# 2024 Annual Report

## Childhood Lead Poisoning Prevention Advisory Committee

***30***

***years of the Childhood Lead Poisoning Prevention Act***

**State of Delaware** **December 10, 2024**

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# Acronyms

| | |
|---|---|
| ABLES | Adult Blood Lead Epidemiology and Surveillance Program (CDC) |
| ARPA | American Rescue Plan Act |
| B23 | Birth to Three Program |
| BLRV | Blood Lead Reference Value (established by CDC, currently 3.5 µg/dL) |
| CDC | U.S. Centers for Disease Control and Prevention |
| CHIP | Children's Health Insurance Program |
| CLPPAC | Childhood Lead Poisoning Prevention Advisory Committee |
| DHSS | Division of Health and Social Services |
| DPH | Department of Public Health |
| DNREC | Department of Natural Resources and Environmental Control |
| DOE | Department of Education |
| EPA | U.S. Environmental Protection Agency |
| HUD | U.S. Department of Housing and Urban Development |
| DSLBPP | Delaware State Lead-Based Paint Program |
| CLPPP | Childhood Lead Poisoning Prevention Program |
| RRP | Renovation, Repair and Painting Program |

# Introduction

2024 marks 30 years since the passage of the Childhood Lead Poisoning Prevention Act in 1994. The state has maintained a Lead Poisoning Prevention Program during that time, has provided case management to hundreds of children who have been exposed to lead, and has used federal grants for primary prevention and surveillance. Despite the enduring focus on this issue, childhood lead poisoning remains a deeply troubling public health concern that has not yet been adequately addressed, and will require substantial effort and resources to eliminate.

This Childhood Lead Poisoning Prevention Advisory Committee (CLPPAC) 2024 Annual Report addresses the statutory report requirements of the CLPPAC, which include improvements recommended for the Childhood Lead Poisoning Prevention Act, improvements to processes to be followed by agencies, intervention activities, studies of incidence, the state blood lead screening program, monitoring and implementation of regulations, and our oversight of the Delaware State Lead-Based Paint Program and Lead-Based Paint Abatement Fund, including appropriateness of spending and timeliness of remediation and abatement activities.

In addition, this report reviews our activities, including our review of state programs, our ongoing development of a statewide screening program, our investigation into quality control in data management in reporting, our proposal for a community lead screening pilot project, and other activities.

The status of past recommendations from the CLPPAC can be found in Appendix B. A number of recommendations have already been addressed, including mandating universal blood lead screening for all children at age 2, providing school nurses with blood lead results, conducting routine water testing in schools, lowering the blood lead level for automatic eligibility for early intervention services in the Birth to Three Program, lowering the blood lead level for case management in the Lead Poisoning Prevention Program, and distributing point of care screening machines in elementary schools and state service centers.

Other recommendations have not progressed. These will require greater attention, including the urgent need to begin primary prevention in rental housing; to proactively integrate lead dust testing and education in other state programs, such as the Weatherization Assistance Program and the Low Income Home Energy Assistance Program (LIHEAP); to initiate actions to ensure that removal of lead paint and the demolition of outdoor structures that contain lead paint are performed in a safe and health-protective manner; to require the use of lead-safe contractors in schools; to ensure that the water in all child care facilities is tested as a condition for licensure; to enroll Delaware in the CDC Adult Blood Lead Epidemiology and Surveillance (ABLES) Program; and improve lead hazard mapping and reporting.

In a few instances, the state has moved in the opposite direction of recommendations, such as discontinuing the use of registered public health nurses for case management and increasing punitive measures for verification of screening by child care facilities. These actions warrant renewed focus.

This document provides an overview of the ongoing activities of childhood lead poisoning prevention, surveillance, and response in Delaware, and also highlights some of the activities of community partners that assist in implementing the goal of ending childhood lead poisoning in the state.

