

## Adult Blood Lead Epidemiology and Surveillance — United States, Fourth Quarter, 1992

Data from CDC's National Institute for Occupational Safety and Health Adult Blood Lead Epidemiology and Surveillance program are complete for 1992. Efforts to expand the number of states participating in the surveillance system are ongoing as states increase their capacity to monitor blood lead levels in both adults and children.

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**TABLE 1. Number of reports of elevated blood lead levels (BLLs) in adults — 18 states,\* fourth quarter, 1992**

Reported BLL (µg/dL)	Fourth quarter, 1992 <sup>†</sup>	Cumulative, 1992	Cumulative, 1991 <sup>§</sup>
25–39 µg/dL	2,939	15,279	NA <sup>¶</sup>
40–49 µg/dL	703	4,288	NA
50–59 µg/dL	205	1,089	NA
≥60 µg/dL	104	585	NA
<b>Total</b>	<b>3,951</b>	<b>21,241</b>	<b>18,879</b>

\* Alabama, California, Colorado, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Texas, Utah, and Wisconsin.

<sup>†</sup> Quarterly totals do not include data from Pennsylvania, from which data are available only on an annual cumulative basis.

<sup>§</sup> Cumulative data for 1991 reported from 13 states.

<sup>¶</sup> Data stratified by BLL not available for 1991.

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## *Epidemiologic Notes and Reports*

### **Green Tobacco Sickness in Tobacco Harvesters — Kentucky, 1992**

Green tobacco sickness (GTS) is an illness resulting from dermal exposure to dissolved nicotine from wet tobacco leaves; it is characterized by nausea, vomiting, weakness, and dizziness and sometimes fluctuations in blood pressure or heart rate (1–3). On September 14, 1992, the Occupational Health Nurses in Agricultural Communities (OHNAC) project of Kentucky\* received reports of 27 cases of GTS. The cases occurred among tobacco harvesters who had sought treatment in several hospital emergency departments in south-central Kentucky during the preceding 2 weeks. This report summarizes the findings of the investigation of these cases.

On September 15, OHNAC staff initiated a review of inpatient and emergency department medical records from May 1 through October 2 at five hospitals in the Bowling Green and Elizabethtown areas. The review identified 55 persons in whom GTS, nicotine poisoning, or other illnesses compatible with GTS symptomatology had been diagnosed. On September 25, industrial hygienists from CDC's National Institute for Occupational Safety and Health (NIOSH) observed the tobacco-harvesting process. Worker's hands, forearms, thighs, and backs received the most dermal exposure to wet tobacco. Dew from tobacco leaves often saturated workers' clothing within minutes of beginning field work.

To evaluate possible risk factors associated with GTS, NIOSH investigators and occupational health nurses from the OHNAC project conducted a case-control study. A case was defined as an emergency department diagnosis of GTS or nicotine poisoning in a person whose recorded work history included tobacco harvesting at the time of illness. Forty-nine persons met the case definition, with episodes occurring from July 25 through September 19, 1992; two cases were subsequently excluded from analysis because illness onset coincided with exposure to pesticides (which can induce similar symptoms). Median age of the 47 case-patients was 29 years (range:

\*OHNAC is a national surveillance program conducted by CDC's National Institute for Occupational Safety and Health (NIOSH) that has placed public health nurses in rural communities and hospitals in 10 states (California, Georgia, Iowa, Kentucky, Maine, Minnesota, New York, North Carolina, North Dakota, and Ohio) to conduct surveillance of agriculture-related illnesses and injuries that occur among farmers and their family members. These surveillance data are used to reduce the risk for occupational illness and injury in agricultural populations.