

ALLIANCE FOR HEALTHY HOMES

Protecting Children from Lead and Other Environmental Health Hazards



UNDERSTANDING NEW NATIONAL DATA ON LEAD POISONING

In the May 27, 2005, *Morbidity and Mortality Weekly Report (MMWR)*, the Centers for Disease Control and Prevention (CDC) published new national data on lead poisoning (*MMWR* 54(20); 513-16) (available online at www.cdc.gov/mmwr/preview/mmwrhtml/mm4950a3.htm). This report reports various blood lead statistics for 1999 through 2002, the first significant update since the National Health and Nutrition Examination Surveys (NHANES) data report from 1991 through 1994. These new data document that further gains have been achieved in protecting children from lead poisoning—and that disparities still exist in lead poisoning rates across races and income levels.

New National Data

The report examines new NHANES data collected in 1999-2002. NHANES, conducted by the National Center for Health Statistics, Centers for Disease Control and Prevention (NCHS/CDC), is designed to assess the health and nutritional status of adults and children in the United States through interviews and direct physical examinations.

The geometric mean blood lead level (BLL) in children aged 1-5 (i.e. the average blood lead level) dropped from 2.7 micrograms per deciliter ($\mu\text{g}/\text{dL}$) in 1991-1994 to 1.9 $\mu\text{g}/\text{dL}$ in 1999-2002. This significant decline reflects continuing progress in reducing the lead burden throughout the US. However, NHANES data by income and race reveal the continuation of significant disparities: African-American children aged 1-5 experience a geometric mean BLL of 2.8 $\mu\text{g}/\text{dL}$, and the average BLL for children aged 1-5 in low-income households is 2.5 $\mu\text{g}/\text{dL}$.

Approximately 310,000 American children, the equivalent of 1.6% of children aged 1-5, have too much lead in their blood. This EBL prevalence is lower than the 2% reported for 1991-1994. Again, this reflects progress in moving toward the goal of eliminating childhood lead poisoning as a public health problem by 2010. Unfortunately, the statistical power of the EBL data was insufficient to identify disparities of risk across racial/ethnic populations, though CDC found that 3.1 percent of African-American children aged 1-5 are still lead poisoned, higher than for the whole population of children in that age group.

Limitations of the New Data

The current design of NHANES as a nationally representative survey and analysis of NHANES data does not allow for estimates in smaller geographic areas or for identifying risk in certain subpopulations, including recent immigrants. This can cause policymakers and medical practitioners to ignore the disparities in risk that characterize lead poisoning

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in the United States. Although this report does repeatedly stress that disparities exist, the data presented may still falsely lead some to believe that lead poisoning is no longer a crushing problem, when data from numerous localities demonstrates that children who typically live in older housing in low-income, predominately minority communities are poisoned at rates much higher than the national norm.¹

Implications

Experience suggests that the lead, paint, and other industries may try to use these data to argue that lead poisoning is no longer a problem or that further preventive measures are unjustified because “the problem is going away by itself.” In fact, it is important to emphasize the significance of these data and the steps required to achieve the national goal of ending this condition by 2010:

- The new national data documenting continuing progress on childhood lead poisoning come as welcome news, proving once again that when we control toxic exposures in the environment, human health directly benefits. This progress has not happened spontaneously or magically but is the direct result of controlling environmental lead exposures and making homes burdened with lead-based paint safe for children.
- The NHANES sample is useful for detecting national trends, such as the decline in BLLs across the U.S. population as a whole in the last three decades. However, because of the peculiarly local and concentrated nature of blood lead elevations, it is conceivable that statistical prevalence estimates based on a small national sample could decline to virtually zero, even though many children continue to be identified with elevated BLLs in concentrated “hot spots” that exist in cities and counties throughout the country. Thus, it is vital to continue analyzing blood lead screening data from children living in high-risk areas and to do so at levels small enough to allow detection of hotspots that need focused prevention efforts.
- While childhood lead poisoning is entirely preventable, these data make clear that hundreds of thousands of children are still at high risk for lead poisoning. The country should be targeting its resources and efforts to identify hazardous properties and make them safe before a child is poisoned.

¹ See Brown MJ, Shenassa E, and Tips N, “Small Area Analysis of Risk for Childhood Lead Poisoning,” April 2001, https://nchh.org/resource-library/afhh_report_small-area-analysis-of-risk-for-childhood-lead-poisoning.pdf. See also Goldberg A and Palmer D, “Do You Know Where the Lead Is?” 2002, <https://web.archive.org/web/20070225185114/http://www.nypirg.org/lead/whereslead/ReportText.pdf>; and Philadelphia Citizens for Children and Youth, “Un-Leaded Only: Toward a Safer City for Children,” 2002, <https://web.archive.org/web/20070413045119/http://www.pccy.org/PDF/Lead%20Report.pdf>.

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- The new data show that African-American children ages one to five are still twice as likely to be lead poisoning than their white peers.
- It is clear that children served by Medicaid and those living in older, dilapidated properties are at highest risk. Ending the tragedy of lead poisoning requires increased resources to rehabilitate substandard properties and good maintenance and code enforcement to keep them safe. The challenge is to target our energies and resources to communities at highest risk, to properties that pose hazards, and to children at highest risk. The report itself highlights the success of HUD's Office of Healthy Homes and Lead Hazard Control grants in contributing to targeted hazard control in communities of highest risk, giving further weight to continuing these grants at current or higher funding levels.
- These data also highlight the lack of consistent and reliable data about both lead hazards in housing and lead-poisoned children. Federal law requires that all children served by Medicaid be screened and receive appropriate follow up care. Reliable data collection and reporting can help to focus prevention efforts.
- More than 38 million US homes and apartments are burdened by lead-based paint, and more than 24 million of them contain substantial lead hazards, according to HUD. Lead-safe painting and rehab needs to become the national norm to avoid creating lead hazards in properties now in good condition, and agencies like the Environmental Protection Agency need to draft effective, enforceable rules to ensure that this occurs.