## Key Findings

1. Childhood lead poisoning remains an important public health issue in the state.
2. Blood lead screening rates are low and have not recovered from the pre-COVID 19 pandemic peak in 2016.
3. Due to data management concerns, the incidence of new lead poisoning cases each year is unclear.
4. The programs to address childhood lead poisoning prevention and intervention are underfunded.
5. As a result of renewed focus on childhood lead poisoning, some programs have grown dramatically in the past two years.
6. Greater coordination between programs and agencies would benefit childhood lead poisoning prevention and intervention.
7. The Childhood Lead Poisoning Prevention Act should be amended to provide clear direction from the General Assembly.

## Recommended Improvements to the Childhood Lead Poisoning Prevention Act

The Childhood Lead Poisoning Prevention Act was established in 1994, and has since been revised and updated (see Appendix C) to keep pace with best practices and emerging program needs. The Act would benefit from future revision in 2025 to accomplish the following:

1. Define the role of the Lead Poisoning Prevention Program (LPPP) and establish program requirements. While the Act presently assigns the DHSS and DPH with limited requirements[1],

[1] Existing DHSS Responsibilities include: provide staff for the CLPPAC (§ 2605 (g)), Delaware State Delaware State Lead-Based Paint Program and activities (§ 2607, 2612), Delaware Lead-Based Paint Abatement and Remediation Fund (§ 2613), provisional certification of contractors (§ 2614), and adopt regulations to administer, implement, and enforce the Act (§ 2616). Existing DPH Responsibilities include: provide an Annual report (§ 2606), duty to investigate lead paint hazards (§ 2610) and notify the Delaware State Lead-Based Paint Program (§ 2611), establish a universal reporting system for blood lead

the role and responsibilities of the bulk of the activities performed by the LPPP occur outside of the direction of the Act. The Act should be amended to bring the LPPP under its purview, to guide the actions of the program, and should include the following:

A. Define the purpose of the LPPP.
B. Describe the core activities of the program, including:
    a. Collect, manage, report, and share blood lead level data.
    b. Describe case management, including the expectations and parameters of case management.
    c. Establish medical management guidelines and oversee the medical management of all cases.
    d. Improve screening and testing rates, particularly in those communities at a higher risk for lead poisoning.
    e. Expand public education for primary prevention, screening/testing, and intervention services.
    f. Execute program referrals for services.
C. Establish clear guidance for enforcement of the Act.

2. Update screening and testing requirements so that they are consistent with new federal recommendations. The CLPPAC supports updating the requirements for blood lead screening and testing in the Delaware Code and Regulations to:

A. Align with the CDC Case Definition for Lead in Blood (CDC, 2023), which permits either 1) a venous blood lead test, or 2) two capillary screenings within a 12-week period, for confirmatory laboratory evidence;
B. Utilize only those screening and testing methods that are accepted for blood lead analysis through FDA-approval or CLIA-waiver; and
C. Recommend healthcare providers to order or perform screening or testing upon the request of the parent or guardian, irrespective of the age of the child or prior screening or testing.

The CDC Case Definition for Lead in Blood, which was updated in 2023, should be relied upon for which blood lead results are considered "valid," irrespective of the age of the child, for eligibility for state services. These services include case management by the Childhood Lead Poisoning Prevention Program, Lead Risk Assessments, abatement of lead paint hazards through the Delaware State Lead-Based Paint Program, Early Intervention Services through the Birth to Three Regional Programs, and any other state services that currently rely upon a confirmatory venous blood lead test.

results (§ 2602 (d), provide access to data on screening and results to school nurses (§ 2603 (d), and collect reports from school districts and charter schools about kindergarten enrollment (§ 2603)

If the State is to rely upon federal recommendations for the determination of a confirmation of blood lead level, it is especially important to use FDA-approved or CLIA-waived methods of blood lead analysis that are not controversial for their accuracy. This would prohibit the use of Filter Paper for blood lead analysis until it receives federal approval by CDC or FDA. From 2019 to 2023, 2486 Delaware children were screened with Filter Paper, though annual screening with Filter Paper dramatically declined when Magellan LeadCareII analyzer recalls ended on March 30, 2022.

