

Congenital Syphilis — Continued

settings (10). STD clinical services have been strengthened at public STD clinics, including additional clinicians and other staff. In addition, the Maryland regulation on syphilis testing during pregnancy was amended in January 1998 to require a third trimester screening test at 28 weeks' gestation or the first visit thereafter to ensure diagnosis in time to prevent perinatal transmission. A Baltimore City Commissioner's order was also issued mandating syphilis screening at delivery.

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Adult Blood Lead Epidemiology and Surveillance — United States, First Quarter 1998, and Annual 1994–1997

CDC, in collaboration with state and local health departments, monitors laboratory-reported elevated blood lead levels (BLLs) among adults in the United States. During 1998, 27 states* reported surveillance data to the Adult Blood Lead Epidemiology and Surveillance (ABLES) program. This report presents ABLES data for the first quarter of 1998 compared with the first quarter of 1997, annual data for 1997 compared with 1996, and prevalence and incidence of elevated BLLs from 1994 through 1997. The findings indicate that approximately 4000 adults per quarter and an estimated 12,000 adults per year continue to have elevated BLLs; there does not appear to be a trend in these data from 1994 through 1997.

Beginning with the previous ABLES report (1), emphasis has been placed on the number of persons with elevated BLLs (prevalence); prior ABLES reports focused primarily on the number of laboratory reports of elevated BLLs (there are often multiple laboratory reports for the same person). The number of new cases of elevated BLLs (incidence) is reported as cumulative annual data.

*Alabama, Arizona, California, Connecticut, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming.

Adult Blood Lead Epidemiology and Surveillance — Continued

States in the ABLES program mandate that laboratories report elevated BLLs for adults to the state health department or another designee. The minimum BLL required to be reported varies among the states; the ABLES definition of an elevated BLL is ≥ 25 $\mu\text{g/dL}$. ABLES follow-back procedures for identifying source of exposures and preventing future exposures have been described previously (2).

Prevalence is defined as all cases (new plus existing) of persons with at least one BLL ≥ 25 $\mu\text{g/dL}$ during the year. Incidence is defined as all new cases of persons with at least one BLL ≥ 25 $\mu\text{g/dL}$ appearing in state surveillance data in the year who were not recorded during the preceding year. Denominators for prevalence and incidence were derived by subtracting the number of persons aged ≥ 65 years in the state from the total number of persons aged ≥ 16 years in the state.[†]

First Quarter Reports, 1998

During January 1–March 31, 1998, 3895 persons were reported with BLLs ≥ 25 $\mu\text{g/dL}$, representing a 20% decrease compared with 4885 persons reported for the first quarter of 1997 (3),[§] and a 3% decrease compared with 4010 reported for the fourth quarter of 1997 (1) (Figure 1). Of the 3895, 155 (4%) were reported with BLLs ≥ 50 $\mu\text{g/dL}$, the level designated by the Occupational Safety and Health Administration (OSHA) for medical removal from the workplace (4), representing a 37% decrease compared with 245 reported for the first quarter of 1997, and a 34% decrease compared with the 236 reported for the fourth quarter of 1997 (Figure 1).

Annual Reports, 1997

The number of persons with BLLs ≥ 25 $\mu\text{g/dL}$ reported to the ABLES program increased by 5% from 12,073 in 1996 to 12,716 in 1997, with the same 27 states reporting in each year (3).[¶] The number of persons with BLLs ≥ 50 $\mu\text{g/dL}$ decreased by 1% from 787 in 1996 to 777 in 1997.

The reported number of new cases with BLLs ≥ 25 $\mu\text{g/dL}$ decreased by 12% from 6115 in 1996 to 5397 in 1997, with the same 27 states reporting in each year. New cases with BLLs ≥ 50 $\mu\text{g/dL}$ decreased by 9% from 456 in 1996 to 417 in 1997.

Prevalence and Incidence, 1994–1997

The number of states reporting to ABLES increased from four in 1987 to 23 in 1994 and 27 in 1997. Because of this increase, comparing current ABLES raw numeric data with raw numeric data from previous years has required adjustment for the number of states reporting. Beginning with this report, prevalence and incidence will be used to facilitate comparisons of ABLES data over time.

