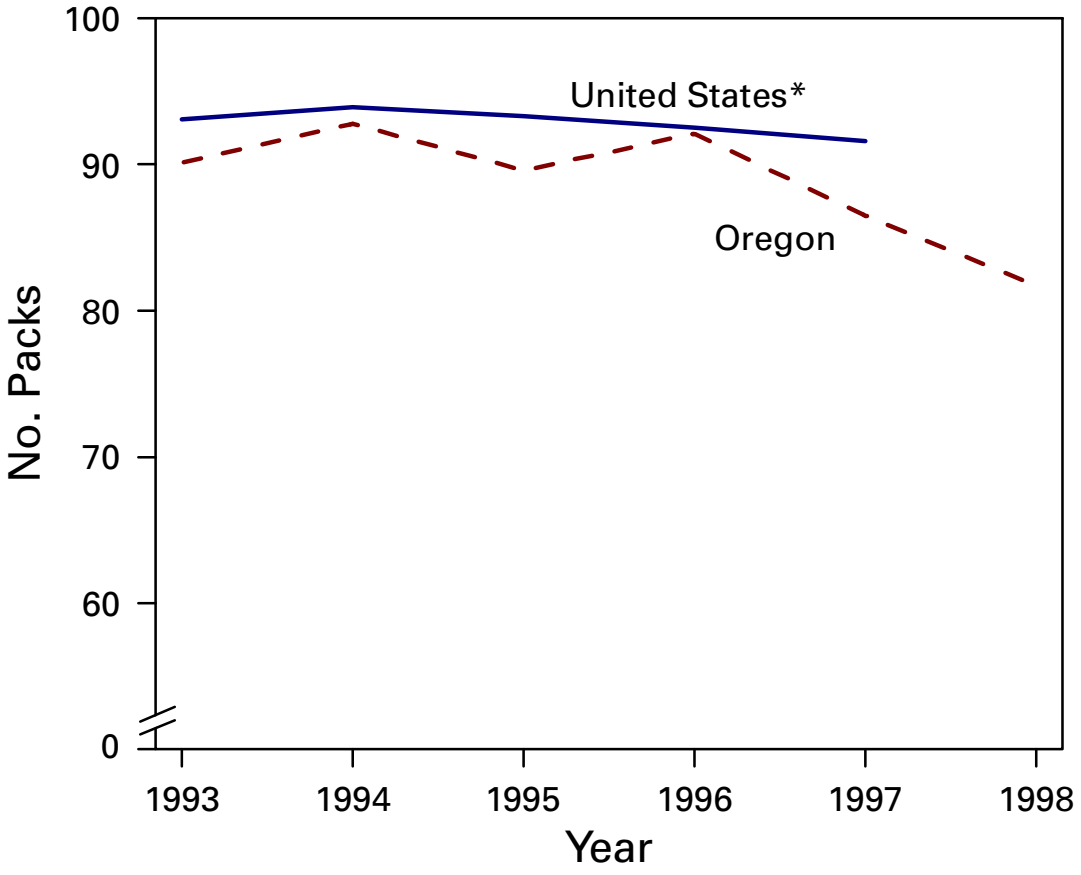
Editorial Note: Two years after the implementation of a ballot measure to increase the excise tax on tobacco and initiate TPEP, per capita consumption has declined 11.3% in Oregon, or the equivalent of 200 cigarettes (10 packs) per capita. Elements of the program include community-based tobacco-use prevention coalitions in every county; a statewide public awareness and education campaign; comprehensive school-based programs; tribal tobacco-use prevention programs; multicultural outreach and education; a quitters' help line providing smoking cessation support; and projects evaluating new approaches to prevent or reduce tobacco use. TPEP has an annual budget of $8.5 million, 93% of which is awarded in grants or contracts to external partners (e.g., county health departments, community-based agencies, tribal governments, and private-sector partners implementing the public awareness campaign).

Decreased consumption is probably a result of both the increase in the price of cigarettes and the tobacco-use prevention program. Price elasticity of demand,

Cigarette Consumption — Continued

FIGURE 1. Annual per capita sales of cigarettes — Oregon and United States, 1993–1998



*Excluding Arizona, California, Massachusetts, and Oregon.

defined as the percentage change in demand for cigarettes resulting from a 1% change in price, is an estimated –0.4% (*6*). A 15.8% increase in the price of cigarettes (the amount of the price increase in Oregon, calculated in 1996 dollars) should result in a 6.3% decrease in cigarette consumption. The findings in this report are consistent with reports from other states with tobacco-use prevention programs and indicate that excise taxes in conjunction with prevention programs reduce cigarette consumption more than excise taxes alone (*1,7*).

Other factors that could account for the decrease in cigarette consumption in Oregon probably did not contribute to the decline. Smuggling or cross-border sales probably are insignificant because a large proportion of Oregon's population resides in Portland, near Washington, where cigarette prices are higher. Increased sales on Indian reservations in the state probably would not contribute to the decline because cigarettes sold on reservations are taxed, and tribes are reimbursed only for tobacco taxes paid by tribal members. Another possibility is that the observed downward trend for Oregon may reflect national declines. Although reliable national data are not available for 1998, it is unlikely that the decrease in Oregon reflects secular trends.

Cigarette Consumption — Continued

During 1990–1997, the annual rate of decline in consumption for all 50 states averaged only 1.4% (*8*).

Oregon's decrease in cigarette consumption also appears to be resulting in decreases in smoking prevalence. Preliminary data from the Behavioral Risk Factor Surveillance System for 1996–1998 indicate that prevalence of current smoking among adults in Oregon declined 6.4%, representing 35,000 fewer smokers. The decline in cigarette consumption in Oregon, California, and Massachusetts indicates that an adequately funded, comprehensive tobacco-control program can quickly and substantially reduce tobacco use.

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Neighborhood Safety and the Prevalence of Physical Inactivity — Selected States, 1996

Physical inactivity is an important risk factor for premature morbidity and mortality, especially among high-risk populations. Although health-promotion programs have targeted high-risk groups (i.e., older adults, women, and racial/ethnic minorities) (*1*), barriers exist that may affect their physical activity level (*2*). Identifying and reducing specific barriers (e.g., lack of knowledge of the health benefits of physical activity, limited access to facilities, low self-efficacy, and environmental issues [*2–6*]) are important for efforts designed to increase physical activity. Concerns about neighborhood safety may be a barrier to physical activity (*2,3*). To characterize the association between neighborhood safety and physical inactivity, CDC analyzed data from the 1996 Behavioral Risk Factor Surveillance System (BRFSS) in Maryland, Montana, Ohio, Pennsylvania, and Virginia. This report summarizes the results of this analysis, which indicate that persons who perceived their neighborhood to be unsafe were more likely to be physically inactive.