Parents and guardians should be entitled to have their child screened or tested for lead, including to monitor blood lead levels, or if there are concerns about an exposure. The half-life of lead in blood is short, approximately 40 days, making the narrow window of detection through a blood lead screening or test especially important (Wani et al., 2015). Delays in screening after a suspected exposure decrease the likelihood that the lead poisoning can be identified. Healthcare providers should not decline a blood lead screening or test when it is requested by a parent or guardian, and parents should not be in a position where they have to shop for a second opinion while the clock is ticking on their ability to detect exposure through a blood lead screening or test.[2]

## Improvements to Processes to be Followed by Agencies

As we have evaluated state programs, we have identified several areas where state agencies can take action to improve their processes without the need for enabling legislation. These proposed improvements are summarized in the following table and detailed below.

| Improvement | Responsible Party | Description |
|---|---|---|
| 1. Update Regulations for Confirmatory Testing | DHSS | Update Title 16 Admin Code 4459A |
| 2. Establish Quality Controls for Data Collection, Management, and Reporting. | Lead Poisoning Prevention Program | Data collection, management and reporting quality controls, integration of state datasets |
| 3. Establish Consistency in Reporting of Blood Lead Results from Laboratories and Providers in DHSS Regulations. | DHSS | Update Title 16 Admin Code 4459A to align with Title 16 Admin Code 4202 |
| 4. Establish Consistency in Program Eligibility in Accordance with the CDC Blood Lead Reference Value | Birth to Three Program | Update Established Conditions List to correspond with the CDC BLRV |

[2] The October 2023 U.S. Food and Drug Administration's nationwide recall of certain single-serving applesauce pouches, including WanaBana, Weis, and Schnucks Apple Cinnamon Fruit Purée, due to elevated lead levels reveals the importance of rapid public health response to emerging sources of exposure.

| Improvement | Responsible Party | Description |
|---|---|---|
| 5. Establish Consistency in Practices with the Childhood Lead Poisoning Prevention Act. | Lead Poisoning Prevention Program | Age for blood lead results submitted to school nurses |
| | Department of Finance | Establish the Delaware Lead-Based Paint Abatement and Remediation Fund |
| 6. Expanded Use of State Resources for Lead Screening | DHSS | Increase use of Mobile Unit |
| 7. Comprehensive Review of Outreach Materials, Guidance, and Practices | Lead Poisoning Prevention Program | Update or establish outreach and education materials, case management procedures, and medical management guidelines |
| 8. Establish Regulations required by HB 456 (2018) | DHSS | Develop regulations governing the ban of the application of lead paints from outdoor structures |

1. Update Regulations for Confirmatory Testing. In August 2023 DHSS updated 4459A Regulations Governing the Childhood Lead Poisoning Prevention Act §6 to require a venous confirmation blood test. Children with a confirmatory venous test are eligible for the following services, whereas children who received only capillary screenings are not eligible:

| Intervention Activities | Confirmed Venous Blood Lead Level Eligibility |
|---|---|
| Case Management by the Childhood Lead Poisoning Prevention Program | 3.5 µg/dL |
| Home Risk Assessment to identify the source of exposure | 3.5 µg/dL |
| Abatement of lead paint hazards by the Delaware State Lead-Based Paint Program | 3.5 µg/dL |
| Early intervention services through the Birth to Three Regional Programs | 5 µg/dL |

The existing requirement for a venous confirmatory test creates a barrier for addressing childhood lead poisoning. Barriers identified by the Committee include:

A. Venous testing is much more difficult for the child, especially for the young children who are required to be screened at ages one and two.
B. Parents sometimes do not take their child to a laboratory for venous blood draws, even if a healthcare provider writes a prescription, due to various reasons including fear of the blood draw, transportation, and the time required for the test.

C. Lack of awareness of the importance of a confirmatory test, by both parents and healthcare providers.
D. Children who do not have a healthcare provider or do not attend wellcare visits are unlikely to be screened or to receive confirmatory testing.
E. Children without health insurance coverage may confront additional barriers to accessing a healthcare provider or affording the cost of a venous blood lead test.