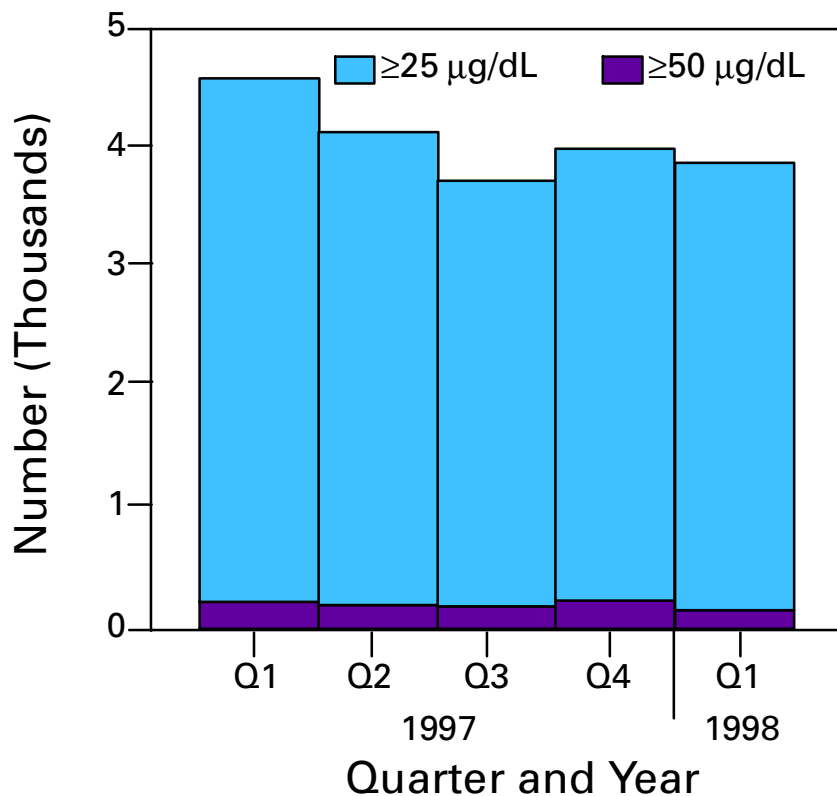
Overall prevalence rates ranged from 104 per million adults aged 16–64 years in 1994 to 111 in 1997 (Figure 2). Of the 22 states that reported throughout 1994–1997, 11 had lower prevalence rates in 1997 than in 1994, and 11 had higher rates. Overall incidence ranged from 53 per million adults aged 16–64 years in 1994 to 47 in 1997

[†]Population figures are available from the World-Wide Web site <http://www.census.gov/population/estimates/state/97agesex.txt>.

[§]To compare the number of persons for a constant roster of 27 states in 1998 and 1997, an estimate of first quarter 1997 data for Illinois, which discontinued reporting in 1996, was subtracted from previously reported totals for the first quarter of 1997 (3).

[¶]To compare data for a constant roster of 27 states in 1996 and 1997, data for 1997 for New Mexico, Rhode Island, and Wyoming were added to the previously reported totals for 1996, and data for 1996 for Illinois (which discontinued reporting at the end of 1996) were subtracted from the previously reported totals for 1996 (3). Previously reported 1996 data for Minnesota and Ohio were updated for this report.

Adult Blood Lead Epidemiology and Surveillance — Continued

FIGURE 1. Number of persons* with blood lead levels (BLLs) ≥ 25 $\mu\text{g}/\text{dL}$, by quarter and year — 27 states,[†] 1997 and first quarter 1998

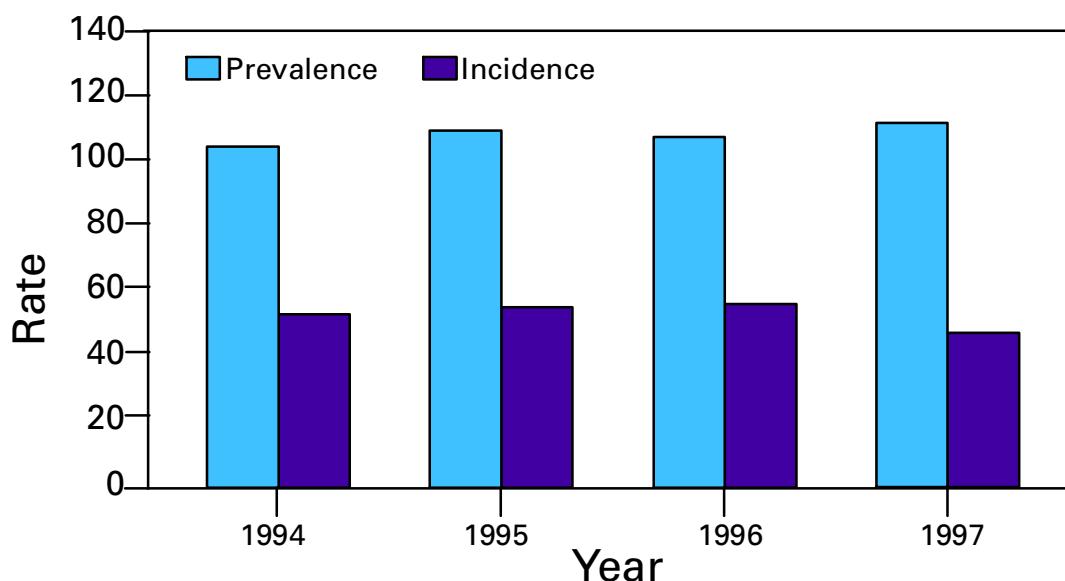
*Persons are categorized according to the highest reported BLL for the person during the given quarter. Data for the third and fourth quarter of 1997 and the first quarter of 1998 for New Mexico were missing; third and fourth quarter data for 1996 and first quarter data for 1997, respectively, were used as estimates. An estimate of first quarter 1997 data for Illinois, which discontinued reporting in 1996, was subtracted from previously reported totals for the first quarter of 1997 (3).