The BRFSS is a population-based, random-digit–dialed telephone survey of the civilian, noninstitutionalized U.S. population aged ≥18 years. In 1996, data on physical activity were analyzed for 12,767 persons (5320 men and 7447 women) who

Physical Inactivity — Continued

responded to the Social Context Module included in the 1996 surveys in Maryland, Montana, Ohio, Pennsylvania, and Virginia. Respondents were asked, "How safe from crime do you consider your neighborhood to be?" Possible responses were "extremely safe," "quite safe," "slightly safe," or "not at all safe." Respondents were classified as physically inactive if they reported no physical activity or exercise during the preceding month. Numbers for racial/ethnic groups other than white were combined because, when analyzed separately, data were too small for meaningful analysis. Data were weighted, and standard errors were calculated using SUDAAN (*7*).

The prevalence of physical inactivity among respondents was approximately 30% (n=3967), which is similar to the levels reported for adults in the United States (*1*). The prevalence of physical inactivity was highest among adults aged ≥65 years, women, racial/ethnic minorities, persons with a high school education or less, and persons with annual household incomes of <$20,000 (Table 1). Overall, higher levels of perceived neighborhood safety were associated with lower levels of physical inactivity; the differences were greatest among persons aged ≥65 years (from 38.6% [extremely safe] to 63.1% [not at all safe]) and racial/ethnic minorities (from 29.9% [extremely safe] to 44.6% [not at all safe]). For respondents with more than a high school education, little difference in physical inactivity was noted among persons who perceived their neighborhood as unsafe and persons who perceived their neighborhood as safe (24.5% and 23.0%, respectively).

The prevalence of physical inactivity among men and women differed across neighborhood safety levels among persons aged 18–64 years but not among persons aged ≥65 years (Figure 1). Data stratified by age and sex and controlling for race and education demonstrated an association between neighborhood safety and physical inactivity among older adults (odds ratio=2.3; 95% confidence interval=1.1–4.7).

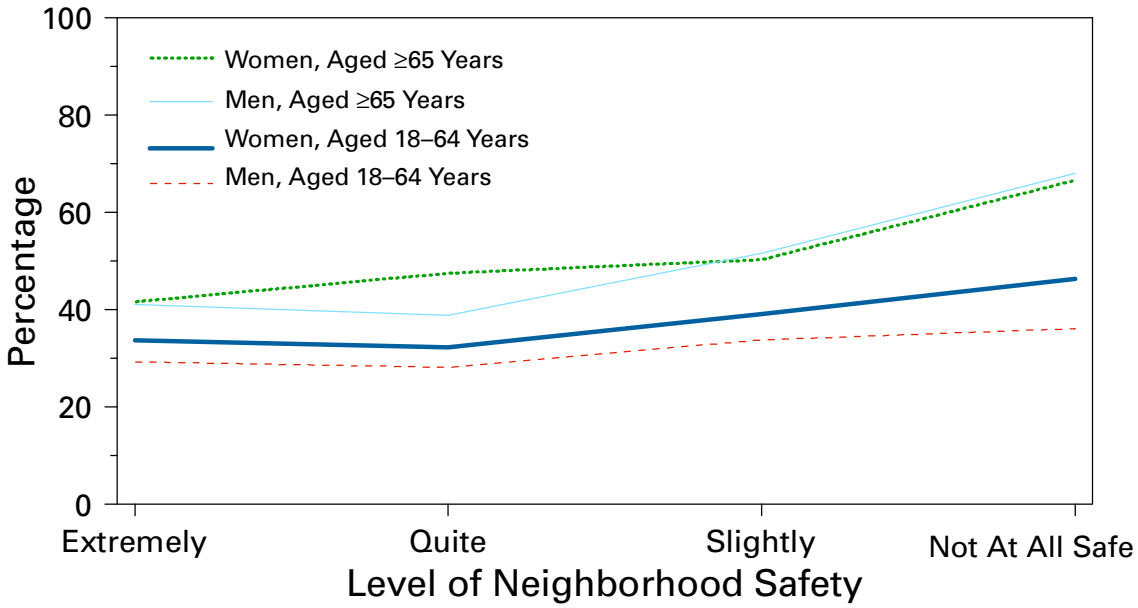
TABLE 1. Perceived neighborhood safety and the prevalence of physical inactivity among persons aged ≥18 years, by selected characteristics — Maryland, Montana, Ohio, Pennsylvania, and Virginia, Behavioral Risk Factor Surveillance System, 1996

		Extremely safe		Quite safe		Slightly safe		Not at all safe	
Characteristic	**Total***	**%**	**(95% CI†)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Age (yrs)									
18–64	**2898**	30.5	(27.6–33.3)	29.1	(27.4–30.8)	35.1§	(31.7–38.4)	39.3§	(31.5–47.0)
≥65	**1069**	38.6	(33.6–43.7)	40.9	(37.6–44.2)	45.0	(36.9–53.0)	63.1§	(48.8–77.5)
Sex									
Men	**1496**	30.7	(26.9–34.4)	28.3	(26.0–34.4)	34.2	(29.6–38.8)	36.7	(25.3–48.1)
Women	**2471**	33.8	(30.5–37.0)	33.8	(31.8–35.7)	38.5§	(34.5–42.5)	47.2§	(38.8–55.7)
Race/ Ethnicity¶									
White	**3188**	32.4	(29.8–35.1)	30.3	(28.6–32.0)	33.1	(29.5–36.7)	40.8	(31.6–49.9)
Other	**779**	29.9	(23.0–36.9)	36.8	(32.9–40.7)	45.1§	(39.1–51.0)	44.6§	(34.0–55.3)
Education level									
≤12 years	**2451**	41.7	(37.9–45.5)	40.3	(38.0–42.7)	44.8	(40.4–49.1)	51.3§	(42.9–59.7)
>12 years	**1516**	23.0	(19.9–26.1)	22.4	(20.5–24.3)	25.4	(21.4–29.5)	24.5	(15.0–33.9)
Annual income									
<$20,000	**938**	43.8	(37.0–50.6)	42.9	(38.8–47.0)	42.5	(36.0–49.0)	44.0	(33.4–54.7)
≥$20,000	**2269**	30.7	(27.8–33.7)	28.6	(26.8–30.5)	34.4	(30.7–38.1)	39.8	(29.2–50.5)

*n=3967; numbers may not add to total because of missing data.
†Confidence interval.
§p ≤0.05 compared with "extremely safe."
¶Numbers for racial/ethnic groups other than white were combined because, when analyzed separately, data were too small for meaningful analysis.