Instead of requiring a venous blood lead test, the CDC Case Definition for Lead in Blood (CDC, 2023) permits the use of two capillary blood lead screenings performed within 12 weeks of each other to confirm the result. Bringing Delaware policy for confirmatory testing in line with the CDC Case Definition would reduce the medical burden for venous blood lead testing, while maintaining rigor in the method of analysis and confirming the result with federally-approved methods. The Department can take action on this regulatory change without the need for a change to the Childhood Lead Poisoning Prevention Act and should do so as soon as possible.

2. Establish Quality Controls for Data Collection, Management, and Reporting. The procedures that govern the collection, management, and reporting of childhood lead poisoning data should be guided in the future by best practices and professional standards and developed in a collaborative approach with the CLPPAC.

Comparative analysis of the Lead Poisoning Prevention Program's annual Blood Lead Surveillance Reports and other state-generated datasets revealed that the methodology used to query and present childhood lead poisoning incidence data has created confusion about what the data represents. Based on presentations to the CLPPAC to date, data presented by LPPP may not capture all new cases that are identified through a blood lead screening or test each year. In August 2024, the State Epidemiologist began assisting the LPPP with its data query protocols, the results of which are not yet available.

Ongoing examination of this concern and the involvement of the State Epidemiologist revealed a much more substantial data-management problem, including lack of important quality controls. As a result, the blood lead testing and screening data are currently undergoing rigorous verification and reconciliation procedures for the very first time.

Another major concern is the lack of basic demographic data. For example, the race of lead-poisoned children in 2023 is unknown. Efforts need to be made to ensure completeness of information when the blood lead results are submitted by a laboratory or healthcare provider. Missing information in demographic characteristics, particularly race, make it more difficult to target mechanisms to reduce disparities in access to screening and prevent exposure.

The integration of separately-maintained state datasets would enable the state to more easily close existing data gaps, which include:

A. Identify lead screening and blood lead level results for children in target communities;
B. Establish the lead poisoning burden among children who receive Medicaid services, live in foster care, or are members of immigrant or refugee households; and
C. Determine the effectiveness of the Mobile Unit and Community Health Clinics at screening children within the community.

3. Establish Consistency in Reporting of Blood Lead Results from Laboratories and Providers in DHSS Regulations. DHSS regulations on the reporting of blood lead results are inconsistent and should be reconciled to match the reporting requirements for other blood lead testing results that are collected by the state.

Title 16 Admin Code 4459A *Regulations Governing the Childhood Lead Poisoning Prevention Act* § 9.2 permits two weeks for a laboratory to report blood lead level results to DPH. This conflicts with the timeline established in Title 16 Admin Code 4202 *Control of Communicable and Other Disease Conditions* § 2.2, which requires reporting of all "notifiable diseases" within 48 hours. Lead poisoning is on the "List of Notifiable Diseases/Conditions" (Title 16 Admin Code Ch. 4202 Appendix 1).

| **Regulations** | **Section** | **Timeline for Reporting Blood Lead Results** |
|---|---|---|
| Title 16 Admin Code 4459A Regulations Governing the Childhood Lead Poisoning Prevention Act | § 9.2 | Two weeks |
| Title 16 Admin Code 4202 *Control of Communicable and Other Disease Conditions* | § 2.2 and Appendix 1 | 48 hours |

Consistent reporting requirements across the Department about when blood lead level results should be submitted is especially important given the need for swift action to address the source of exposure and to provide case management.

4. Establish Consistency in Program Eligibility in Accordance with the CDC Blood Lead Reference Value. The Birth to Three Program receives funding through a federal grant of the Individuals with Disabilities Act (IDEA Part C) and provides early intervention services and support for infants and toddlers who have a developmental delay, a birth mandate disability, or an established medical condition, and their families.