[†]Alabama, Arizona, California, Connecticut, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming.

(Figure 2). Of the 22 states that reported throughout 1994–1997, the incidence in 1997 compared with 1994 was lower in 13 states, higher in eight states, and unchanged in one.

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Adult Blood Lead Epidemiology and Surveillance — Continued

FIGURE 2. Prevalence* and incidence† of blood lead levels (BLLs) ≥ 25 $\mu\text{g}/\text{dL}$ among adults‡, by year — 1994–1997¶

*Prevalence is defined as all cases (new plus existing) of persons with at least one BLL ≥ 25 $\mu\text{g}/\text{dL}$ during the year.

†Incidence is defined as all new cases of persons with at least one BLL ≥ 25 $\mu\text{g}/\text{dL}$ appearing in state surveillance data in the year who were not recorded in the immediately preceding year.

‡Per 1 million adults aged 16–64 years.

¶In 1994 and 1995, adults with BLLs ≥ 25 $\mu\text{g}/\text{dL}$ were reported in the following states: Alabama, Arizona, California, Connecticut, Illinois, Iowa, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, and Wisconsin; in 1996, Minnesota and Ohio were added; and in 1997, New Mexico, Rhode Island, and Wyoming were added and Illinois was subtracted.

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Editorial Note: The quarterly data for the 27 ABLES states for the first quarter of 1997 through the first quarter of 1998 show approximately 4000 persons each quarter with BLLs ≥ 25 $\mu\text{g}/\text{dL}$ and approximately 200 persons each quarter with BLLs ≥ 50 $\mu\text{g}/\text{dL}$.

The annual data for 1997 for the 27 ABLES states show a 5% increase in the number of persons and a 12% decrease in the number of new cases with BLLs ≥ 25 $\mu\text{g}/\text{dL}$ compared with 1996 and adjusted for the increase in the number of participating states in 1997. Based on data for 1994–1997, however, these changes from 1996 to 1997 do not seem to represent a change from the overall pattern of prevalence and incidence during 1994–1997; a recognizable trend in the combined ABLES data during this period is not evident.

Adult Blood Lead Epidemiology and Surveillance — Continued

Variation in the number of detected cases reported to ABLES may reflect 1) changes in the year-to-year efforts of the various participating states, and lead-using industries within them, to identify lead-exposed workers and prevent new lead exposures; 2) changes in occupational exposures to lead; 3) changes in compliance with OSHA requirements regarding blood lead monitoring; and/or 4) changes in the size of the workforce in lead-using industries. Variation in quarterly and annual nationwide reporting totals also might represent normal fluctuations in case reporting, which may result from changes in staffing and funding in state-based surveillance programs, interstate differences in worker BLL testing by lead-using industries, or random variation.

The findings in this report document the continuing hazard of lead exposures as an occupational health problem in the United States. ABLES enhances surveillance for this preventable condition by expanding the number of participating states, exploring ways to increase the usefulness of reporting, and alerting the public to potential new sources of lead exposure.