Physical Inactivity — Continued

FIGURE 1. Percentage of respondents who reported physical inactivity, by sex, age group, and perceived neighborhood safety level — Maryland, Montana, Ohio, Pennsylvania, and Virginia, Behavioral Risk Factor Surveillance System, 1996



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Editorial Note: This report is the first to document the higher prevalence of physical inactivity among persons who perceive their neighborhoods as unsafe, and this finding remained after controlling for other factors. The findings were similar to those from other studies (*1*), which found that women were more physically inactive than men, and older adults were more inactive than younger adults. However, among older persons who perceived their neighborhoods as unsafe, the prevalence of physical inactivity in these states was similar among men and women.

Environmental barriers, including neighborhood safety, are not the only factors associated with physical inactivity among adolescents and young adults (*3,8*). However, many young adults use facilities, and the types of activities available are more varied. Among older adults, environmental barriers studied have been related to access to facilities (e.g., malls, parks, and gymnasiums) for physical activity rather than neighborhood safety issues (*4,5,9*). Older adults, for whom walking is the major activity, may be more influenced by safety concerns in their neighborhoods. These results suggest an association between perceived neighborhood safety and physical inactivity for adults aged ≥65 years.

The findings in this report are subject to at least five limitations. First, BRFSS data are cross-sectional and may not accurately reflect behaviors or conditions over time. Second, data are from only five states and may not represent trends in other states. Third, because the number of respondents in this analysis is relatively small and the data are self-reported, estimates may be unreliable. Fourth, because of the small number of respondents for racial/ethnic minorities, numbers were combined for a

Physical Inactivity — Continued

comparison with whites. Finally, these data may be affected by unmeasured confounding factors (e.g., social and demographic factors).

The survey described in this report suggests that public health action is needed to provide safe alternatives for physical activity in neighborhoods. Such efforts could increase community support and access to safe places for older adults to engage in physical activity. Additional research is needed to increase understanding of how perceived and actual neighborhood safety inhibits or facilitates participation in physical activity.

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Notice to Readers

Recall of Tripedia™ Vaccine

On January 27, 1999, the Food and Drug Administration initiated a voluntary recall of Tripedia™ diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP), lot number 0916490, manufactured by Pasteur Mérieux Connaught USA.* Routine post-release stability testing completed in January 1999 indicated that the potency of the diphtheria toxoid component of this lot was below specification. The potency of the tetanus and pertussis components of this lot was acceptable.

The lot was distributed during February–June 1998. All lots of Tripedia™ met potency specifications before release. Previously tested lots of Tripedia™ met diphtheria potency specifications in routine stability testing after release; stability testing of additional lots is in progress.

A primary series (three doses) of fully potent diphtheria toxoid-containing vaccine is required to reliably induce protective antibody levels. Five doses of diphtheria toxoid-containing vaccine are recommended for preschool-aged children in the United States and provide optimal protection against diphtheria.

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

Notice to Readers — Continued

The risk for exposure to toxigenic strains of *Corynebacterium diphtheriae* in the United States is low; however, diphtheria remains endemic in many countries. Additional doses of diphtheria toxoid-containing vaccine beyond those recommended in the childhood immunization schedule are associated with an increase in local reactions and should be considered only for children vaccinated with Tripedia™ lot number 0916490 who may be at increased risk for exposure to toxigenic strains of *C. diphtheriae*. CDC, the American Academy of Pediatrics, and the American Academy of Family Physicians have developed recommendations for children who received one or more doses of Tripedia™ lot number 0916490. The complete text of the recommendations is available on CDC's National Immunization Program World-Wide Web site, http://www.cdc.gov/nip/news/recall.htm; in summary, the recommendations are as follows:

- Children remaining in the United States until the scheduled fourth dose of DTaP or traveling to countries where the risk for diphtheria is low do not require any supplemental doses of diphtheria toxoid-containing vaccine.
- Children traveling to a country where the risk for diphtheria is high[†] before their scheduled fourth dose of DTaP may require a supplemental dose of DT or a dose of DTaP on an accelerated schedule; the recommendations vary based on the number of doses of Tripedia™ lot number 0916490 received (Table 1).

[†]Travelers may be at substantial risk for exposure to toxigenic strains of *C. diphtheriae*, especially with prolonged travel, extensive contact with children, or exposure to poor hygiene. Countries comprise the following: *Africa*—Algeria, Egypt, and sub-Saharan Africa; *Americas*—Brazil, Dominican Republic, Ecuador, and Haiti; *Asia/Oceania*—Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Iran, Iraq, Laos, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Syria, Thailand, Turkey, Vietnam, and Yemen; and *Europe*—Albania and all countries of the former Soviet Union.

TABLE 1. Recommendations for children who travel to areas where the risk for diphtheria is high* and who received Tripedia™ diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP) lot number 0916490†

Age (mos)	Total doses received of any diphtheria toxoid-containing vaccine	No. doses of Tripedia™ from lot no. 0916490	Recommendation§
2–11	1–2	1–2	Complete primary series with DTaP¶
	3	1	Administer fourth dose of DTaP at age 15–18 mos
	3	2–3	Administer supplemental dose of DT, followed by fourth dose of DTaP at age 15–18 mos
≥12	3	1	Administer fourth dose of DTaP at age 15–18 mos
	3	2–3	Administer supplemental dose of DT if <6 months have elapsed since third dose of DTaP, followed by fourth dose of DTaP at age 15–18 mos
			OR
			Administer fourth dose of DTaP as early as age 12 mos if ≥6 months have elapsed since third dose of DTaP
	4	1–3	Administer fifth dose of DTaP at age 4 to 6 yrs
	5	1	Administer routine tetanus and diphtheria toxoids (for adolescent and adult use) boosters

