

Iowa Department of Health: Unifying Approaches for Comprehensive Lead Health

An AMCHP MCEH CoIIN Success Story

Lead exposure remains one of the greatest public health issues in the United States due to the detrimental health effects on children, including unborn children. Lead can be detected in pregnant women's plasma and breast milk and can cross the placental barrier. Children are particularly vulnerable to lead exposure due to the susceptibility of their developing organ systems. Children exposed to lead before birth or shortly after are at increased risk of neurodevelopmental challenges, including lower IQ, difficulty concentrating, and inability to control emotions.

Ineffective Siloed Approach

Iowa has long recognized lead poisoning as a health equity issue, affecting vulnerable populations in the state. Despite this awareness, these populations were not receiving the resources and testing needed to address this issue. In evaluating how to better address lead poisoning prevention, the Iowa Department of Public Health (IDPH) realized that the siloed approach of the department was ineffective. Different programs in the department used different terminology and definitions, making collaboration and progress difficult. This approach resulted in a mismatched, diverse set of lead poisoning prevention services being provided throughout the state. It also caused confusion for local health care providers, as they were unclear on where to direct families for services. More importantly, this exacerbated the issue of equity in lead poisoning, as certain populations were denied adequate resources. Fewer than 50 percent of counties in the state were receiving comprehensive services. This highlighted the need for IDPH to build capacity for consistent, comprehensive statewide services.

To increase collaboration in the department to better address lead poisoning, IDPH participated in the Association of Maternal and Child Health Programs (AMCHP) Maternal and Child Environmental Health (MCEH) Collaborative Improvement and Innovation Network (CoIIN). This initiative aims to build state capacity to increase the number of infants and children who have access to a system of coordinated care to address their needs related to lead exposure, with the ultimate goal of decreasing maternal and child morbidity and mortality associated with exposure. Joining the CoIIN allowed IDPH to standardize language and advance lead poisoning prevention work throughout the state.

Updated Language & Conducted Outreach

The first step IDPH took as part of this initiative was to update the language used by each program to ensure consistency throughout the department and make it easier for programs to communicate and collaborate. Once this was accomplished, various programs in IDPH were able to work together to achieve outcomes to improve lead poisoning prevention strategies.

To improve services at the local level, IDPH implemented a Plan-Do-Study-Act framework to address small, local, and clinic-level problems and work directly with healthcare providers to increase blood lead level testing in children. They also used feedback from providers to share effective testing strategies with other providers. Other outcomes IDPH achieved at the local level include increasing education and outreach on blood lead



level testing for children and developing mandatory requirements for counties to provide direct services to children based on blood lead levels.

Updated Data Systems & Title X Agreements

In addition to these changes made at the local and state levels, IDPH also made contributions to efforts at the federal level. IDPH updated data systems and data sharing agreements with Medicaid to include more descriptive information than what is included in billing reports to improve services provided to patients. IDPH also partnered with other states and organizations on a Title V needs assessment and included childhood lead poisoning as one of the state performance measures for receiving Title V funds. Finally, IDPH amended existing Title X contracts with federally qualified health centers to include lead poisoning and launched a pilot study to establish baseline testing for future comparisons. These outcomes addressed the previous mismatched system of unequally distributed strategies by implementing comprehensive, statewide services.

Many of the challenges IDPH experienced during the project were related to communication with health care providers. Many healthcare providers and parents in the state do not see lead as a current issue, but rather an issue from the past that has been resolved. IDPH found a need to increase education to health care providers on this topic and find ways to ensure providers are testing children as required.

Future Plans: Comparing Testing Rates & Enforcing Requirements

Moving forward, IDPH plans to utilize local agencies to work with health care providers to increase services at the local level. IDPH also plans to expand the pilot study to compare testing rates in federally qualified health centers to other health care providers for more comprehensive statewide data on testing rates. IDPH will continue to enforce the requirements for counties to provide services to children based on blood lead levels. Expanding progress from this project along with sustained unification within the department will allow IDPH to continue improving lead poisoning throughout the state.

Meet the Team from Iowa

The organizations that participated in Iowa's ColIN initiative included the Iowa Department of Public Health and Iowa Parents Against Lead Poisoning Kids. Within the Iowa Department of Health, programs included the Title V Program, Bureau of Environmental Health Service's Childhood Blood Lead Testing Program, and Occupational Health and Safety Surveillance.

Learn More

The National Environmental Health Association (NEHA) and other partners are part of the leadership team for the AMCHP MCEH ColIN, which is funded through a three-year grant from the United States Health Resources and Services Administration. By joining the collaborative, NEHA has an important platform to affect policy within the participating states. The objective of the ColIN aligns with the Centers for Disease Control and Prevention and the United States Department of Health and Human Services' broad goal to protect children from the health risks of harmful exposures by developing innovative strategies to reduce and prevent emerging and re-emerging environmental health concerns. Learn more at the following websites:

- neha.org
- mchb.hrsa.gov
- amchp.org
- atsdr.cdc.gov
- www.MCHLeadToolkit.org

