

Gonorrhea — Continued

5. Piot P, Islam MQ. Sexually transmitted diseases in the 1990s: global epidemiology and challenges for control. *Sex Transm Dis* 1994;21(suppl 2):S7-S13.
6. CDC. Premarital sexual experience among adolescent women—United States, 1970–1988. *MMWR* 1991;39:929–32.
7. CDC. Decreased susceptibility of *Neisseria gonorrhoeae* to fluoroquinolones—Ohio and Hawaii, 1992–1994. *MMWR* 1994;43:325–7.

Adult Blood Lead Epidemiology and Surveillance — United States, Fourth Quarter 1994

CDC's National Institute for Occupational Safety and Health (NIOSH) Adult Blood Lead Epidemiology and Surveillance (ABLES) program monitors elevated blood lead levels (BLLs) in adults in the United States. Blood lead data from laboratory reports are transmitted to state-based lead surveillance programs and are compiled by NIOSH for quarterly reporting (1).

The total number of elevated blood lead reports for 1994 increased 4% over 1993; this increase is attributed to the participation of two additional states (North Carolina and Oklahoma) (Table 1). The number of reports in 1994 increased 5% at lower BLLs (25–39 $\mu\text{g/dL}$ and 40–49 $\mu\text{g/dL}$) and decreased 18% at higher BLLs (50–59 $\mu\text{g/dL}$ and ≥ 60 $\mu\text{g/dL}$), compared with the number of reports in 1993.

Since 1988, the number of states with legislation requiring laboratories and physicians to report elevated BLLs in adults to state health departments has increased from four to 32. As of this report, 22 of these 32 states contribute to quarterly national re-

TABLE 1. Reports of elevated blood lead levels (BLLs) among adults — 22 states,* fourth quarter 1994

Reported BLL ($\mu\text{g/dL}$)	Fourth quarter 1994		Cumulative reports, fourth quarter 1994 [†]		Cumulative reports, fourth quarter 1993 ^{†§}	
	No. reports	No. persons [¶]	No.	(%)	No.	(%)
25–39	4,975	2,332	19,399	(72)	18,529	(72)
40–49	1,393	684	5,806	(22)	5,398	(21)
50–59	309	168	1,140	(4)	1,311	(5)
≥ 60	114	58	459	(2)	633	(2)
Total	6,791	3,242	26,804	(100)	25,871	(100)

*Alabama, Arizona, California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, and Wisconsin.

[†]The cumulative number of reports for 1993 and 1994 have been revised in this report from the number previously reported (2,3). Additional reports for a specific quarter often are received by states after the quarterly reporting deadlines. These reports are included in the year-end cumulative totals to reflect updated quarterly reporting.

[§]Data for first quarter 1993 reported from 17 states (Alabama, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, and Wisconsin). Data for second through fourth quarters 1993 also include reports from Arizona, California, and Washington.

[¶]Individual reports are categorized according to the highest reported BLL for a person during the given quarter. Pennsylvania provides only numbers of reports. Summaries of numbers of persons do not include Pennsylvania data.

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porting; 10 others are developing their capacity to report. Aggregation of state-specific data began in 1992 with 12 states providing quarterly data (4).

ABLES data have improved understanding of the magnitude of this public health problem; identified workplace-specific clusters of overexposures to lead; and resulted in follow-up investigations leading to either remedial activities by employers (5), identification of new sources of exposures (6–8), or enforcement actions by the Occupational Safety and Health Administration (9).

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References

1. CDC. Surveillance of elevated blood lead levels among adults—United States, 1992. *MMWR* 1992;41:285–8.
2. CDC. Adult blood lead epidemiology and surveillance—United States, fourth quarter, 1993. *MMWR* 1994;43:246–7.
3. CDC. Adult blood lead epidemiology and surveillance—United States, 1992–1994. *MMWR* 1994;43:483–5.
4. CDC. Elevated blood lead levels in adults—United States, second quarter, 1992. *MMWR* 1992;41:715–6.
5. CDC. Control of excessive lead exposure in radiator repair workers. *MMWR* 1991;40:139–41.
6. CDC. Lead intoxication associated with chewing plastic wire coating—Ohio. *MMWR* 1993;42:465–7.
7. CDC. Lead poisoning among sandblasting workers—Galveston, Texas, March 1994. *MMWR* 1995;44:44–5.
8. CDC. Controlling lead toxicity in bridge workers—Connecticut, 1991–1994. *MMWR* 1995;44:76–9.
9. CDC. Lead poisoning among battery reclamation workers—Alabama, 1991. *MMWR* 1992;41:301–4.

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Human Rabies — Alabama, Tennessee, and Texas, 1994

In October and November 1994, three persons (one each in Alabama, Tennessee, and Texas) died from rabies. This report summarizes the investigations of these cases by state and local health departments and CDC.

Alabama

On September 29 and 30, a 24-year-old woman residing in Barbour County, Alabama, who was 5–6 weeks pregnant sought care on two occasions at a local hospital emergency department (ED) for subscapular back pain, nausea, vomiting, and paresthesia of the left arm. She was treated for musculoskeletal pain and released. She returned to the ED on October 1 and was referred to a regional hospital for complaints of left-sided chest pain. While in the ED at the regional hospital, she had onset of seizures followed by multiple episodes of projectile vomiting and was admitted to the hospital. Initially, she was alert, but shortly after admission she required intubation and ventilation for respiratory distress and had a spontaneous abortion. On October 2, clinical conditions included acute respiratory distress syndrome, frequent seizures, severe rhabdomyolysis and compartmental syndrome requiring a fasciotomy, and acute renal failure.

On October 6, nasal and vaginal cultures were positive for *Candida albicans* and *C. tropicalis*. Coxsackie B6 virus titer was 16:1, and B1 was 8:1; all other coxsackie viral titers were negative. All other cultures and serologic tests for viral and bacterial cultures were negative.

She developed disseminated intravascular coagulation and multiorgan failure; she died on October 11. Autopsy results indicated evidence of disseminated candidiasis and mucormycosis, which were attributed to antibiotic and steroid therapy.

On December 2, intracytoplasmic structures (Negri bodies) were identified in tissue samples sent to the Armed Forces Institute of Pathology. On December 12, the fixed tissues analyzed at CDC were positive by immunofluorescence for rabies. Nucleotide sequence analysis identified a variant of rabies virus associated with the Mexican free-tailed bat (*Tadarida brasiliensis*).

From 1987 through the onset of her illness, the woman frequently removed and discarded dead or dying bats from a chimney in the facility where she worked. On December 14, Alabama health department investigators retrieved five live bats (all Mexican free-tailed bats) from the facility's fireplace; three tested positive for rabies,