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*Notice to Readers***Use of Short-Course Tuberculosis Preventive Therapy Regimens in HIV-Seronegative Persons**

In the *MMWR Recommendations and Reports, Prevention and Treatment of Tuberculosis Among Patients Infected with Human Immunodeficiency Virus: Principles of Therapy and Revised Recommendations* (1), CDC has recommended the use of a 2-month regimen of daily rifampin and pyrazinamide (2RZ) as an alternative to a 12-month regimen of isoniazid for the prevention of tuberculosis in HIV-infected persons with positive tuberculin skin test reactions. This recommendation is based on the results of several randomized, controlled clinical trials in HIV-infected persons. Next year, CDC, in conjunction with the American Thoracic Society, expects to issue new guidelines on screening and preventive therapy for tuberculosis that will include a recommendation on the use of the 2RZ regimen for HIV-negative persons for whom preventive therapy is indicated. This recommendation will note that a comparative trial of the 2RZ regimen in HIV-negative persons has not been conducted and that additional data will be needed on acceptability and toxicity to determine whether it is a cost-effective alternative to longer courses of isoniazid.

Until new guidelines are issued, the regimen for HIV-positive persons can be used for HIV-negative persons, following the same guidelines for HIV-positive persons. This regimen may be useful especially in settings where provision of longer courses of

Notices to Readers — Continued

preventive therapy has not been feasible (e.g., jails). CDC's Division of Tuberculosis Elimination (DTBE), National Center for HIV, STD, and TB Prevention, will collect information on completion of preventive therapy from selected programs using the short-course regimen. Programs interested in working with the DTBE in this effort can contact CDC, telephone (404) 639-8123.

Reference

1. CDC. Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: principles of therapy and revised recommendations. *MMWR* 1998;47 (no. RR-20).

Notice to Readers

**Availability of Continuing Education Component
in the *MMWR Recommendations and Reports* series, Vol. 47, No. RR-20**

Continuing Medical Education (CME) and Continuing Nursing Education (CNE) components are available in the paper and electronic versions of the October 30, 1998, *MMWR Recommendations and Reports* (Vol. 47, no. RR-20), *Prevention and Treatment of Tuberculosis Among Patients Infected with Human Immunodeficiency Virus: Principles of Therapy and Revised Recommendations*. The CME component was planned and implemented by CDC according to the Essentials and Standards of the Accreditation Council for Continuing Medical Education. CDC is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CDC designates this educational activity for a maximum of 2.0 hours in category 1 credit toward the American Medical Association's Physician's Recognition Award. CDC also is accredited by the American Nurses Credentialing Center's Commission on Accreditation to provide continuing education for nurses. CDC designates this educational activity for a maximum of 2.4 contact hours of CNE credit.

To register and to receive credit, physicians and nurses must return their responses either electronically to the World-Wide Web site <http://www.cdc.gov/epo/mmwr/mmwr.html>, then go to Continuing Education Program for Physicians and Nurses, or by a card or letter postmarked by October 30, 1999. There is no fee for participating in this continuing education activity.

CME and CNE components are planned for future *MMWR Recommendations and Reports*.

MNWRTM

MORBIDITY AND MORTALITY WEEKLY REPORT

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Deaths Associated with Hurricane Georges — Puerto Rico, September 1998

On the evening of September 21, 1998, Hurricane Georges struck Puerto Rico with estimated maximum winds of 115 mph (Category 3). It made multiple landfalls throughout the Caribbean, including Antigua, the U.S. Virgin Islands, Hispaniola, and Cuba. On September 25, Hurricane Georges struck the U.S. mainland near Key West, Florida, and made final landfall on September 27 in Biloxi, Mississippi, as a Category 2 hurricane. This report presents preliminary data about deaths resulting from the hurricane in Puerto Rico.

On September 23, all 78 civil divisions in Puerto Rico reported damage to homes, and 416 government-run shelters were housing approximately 28,000 persons. Approximately 700,000 persons were without water, and 1 million had no electricity.

The medical examiner (ME) at the Institute of Forensic Sciences provided information about the number and causes of deaths associated with Hurricane Georges. The ME determined whether a death was hurricane-related, including deaths during the impact phase of the storm (i.e., associated with high winds, storm surge, or flash flooding), and during the post-impact phase (i.e., associated with hurricane-related effects such as structural damage, power outages, and injuries incurred during clean-up).

Case Reports

Case 1. On September 23, a 28-year-old woman from Ponce died inside her home from carbon monoxide (CO) poisoning. A gasoline-powered electric generator had been operating inside the home while she was sleeping. Two other family members were hospitalized because of CO poisoning.

Case 2. On September 24, a 46-year-old man from Bayamon was found dead from CO poisoning inside his family store. He had been cleaning the store the night after the hurricane, and a gasoline-powered electric generator was operating outside near an opening where fumes could enter the structure.

Cases 3–6. On September 25, a 27-year-old woman from Caguas and her three children (aged 4, 6, and 7 years) died in a fire in their home. They were using candles to light the home. The mother apparently was asleep when the house caught fire.

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