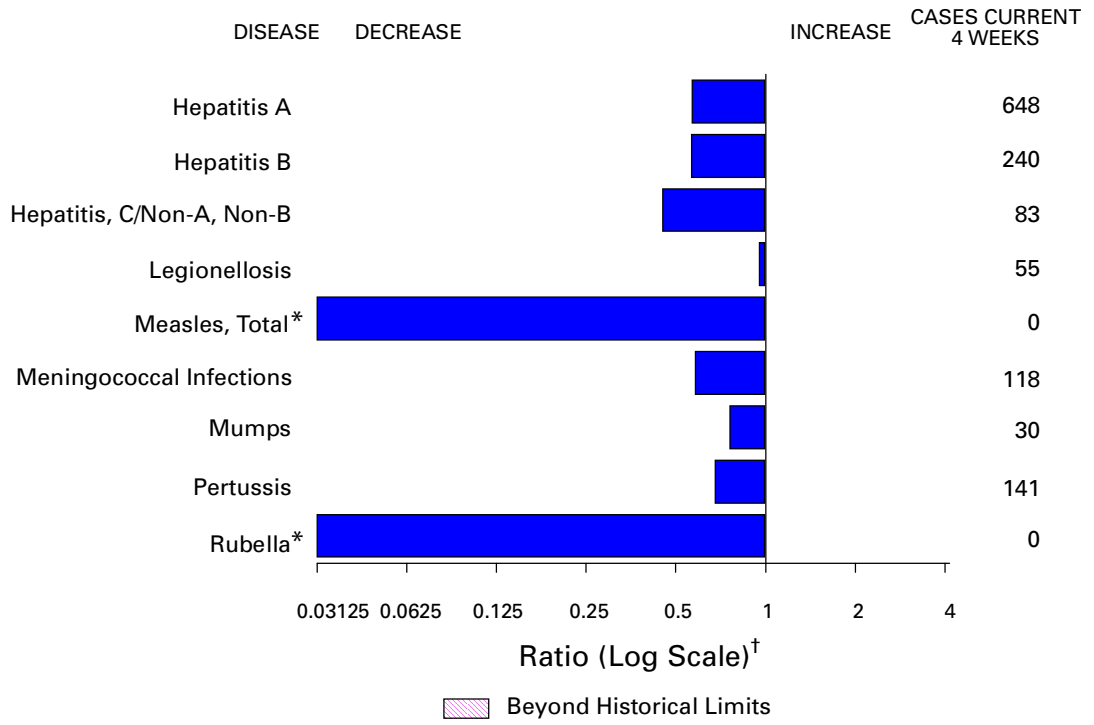
*Travelers may be at substantial risk for exposure to toxigenic strains of *Corynebacterium diphtheriae*, especially with prolonged travel, extensive contact with children, or exposure to poor hygiene conditions. Countries comprise the following: *Africa*—Algeria, Egypt, and sub-Saharan Africa; *Americas*—Brazil, Dominican Republic, Ecuador, and Haiti; *Asia/Oceania*—Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Iran, Iraq, Laos, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Syria, Thailand, Turkey, Vietnam, and Yemen; and *Europe*—Albania and all countries of the former Soviet Union.

†Manufactured by Pasteur Mérieux Connaught USA. Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

§The minimum interval is 4 weeks between a dose of diphtheria and tetanus toxoids (for pediatric use) (DT) and any other dose of diphtheria toxoid-containing vaccine. The minimum interval is 6 months between the third dose of DTaP (including doses of Tripedia™ lot number 0916490) and the fourth dose of DTaP.

¶If time is sufficient before travel, children who received two doses of Tripedia™ lot number 0916490 should receive their third dose of DTaP (as early as 4 weeks after the previous dose of DTaP) and a supplemental dose of DT (as early as 4 weeks after the third dose of DTaP).

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending February 20, 1999, with historical data — United States



*No measles or rubella cases were reported for the current 4-week period, yielding a ratio for week 7 of zero (0).

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

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending February 20, 1999 (7th Week)

	Cum. 1999		Cum. 1999
Anthrax	-	Plague	-
Brucellosis	5	Poliomyelitis, paralytic	-
Cholera	-	Psittacosis	2
Congenital rubella syndrome	-	Rabies, human	-
Cryptosporidiosis*	87	Rocky Mountain spotted fever (RMSF)	20
Diphtheria	-	Streptococcal disease, invasive Group A	146
Encephalitis: California*	1	Streptococcal toxic-shock syndrome*	4
eastern equine*	-	Syphilis, congenital¶	-
St. Louis*	-	Tetanus	1
western equine*	-	Toxic-shock syndrome	8
Hansen Disease	5	Trichinosis	1
Hantavirus pulmonary syndrome*†	1	Typhoid fever	22
Hemolytic uremic syndrome, post-diarrheal*	5	Yellow fever	-
HIV infection, pediatric*§	7		

