

NATIONAL CENTER FOR ENVIRONMENTAL HEALTH

NCEH has been actively involved in state and local health department childhood lead poisoning prevention programs (CLPPPs) since authorization in 1988:

- 1990-2009 - CDC awarded funds to state and local health departments to support childhood lead poisoning prevention programs.
- 2009-2010 - With congressional acknowledgment, this mission was expanded to include a healthy homes initiative that addressed multiple childhood diseases and injuries in the home but with a continued focus on reaching the Healthy People goal of eliminating childhood lead poisoning.
- 2011 - The budget authorization, appropriation line, and branch name (Lead Poisoning Prevention Branch - LPPB) were changed to reflect Congress' intention that the Program expand from a sole focus on lead poisoning to a broad mission to improve the nation's capacity to identify and address housing related health hazards.
- 2012 - Funding for the Program was reduced from \$30 million to \$1.5 million which curtailed operational activities.
- 2013 - The Program brought more state partners into production status using the CDC-developed software, called Healthy Homes and Lead Poisoning Surveillance System (HHLPPS). The Program collected lead data which was submitted to the CDC by the states in that same year.
- 2014-2016 - More emphasis was placed on maintenance and systems updates for improving HHLPPS. Software enhancements and information security controls were a significant part of this effort. This prepared the way for the Program to be restarted and accept new state partners to apply a more advanced version of HHLPPS.
- 2017-2019 - The program period will have the following main objectives: Support primary prevention activities including blood lead testing, surveillance, and targeted population-based interventions. Awardees will be expected to demonstrate that policies and systems are in place to identify lead-exposed children and link them to recommended services. More specifically, they will be expected to work closely with other agencies, partners, stakeholders and others serving children to ensure that a comprehensive system of referral, case management, follow up, and evaluation is in place for lead-exposed children.

An estimated 535,000 children in the United States have blood lead levels (BLLs) at or above the reference value for blood lead established by CDC in 2012 (5 µg/dL). These children are at grave risk for the intellectual, behavioral, and academic deficits caused by lead. The primary source of lead exposure for children is their homes; some 38 million homes in the United States have lead-based paint hazards that can result in childhood lead poisoning. Low-income and minority children bear a disproportionate burden of this condition caused by unhealthy housing. Other sources of lead and causes of exposure have also been found in items made with lead and in drinking water.

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

NIOSH ABLES is a long-standing state-based surveillance program of laboratory-reported adult blood lead levels (BLLs) since 1987:

- 1987-2013 - NIOSH provided funding that resulted in the expansion of the ABLES program from 4 to 41 states. However, federal funding for State ABLES programs was discontinued in September 2013.
- 2015 - In August, funding to support adult BLL surveillance was resumed but at a reduced amount compared to the pre-2013 funding level.
- 2015 - As of December, 28 states collaborate with NIOSH to conduct adult BLL surveillance.

Occupational lead exposure is an important health problem in the United States. Lead exposure causes acute and chronic adverse effects in multiple organ systems ranging from subclinical changes in function to symptomatic life-threatening intoxication. Moreover, evidence indicates that lead exposure at low doses can lead to adverse cardiovascular and kidney effects, cognitive dysfunction, and adverse reproductive outcomes. Current research has found decreased renal function associated with BLLs at 5 µg/dL and lower, and increased risk of hypertension and essential tremor at BLLs below 10 µg/dL.

The public health objective of the ABLES program is identical to the Occupational Safety and Health Objective 7 in Healthy People 2020, which is to reduce the rate of adults (age 16 or older) who have blood lead levels (BLL) equal or greater than ten micrograms per deciliter (BLLs ≥ 10 µg/dL). The ABLES program aims to accomplish this objective by working with State ABLES programs to build state capacity to initiate or improve adult blood lead surveillance programs which can accurately measure trends in adult BLLs and which can effectively target interventions to prevent lead exposures.