Effective May 1, 2021, the Birth to Three Program lowered the eligibility for children with a lead exposure documented in a venous blood lead test from 10 µg/dL to 5 µg/dL to align with the CDC Blood Lead Reference Value (BLRV). Subsequently, the CDC lowered the BLRV to from 5 µg/dL to 3.5 µg/dL, but that change was not updated in the Established Conditions List.

To provide consistency across state programs for eligibility, the Birth to Three Program should update their Established Conditions List as soon as possible to reflect new federal guidance and changes when they are made to the BLRV. The BLRV already sets the qualifying criteria for case management and enrollment in the Delaware State Lead-Based Paint Program.

5. Establish Consistency in Practices with the Childhood Lead Poisoning Prevention Act. The Childhood Lead Poisoning Prevention Act (the Act) has specific definitions and requirements, some of which have not yet been integrated into program practices. These include:

A. School Nurse Data Access: In its description of the requirement and corresponding MOU being developed between DHSS and DOE to provide blood lead level results to school nurses, DHSS maintained that all blood lead results between 9 months of age and 18 years will be transferred. However, the Act requires the data include "the results of all lead screenings or tests" (Title 16 Del. C.§ 2603 (d)). The limitation placed on the data transfer to exclude blood lead results for children under 9 months of age is therefore not in compliance with the Act and should be corrected.

B. Delaware Lead-Based Paint Abatement and Remediation Fund: Title 16 Delaware Code § 2613 created the Delaware Lead-Based Paint Abatement and Remediation Fund. Moneys from the Fund are to support the payment of contractors for risk assessments, abatement and remediation work, and temporary lodging for housing occupants during work. The Governor's budget is required to contain specific appropriations to the Fund, and interest accrued in the Fund is to be credited to the Fund. Despite these requirements, the Fund has not yet been directly established, there is no evidence that any accrued interest has been transferred for qualifying activities, and budget requests are not specific to the Fund. This challenges our ability to oversee the Fund, which the Act requires the CLPPAC to perform.

6. Expanded Use of State Resources for Lead Screening. State resources for blood lead screening at the DHSS Public Health Clinics and Mobile Units are underutilized (see page 35). These existing lead screening resources could be better used to expand Delaware's screening rates with a more aggressive lead screening campaign with the following characteristics:

A. Easy to access to schedules more than a few days in advance;
B. Expanded partnerships with schools, childcare facilities, community organizations, and special events;
C. Evening and weekend hours;
D. Greater publicity, including press releases and social media; and
E. Comprehensive community education on lead, within which screening is a part.

7. Comprehensive Review of Outreach Materials, Guidance, and Practices. Childhood lead poisoning prevention should be guided by the best available research. The materials, practices,

and guidance used by the LPPP should be evaluated for gaps and areas of improvement. This includes the outreach and educational materials used by the LPPP, case management procedures, and medical management guidelines. The LPPP should:

A. Assess educational materials sent to families with children with a blood lead level at or above the CDC BLRV (3.5 µg/dL) for appropriate and sufficient health guidance. The educational materials distributed by the LPPP contained more health information prior to 2022, when they were revised and the health component was dramatically reduced.
B. Re-evaluate whether registered public health nurses should have a role in case management. The use of registered public health nurses was discontinued in 2019.
C. Develop medical management guidelines to assist healthcare providers in making the most of their role in managing childhood lead poisoning cases. Medical management guidelines are provided by state health agencies in other states and would lessen confusion and improve the consistency of medical care in Delaware.
D. Produce a comprehensive package of planning and outreach materials. These should outline best practices and would better guide program staff in the future.

8. Establish Regulations required by HB 456 (2018). HB 456, which was signed into law in 2018, required the following regulations, which have not yet been established:

> By January 1, 2020, the Department of Health and Social Services shall develop regulations governing the ban of the application of lead paints from outdoor structures in the State of Delaware consistent with the prohibitions set forth in this Act. Such regulations shall be designed to minimize public health risks from the application of lead paints and the potential future weathering and removal of lead paints. The Department of Health and Social Services and the Department of Natural Resources and Environmental Control shall coordinate efforts wherever feasible in the implementation of this Act.