-:no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update January 24, 1999.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 20, 1999, and February 21, 1998 (7th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1999	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998
UNITED STATES	3,137	4,884	57,395	74,787	136	37	34,046	45,267	240	439
NEW ENGLAND	158	184	1,683	2,831	22	11	513	828	38	16
Maine	3	2	72	136	1	-	8	6	-	-
N.H.	3	10	109	131	1	-	7	19	-	-
Vt.	-	5	51	36	-	-	6	1	-	2
Mass.	124	70	1,143	1,156	14	7	407	297	38	14
R.I.	9	13	299	343	-	-	83	46	-	-
Conn.	19	84	9	1,029	6	4	2	459	-	-
MID. ATLANTIC	489	1,005	8,745	10,787	8	-	4,464	6,181	4	25
Upstate N.Y.	17	116	N	N	6	-	258	682	4	23
N.Y. City	237	490	4,910	4,763	-	-	2,376	2,238	-	-
N.J.	162	237	484	1,579	2	-	210	1,035	-	-
Pa.	73	162	3,351	4,445	N	-	1,620	2,226	-	2
E.N. CENTRAL	179	317	9,795	11,562	31	4	7,181	9,247	80	72
Ohio	38	56	3,003	3,866	19	3	1,828	2,287	-	3
Ind.	25	79	-	-	5	-	726	866	-	1
Ill.	77	101	3,558	2,746	2	-	2,211	2,681	1	10
Mich.	22	57	2,829	3,081	5	-	2,233	2,677	79	58
Wis.	17	24	405	1,869	N	1	183	736	-	-
W.N. CENTRAL	110	64	1,978	4,686	28	9	691	1,866	-	65
Minn.	20	15	578	951	12	8	225	331	-	-
Iowa	3	6	234	455	5	1	73	131	-	1
Mo.	72	22	-	1,624	1	-	-	791	-	63
N. Dak.	-	-	-	127	2	-	-	11	-	-
S. Dak.	-	4	238	224	-	-	23	34	-	-
Nebr.	6	9	338	434	2	-	157	161	-	-
Kans.	9	8	590	871	6	-	213	407	-	1
S. ATLANTIC	883	1,458	15,559	13,455	14	5	11,804	11,181	26	12
Del.	13	13	406	295	-	-	234	204	-	-
Md.	81	218	1,106	959	1	-	1,107	1,066	15	2
D.C.	8	125	N	N	-	-	452	443	-	-
Va.	54	109	1,911	1,697	5	-	1,667	964	4	1
W. Va.	10	5	332	691	-	1	76	224	1	-
N.C.	69	105	2,981	2,535	2	2	2,662	2,237	-	5
S.C.	60	91	3,859	2,203	1	1	2,038	1,633	1	-
Ga.	111	113	1,321	2,707	1	-	857	2,352	-	-
Fla.	477	679	3,643	2,368	4	1	2,711	2,058	5	4
E.S. CENTRAL	157	266	4,686	5,001	7	-	4,214	5,156	17	17
Ky.	15	38	-	759	-	-	-	507	-	4
Tenn.	64	82	1,814	1,761	5	-	1,527	1,618	16	11
Ala.	31	86	1,783	1,283	2	-	1,657	1,746	1	2
Miss.	47	60	1,089	1,198	-	-	1,030	1,285	-	-
W.S. CENTRAL	532	871	4,143	10,460	3	-	2,948	6,594	7	10
Ark.	19	33	630	375	1	-	281	578	-	1
La.	27	134	2,275	1,674	1	-	2,005	1,446	6	-
Okla.	6	52	1,238	1,032	-	-	662	572	-	-
Tex.	480	652	-	7,379	1	-	-	3,998	1	9
MOUNTAIN	45	192	2,345	3,693	6	1	543	1,079	14	52
Mont.	-	5	163	107	-	-	3	6	2	4
Idaho	4	5	186	255	-	-	10	19	3	15
Wyo.	-	-	-	109	-	-	-	7	-	13
Colo.	26	39	707	839	2	1	151	376	3	3
N. Mex.	4	36	590	576	2	-	118	114	3	7
Ariz.	4	61	522	1,299	1	-	243	455	2	-
Utah	4	22	177	266	1	-	18	31	1	6
Nev.	U	24	U	242	U	-	U	71	U	4
PACIFIC	584	527	8,461	12,312	17	7	1,688	3,135	54	170
Wash.	29	31	341	1,427	1	2	48	258	2	1
Oreg.	15	13	508	763	6	5	71	124	-	1
Calif.	525	468	7,170	9,611	10	-	1,491	2,652	52	136
Alaska	5	-	245	243	-	-	45	47	-	-
Hawaii	10	15	197	268	-	-	33	54	-	32
Guam	1	-	-	37	N	-	-	4	-	-
P.R.	92	88	U	U	1	U	42	73	-	-
V.I.	-	8	N	N	N	U	U	U	U	U
Amer. Samoa	-	-	U	U	N	U	U	U	U	U
C.N.M.I.	-	-	N	N	N	U	-	7	-	-

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

*Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update January 24, 1999.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending February 20, 1999, and February 21, 1998 (7th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999*	Cum. 1998*	Cum. 1999
UNITED STATES	83	154	253	384	112	158	660	948	410	758	482
NEW ENGLAND	6	11	44	56	2	6	12	12	33	37	86
Maine	-	-	-	1	-	-	-	-	1	-	14
N.H.	1	2	-	-	-	-	-	1	-	-	4
Vt.	2	-	-	-	-	-	1	-	-	1	14
Mass.	2	1	44	14	2	6	8	11	11	17	26
R.I.	1	3	-	2	-	-	-	-	13	4	7
Conn.	-	5	-	39	-	-	3	-	8	15	21
MID. ATLANTIC	13	30	100	233	27	59	33	54	125	152	108
Upstate N.Y.	5	9	51	53	9	11	1	2	-	14	70
N.Y. City	-	5	-	7	3	36	13	5	70	102	U
N.J.	3	1	41	36	13	6	1	15	55	36	27
Pa.	5	15	8	137	2	6	18	32	U	U	11
E.N. CENTRAL	27	60	14	14	11	15	107	136	25	15	1
Ohio	12	18	8	10	1	1	12	34	U	U	-
Ind.	5	7	5	3	4	1	32	26	U	U	-
Ill.	-	11	-	-	-	7	56	49	U	U	-
Mich.	10	11	1	1	5	5	7	15	21	-	1
Wis.	-	13	U	U	1	1	-	12	4	15	-
W.N. CENTRAL	1	11	4	4	5	6	2	18	28	29	46
Minn.	-	-	-	-	-	-	-	1	20	10	10
Iowa	1	-	1	4	2	1	-	-	-	-	12
Mo.	-	6	-	-	3	4	-	10	7	17	-
N. Dak.	-	-	1	-	-	-	-	-	-	-	15
S. Dak.	-	-	-	-	-	-	-	-	1	-	-
Nebr.	-	5	-	-	-	-	1	4	-	-	1
Kans.	-	-	2	-	-	1	1	3	-	2	8
S. ATLANTIC	22	18	50	55	33	32	274	354	83	154	204
Del.	2	1	-	-	-	1	1	-	-	1	-
Md.	-	5	37	51	14	17	54	97	U	U	44
D.C.	-	2	1	2	5	2	10	9	4	13	-
Va.	2	2	-	-	4	2	21	36	9	5	48
W. Va.	N	N	-	-	1	-	1	-	5	10	10
N.C.	3	3	10	-	1	4	77	93	33	87	50
S.C.	3	1	-	-	-	-	40	45	32	38	11
Ga.	-	-	-	2	-	4	26	24	U	U	19
Fla.	12	4	2	-	8	2	44	50	U	U	22
E.S. CENTRAL	3	6	6	6	2	5	142	170	41	63	15
Ky.	-	4	-	-	-	-	-	15	U	U	-
Tenn.	3	1	2	5	2	3	80	87	U	U	13
Ala.	-	-	4	1	-	1	44	36	39	40	2
Miss.	-	1	-	-	-	1	18	32	2	23	-
W.S. CENTRAL	1	-	-	-	4	2	73	115	14	235	1
Ark.	-	-	-	-	-	-	10	16	8	5	-
La.	1	-	-	-	3	2	27	52	U	U	-
Okla.	-	-	-	-	-	-	36	7	6	17	1
Tex.	-	-	-	-	1	-	-	40	-	213	-
MOUNTAIN	4	7	1	1	5	8	-	34	12	33	7
Mont.	-	-	-	-	1	-	-	-	-	-	3
Idaho	-	-	-	-	1	1	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	1	-
Colo.	1	2	-	-	1	3	-	2	U	U	1
N. Mex.	1	1	1	-	1	3	-	2	3	7	-
Ariz.	-	-	-	-	1	-	-	25	U	U	3
Utah	2	4	-	-	-	1	-	2	9	6	-
Nev.	U	-	U	1	U	-	U	3	U	19	U
PACIFIC	6	11	34	15	23	25	17	55	49	40	14
Wash.	-	-	-	-	2	-	-	3	20	26	-
Oreg.	-	-	-	-	-	5	-	1	U	U	-
Calif.	6	11	34	15	20	20	16	51	U	U	14
Alaska	-	-	-	-	-	-	-	-	6	4	-
Hawaii	-	-	-	-	1	-	1	-	23	10	-
Guam	-	1	-	-	-	-	-	-	-	12	-
P.R.	-	-	-	-	-	-	34	31	-	3	6
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	-	-	1	-	9	-

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

*Cumulative reports of provisional tuberculosis cases for 1998 and 1999 are unavailable ("U") for some areas using the Tuberculosis Information Management System (TIMS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 20, 1999, and February 21, 1998 (7th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	1999	Cum. 1999	1999	Cum. 1999	Cum. 1999	Cum. 1998
UNITED STATES	115	150	1,603	2,399	548	1,049	-	7	-	2	9	2
NEW ENGLAND	11	12	22	61	8	17	-	-	-	-	-	1
Maine	1	-	2	8	-	-	-	-	-	-	-	-
N.H.	1	1	2	3	2	2	-	-	-	-	-	-
Vt.	2	-	-	2	-	-	-	-	-	-	-	-
Mass.	7	11	7	16	4	9	-	-	-	-	-	1
R.I.	-	-	-	4	2	-	-	-	-	-	-	-
Conn.	-	-	11	28	-	6	U	-	U	-	-	-
MID. ATLANTIC	17	19	70	178	52	160	-	-	-	-	-	1
Upstate N.Y.	11	6	16	41	15	31	-	-	-	-	-	-
N.Y. City	-	6	11	74	6	44	-	-	-	-	-	-
N.J.	6	7	24	31	8	27	-	-	-	-	-	1
Pa.	-	-	19	32	23	58	-	-	-	-	-	-
E.N. CENTRAL	14	26	470	443	61	265	-	-	-	-	-	-
Ohio	12	12	93	58	16	11	-	-	-	-	-	-
Ind.	1	2	29	58	4	121	-	-	-	-	-	-
Ill.	1	11	31	116	-	37	-	-	-	-	-	-
Mich.	-	-	316	184	41	77	-	-	-	-	-	-
Wis.	-	1	1	27	-	19	-	-	-	-	-	-
W.N. CENTRAL	3	1	28	233	12	61	-	-	-	-	-	-
Minn.	-	-	2	5	1	2	-	-	-	-	-	-
Iowa	1	-	7	77	4	10	-	-	-	-	-	-
Mo.	-	-	3	127	-	42	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	1	-	1	-	-	-	-	-	-
Nebr.	-	-	13	3	6	1	-	-	-	-	-	-
Kans.	1	1	3	20	1	5	-	-	-	-	-	-
S. ATLANTIC	37	23	186	156	98	90	-	-	-	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	-	-
Md.	19	8	49	52	24	21	-	-	-	-	-	-
D.C.	-	-	9	6	2	1	-	-	-	-	-	-
Va.	2	3	12	20	7	7	-	-	-	-	-	-
W. Va.	1	1	-	-	-	-	-	-	-	-	-	-
N.C.	2	3	20	13	31	40	-	-	-	-	-	-
S.C.	2	-	1	6	10	-	-	-	-	-	-	-
Ga.	-	7	46	27	4	11	-	-	-	-	-	-
Fla.	11	1	49	32	20	10	-	-	-	-	-	-
E.S. CENTRAL	9	12	62	68	43	60	-	-	-	-	-	-
Ky.	-	2	-	2	-	3	U	-	U	-	-	-
Tenn.	5	5	42	39	32	44	-	-	-	-	-	-
Ala.	4	5	19	14	11	13	-	-	-	-	-	-
Miss.	-	-	1	13	-	-	U	-	U	-	-	-
W.S. CENTRAL	9	7	73	170	19	72	-	-	-	2	2	-
Ark.	-	-	3	3	6	14	-	-	-	-	-	-
La.	3	3	6	3	4	3	-	-	-	-	-	-
Okla.	4	3	26	55	1	3	-	-	-	-	-	-
Tex.	2	1	38	109	8	52	-	-	-	2	2	-
MOUNTAIN	9	31	123	411	58	106	-	1	-	-	1	-
Mont.	1	-	2	6	1	1	-	-	-	-	-	-
Idaho	1	-	4	26	4	4	-	-	-	-	-	-
Wyo.	-	-	-	3	-	1	U	-	U	-	-	-
Colo.	1	3	51	43	15	12	-	1	-	-	1	-
N. Mex.	2	-	5	27	27	38	-	-	-	-	-	-
Ariz.	-	16	50	246	6	29	U	-	U	-	-	-
Utah	4	2	11	25	5	8	-	-	-	-	-	-
Nev.	U	10	U	35	U	13	U	U	U	U	U	-
PACIFIC	6	19	569	679	197	218	-	6	-	-	6	-
Wash.	-	-	20	46	2	14	-	-	-	-	-	-
Oreg.	5	9	27	49	4	19	-	6	-	-	6	-
Calif.	-	8	519	575	189	180	-	-	-	-	-	-
Alaska	1	-	2	-	2	1	-	-	-	-	-	-
Hawaii	-	2	1	9	-	4	-	-	-	-	-	-
Guam	-	-	-	-	-	-	U	-	U	-	-	-
P.R.	-	1	8	6	9	69	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	7	U	-	U	-	-	-

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

*Of 16 cases among children aged <5 years, serotype was reported for 4 and of those, 1 was type b.