## Recommendations for Funding

The budgets allocated in FY 2024 and FY 2025 are insufficient to meet the basic needs of the Childhood Lead Poisoning Prevention Program and the Delaware State Lead-Based Paint Program. Because of improvements in screening rates, and anticipated changes to confirmatory testing, the number of children requiring services is expected to increase. The danger of a waiting list that will backlog programs and overwhelm capacity has the potential to bury the Programs in the near future.

Funding needs are specific to the following program elements. The complete analysis and details that we submitted to the Joint Legislative Oversight and Sunset Committee in October 2024 can be found in Appendix C.

| Program | Funding Request |
|---|---|
| Case Management | $535,500 |
| Lead Risk Assessments | $542,500 |
| Lead Paint Hazard Control and Abatement | $5,827,500 |
| Filter First in Homes | $35,000 |
| Interim Controls | $188,500 |
| Public Education and Outreach | $250,000 |
| Total | $7,379,000 |

# Overview of CLPPAC Activities

The Childhood Lead Poisoning Prevention Advisory Committee (CLPPAC) was first established in 2001 with SB 155. After more than a decade, the Committee stopped meeting without explanation in 2012. HB 89 restarted the CLPPAC in 2019, and HB 63 (2021) assigned the Department of Health and Social Services (DHSS) with the responsibility of providing staff support. SB 9 in 2023 tasked the CLPPAC with overseeing the new Delaware State Delaware State Lead-Based Paint Program, the Delaware Lead-based Paint Remediation and Abatement Fund, and developing a plan for lead-safe rental housing.

In 2024, the CLPPAC has committed itself to the following tasks:

1. Initiate a review of all DHSS programs and services pertaining to childhood lead poisoning, including quarterly reports from the Lead Poisoning Prevention Program and Delaware State Lead-Based Paint Program, with standardized information provided to the Committee.
2. Initiate the process of reviewing data, data gaps, current practices, and best practices in childhood blood lead screening and testing for the development of a Statewide Screening Plan.
3. Assess the status of childhood lead poisoning in Delaware.

## Program Review

CLPPAC initiated a thorough review of state programs that address childhood lead poisoning and prevention, prioritizing DHSS programs first, with the intention of continuing with other agency programs in 2025. The program review has informed the bulk of this report, and has also served the purpose of educating the public and CLPPAC members about the breadth and depth of state programs to address childhood lead poisoning. Details on our program review can be found in Appendix A.

## Statewide Screening Plan

CLPPAC is in the research phase of developing a Statewide Screening Plan for Delaware to improve childhood blood lead screening and testing in the state. Our efforts involve a careful review of state data, policies, and practices, and an evaluation of best practices from other states and the peer-reviewed literature. To date, our focus has considered the following elements: baseline screening and testing information, data gaps, screening, and testing opportunities, screening barriers, verification of screening, blood lead result validity, screening goals, and children at greatest risk.

## Data Validation

To improve the presentation and usefulness of blood lead surveillance data for a data-driven policy response to childhood lead poisoning, CLPPAC has begun to coordinate with the State Epidemiologist in the Division of Public Health. This effort includes an evaluation of baseline data in the most recent Blood Lead Surveillance Report published by the Division and improvements to data presentation, with particular regard to age, demographic, blood lead level, and geographic granularity so that data are useful for improving policy and directing resources.

## Community Lead Screening Pilot Project

This project proposes to screen 500 children from birth to 6 years of age for lead poisoning in target communities though the places where they learn. By bringing the screening equipment directly into target communities, the project proposes to screen as many children as possible in centralized locations in the shortest amount of time.

Blood lead screening and testing rates for Delaware children are low, potentially leaving many children with lead exposures unidentified. Statewide screening rates peaked in 2016 and have not recovered from substantial declines during the COVID-19 pandemic. To bring screening rates to acceptable levels, an aggressive screening strategy is required that can maximize existing state resources and build community partnerships.