†For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 20, 1999, and February 21, 1998 (7th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998
UNITED STATES	246	473	7	44	44	29	278	511	-	3	30
NEW ENGLAND	17	29	-	1	-	2	51	108	-	-	10
Maine	3	3	-	-	-	-	-	4	-	-	-
N.H.	-	1	-	1	-	-	3	8	-	-	-
Vt.	1	1	-	-	-	2	10	19	-	-	-
Mass.	13	10	-	-	-	-	38	74	-	-	1
R.I.	-	3	-	-	-	-	-	-	-	-	-
Conn.	-	11	U	-	-	U	-	3	U	-	9
MID. ATLANTIC	28	43	2	5	1	2	16	45	-	-	14
Upstate N.Y.	7	11	2	2	1	2	15	29	-	-	12
N.Y. City	7	8	-	-	-	-	-	3	-	-	-
N.J.	10	14	-	-	-	-	-	4	-	-	2
Pa.	4	10	-	3	-	-	1	9	-	-	-
E.N. CENTRAL	36	78	1	2	5	10	57	68	-	-	-
Ohio	20	30	-	1	3	9	50	28	-	-	-
Ind.	7	8	-	-	-	1	2	2	-	-	-
Ill.	5	20	-	-	-	-	-	-	-	-	-
Mich.	4	8	1	1	2	-	5	10	-	-	-
Wis.	-	12	-	-	-	-	-	28	-	-	-
W.N. CENTRAL	14	40	-	1	-	-	5	32	-	-	-
Minn.	-	-	-	-	-	-	-	18	-	-	-
Iowa	4	8	-	1	-	-	3	7	-	-	-
Mo.	3	19	-	-	-	-	1	2	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	4	4	-	-	-	-	1	-	-	-	-
Nebr.	1	1	-	-	-	-	-	2	-	-	-
Kans.	2	8	-	-	-	-	-	3	-	-	-
S. ATLANTIC	48	66	3	9	8	3	41	43	-	3	1
Del.	1	-	-	-	-	-	-	-	-	-	-
Md.	6	10	1	2	-	-	13	7	-	-	-
D.C.	-	-	-	-	-	-	-	-	-	-	-
Va.	2	7	-	-	1	-	6	-	-	-	-
W. Va.	-	2	-	-	-	-	-	-	-	-	-
N.C.	6	14	-	1	4	-	16	23	-	3	1
S.C.	6	5	-	2	2	-	2	5	-	-	-
Ga.	8	21	-	-	-	-	-	-	-	-	-
Fla.	19	7	2	4	1	3	4	8	-	-	-
E.S. CENTRAL	20	44	-	-	-	2	9	11	-	-	-
Ky.	-	8	U	-	-	U	-	-	U	-	-
Tenn.	9	15	-	-	-	2	6	3	-	-	-
Ala.	11	19	-	-	-	-	3	8	-	-	-
Miss.	-	2	U	-	-	U	-	-	U	-	-
W.S. CENTRAL	11	27	-	9	11	1	12	12	-	-	1
Ark.	3	5	-	-	-	-	3	3	-	-	-
La.	6	8	-	-	-	-	-	-	-	-	-
Okla.	1	13	-	1	-	1	2	-	-	-	-
Tex.	1	1	-	8	11	-	7	9	-	-	1
MOUNTAIN	22	28	1	3	4	7	79	113	-	-	3
Mont.	-	1	-	-	-	-	-	1	-	-	-
Idaho	3	1	-	-	-	6	50	54	-	-	-
Wyo.	-	1	U	-	1	U	-	-	U	-	-
Colo.	5	11	1	2	-	1	5	14	-	-	-
N. Mex.	6	3	N	N	N	-	7	37	-	-	-
Ariz.	5	9	U	-	1	U	2	3	U	-	-
Utah	3	1	-	1	-	-	15	2	-	-	2
Nev.	U	1	U	U	2	U	U	2	U	U	1
PACIFIC	50	118	-	14	15	2	8	79	-	-	1
Wash.	6	12	-	-	-	2	4	11	-	-	-
Oreg.	4	28	N	N	N	-	3	8	-	-	-
Calif.	33	75	-	12	9	-	-	60	-	-	1
Alaska	3	1	-	1	2	-	1	-	-	-	-
Hawaii	4	2	-	1	4	-	-	-	-	-	-
Guam	-	-	U	-	1	U	-	-	U	-	-
P.R.	-	-	-	-	-	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	-	2	U	-	-	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending February 20, 1999 (7th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	717	553	116	31	12	5	104
Boston, Mass.	169	118	33	10	4	4	31
Bridgeport, Conn.	42	34	6	2	-	-	4
Cambridge, Mass.	22	16	6	-	-	-	4
Fall River, Mass.	38	37	1	-	-	-	5
Hartford, Conn.	77	60	12	3	1	1	12
Lowell, Mass.	32	26	5	1	-	-	2
Lynn, Mass.	13	8	5	-	-	-	2
New Bedford, Mass.	39	33	2	2	2	-	3
New Haven, Conn.	66	43	16	5	2	-	11
Providence, R.I.	79	65	8	4	2	-	-
Somerville, Mass.	2	2	-	-	-	-	-
Springfield, Mass.	36	30	5	1	-	-	7
Waterbury, Conn.	34	27	5	1	1	-	5
Worcester, Mass.	68	54	12	2	-	-	18
MID. ATLANTIC	2,403	1,733	487	124	34	25	125
Albany, N.Y.	54	38	11	2	2	1	3
Allentown, Pa.	14	12	1	1	-	-	-
Buffalo, N.Y.	85	64	13	5	1	2	1
Camden, N.J.	34	24	6	1	-	3	3
Elizabeth, N.J.	14	9	5	-	-	-	1
Erie, Pa.	55	45	7	2	-	1	3
Jersey City, N.J.	33	23	8	2	-	-	-
New York City, N.Y.	1,262	917	263	60	11	11	30
Newark, N.J.	70	33	24	9	3	1	3
Paterson, N.J.	22	13	5	2	2	-	-
Philadelphia, Pa.	299	203	62	21	7	6	28
Pittsburgh, Pa.§	56	44	9	2	1	-	8
Reading, Pa.	41	34	3	3	1	-	5
Rochester, N.Y.	156	117	31	5	3	-	17
Schenectady, N.Y.	29	25	3	1	-	-	5
Scranton, Pa.	47	38	7	1	1	-	3
Syracuse, N.Y.	69	48	14	5	2	-	6
Trenton, N.J.	24	17	6	1	-	-	7
Utica, N.Y.	39	29	9	1	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,338	1,682	424	134	47	50	168
Akron, Ohio	54	43	7	2	-	2	-
Canton, Ohio	42	34	6	1	1	-	6
Chicago, Ill.	367	236	77	29	15	9	28
Cincinnati, Ohio	102	69	17	5	3	8	15
Cleveland, Ohio	138	95	28	10	1	4	5
Columbus, Ohio	278	205	50	13	6	4	20
Dayton, Ohio	127	90	25	8	2	2	8
Detroit, Mich.	268	195	49	15	6	3	6
Evansville, Ind.	58	48	6	2	1	1	3
Fort Wayne, Ind.	71	58	10	2	-	1	4
Gary, Ind.	12	9	3	-	-	-	-
Grand Rapids, Mich.	66	51	10	3	-	2	4
Indianapolis, Ind.	221	151	39	20	2	9	22
Lansing, Mich.	47	30	13	3	1	-	5
Milwaukee, Wis.	139	104	25	7	2	1	19
Peoria, Ill.	65	48	14	2	1	-	3
Rockford, Ill.	64	53	6	2	2	1	9
South Bend, Ind.	52	44	6	2	-	-	2
Toledo, Ohio	93	59	25	5	3	1	5
Youngstown, Ohio	74	60	8	3	1	2	4
W.N. CENTRAL	586	441	81	39	10	15	46
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	30	26	2	2	-	-	2
Kansas City, Kans.	U	U	U	U	U	U	U
Kansas City, Mo.	118	83	19	5	5	6	11
Lincoln, Nebr.	61	45	9	7	-	-	4
Minneapolis, Minn.	98	77	15	3	-	3	12
Omaha, Nebr.	75	57	7	7	1	3	6
St. Louis, Mo.	113	81	19	11	1	1	-
St. Paul, Minn.	91	72	10	4	3	2	11
Wichita, Kans.	U	U	U	U	U	U	U
S. ATLANTIC	1,094	736	209	73	23	18	85
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	110	75	18	11	2	4	13
Charlotte, N.C.	123	79	29	12	1	2	14
Jacksonville, Fla.	127	87	34	3	2	1	4
Miami, Fla.	107	62	26	14	5	-	-
Norfolk, Va.	58	46	6	2	-	4	2
Richmond, Va.	76	47	19	5	5	-	9
Savannah, Ga.	75	54	17	3	-	1	10
St. Petersburg, Fla.	77	68	6	1	1	1	13
Tampa, Fla.	226	145	32	9	3	2	16
Washington, D.C.	101	61	20	13	4	3	4
Wilmington, Del.	14	12	2	-	-	-	-
E.S. CENTRAL	876	615	151	58	23	26	61
Birmingham, Ala.	217	149	43	15	3	5	18
Chattanooga, Tenn.	60	44	11	3	1	1	3
Knoxville, Tenn.	115	82	23	8	1	1	4
Lexington, Ky.	67	48	10	1	2	5	5
Memphis, Tenn.	222	142	37	23	12	8	21
Mobile, Ala.	43	37	6	-	-	-	2
Montgomery, Ala.	27	23	3	1	-	-	5
Nashville, Tenn.	125	90	18	7	4	6	3
W.S. CENTRAL	1,487	1,020	273	108	42	44	124
Austin, Tex.	84	63	14	6	-	1	3
Baton Rouge, La.	62	41	11	5	-	5	5
Corpus Christi, Tex.	50	37	7	2	2	2	5
Dallas, Tex.	205	132	44	20	5	4	5
El Paso, Tex.	49	37	10	2	-	-	1
Ft. Worth, Tex.	123	88	21	5	2	7	24
Houston, Tex.	440	274	101	41	15	9	28
Little Rock, Ark.	71	55	8	3	3	2	3
New Orleans, La.	25	13	4	3	4	1	-
San Antonio, Tex.	208	158	29	12	5	4	27
Shreveport, La.	66	48	10	4	2	2	16
Tulsa, Okla.	104	74	14	5	4	7	7
MOUNTAIN	994	741	145	66	22	19	105
Albuquerque, N.M.	121	95	16	8	1	1	9
Boise, Idaho	53	44	7	2	-	-	4
Colo. Springs, Colo.	47	31	9	3	-	4	-
Denver, Colo.	117	75	19	12	4	7	20
Las Vegas, Nev.	209	154	33	13	6	3	16
Ogden, Utah	35	28	6	1	-	-	7
Phoenix, Ariz.	80	56	15	8	1	-	-
Pueblo, Colo.	34	27	4	3	-	-	8
Salt Lake City, Utah	108	77	17	7	5	2	14
Tucson, Ariz.	190	154	19	9	5	2	27
PACIFIC	1,589	1,177	260	96	28	26	168
Berkeley, Calif.	16	13	2	-	-	1	1
Fresno, Calif.	132	102	17	13	-	-	15
Glendale, Calif.	13	9	3	-	1	-	-
Honolulu, Hawaii	61	45	11	3	1	1	5
Long Beach, Calif.	69	50	12	1	2	4	6
Los Angeles, Calif.	291	215	40	22	8	6	17
Pasadena, Calif.	26	18	4	-	-	4	4
Portland, Oreg.	91	74	11	3	1	2	12
Sacramento, Calif.	204	161	31	9	2	1	43
San Diego, Calif.	176	121	35	14	2	4	20
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	156	115	27	11	2	1	13
Santa Cruz, Calif.	37	29	3	2	3	-	4
Seattle, Wash.	141	97	30	8	4	2	5
Spokane, Wash.	65	48	11	4	2	-	10
Tacoma, Wash.	111	80	23	6	-	-	13
TOTAL	12,084¶	8,698	2,146	729	241	228	986

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 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 this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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