Screening and confirmed (venous) identification of a blood lead level at or above the CDC's Blood Lead Reference Value (BLRV) of 3.5 µg/dL initiates a series of actions by the state to identify and correct the source of exposure, to guide the child's family through the services available in case management, and, for those children under age 3 with a confirmed (venous) blood lead level at or above 5 µg/dL, automatic referral to early intervention programs.

The low rates of screening are particularly concerning in low-income communities with older housing, which are more likely to have lead paint hazards in the home. While Delaware mandates screening of all children at 12 months and again at 24 months of age, children 3 years and older continue to be at high risk for the detrimental cognitive and health effects of lead poisoning. This project proposes a streamlined mass-screening approach that simply seeks to screen children within the target communities at the target age range, without consulting the child's medical record and without regard for whether the child has previously received a lead screening.

## Committee Work Product in 2024

In the past year, we have met monthly, the product of which is detailed in this report. In addition, we took the following actions:

1. Submitted a printed copy of the Lead-Safe Rental Housing Plan (CLPPAC, 2023) to each member of the General Assembly in January 2024.
2. Submitted a letter to the Joint Finance Committee in support of the Lead Poisoning Prevention Program in February 2024.
3. Submitted a letter to the Joint Legislative Sunset Review Committee in support of the Lead Poisoning Prevention Program as part of their 3-year targeted program review on October 9, 2024.

## Committee Challenges

Due to improvements made in committee staffing, specifically the addition of Social Contract, LLC to provide administrative support in September 2023, the CLPPAC has been able to maintain compliance with the public meeting requirements of Title 29 Chapter 100, Freedom of Information Act this year. While Social Contract, LLC's assistance in coordinating the collection of information for committee research has also been invaluable, outstanding information requests and receipt of conflicting information continues to be a challenge. In addition, committee membership is not fully appointed, and the Kent County public member appointed by the Governor has not yet been designated.

## Looking Ahead

2025 is an opportunity to address some of the longstanding issues that continue to contribute to childhood lead poisoning, principally lead hazards in rental housing that continue to harm children, some rental units perhaps poisoning many children over the years with tenant turnover. In addition, we will continue our program review and monitoring of state programs to identify gaps and areas of improvement, as well as to celebrate the successes.

Lead-Safe Rental Housing: The CLPPAC strongly believes in the benefits of primary prevention, and the importance of removing lead hazards from rental housing. Lead paint remediation should be performed preemptively in pre-1978 rental units in order to avoid additional children being poisoned, as we described in our Lead-Safe Rental Housing Plan (CLPPAC, 2023).

Our recommendations included updating the Residential Landlord Tenant Code to include a comprehensive statewide system for the registration of all rental units, lead safe certification of all rental units built prior to January 1, 1978, non-discrimination requirements, standardized education and disclosure requirements, tenant protection measures to ensure tenants are not exposed to lead during lead paint hazard removal work, administrative warrants and enforcement mechanisms, and penalties for rental unit owners who fail to comply. Our recommendations also asked for a Lead Paint Hazard Control Grant Program, application for federal funds for lead hazard control, market-based mechanisms to encourage workforce development, and greater resources to support the Lead Poisoning Prevention Program.

Continuation of Program Review: The CLPPAC review of state programs will continue into 2025 and will continue with quarterly reports from the Delaware State Lead-Based Paint Program (DSLBPP) and Lead Poisoning Prevention Program (LPPP). We will also examine other DHSS Programs, including the Office of Drinking Water, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Health Alert Notifications. We intend to look deeper into the programs in the Department of Education's water sampling in schools, facility evaluation tool, Child Find and 619 Program referrals, and the Office of Childcare Licensing inspection and screening verification requirements, as well as DNREC's activities involving permits for sandblasting water towers and the demolition of utility towers by Delmarva Power in New Castle County.

New Federal Rules: At the federal level, substantial progress has been made to remove lead from drinking water with the October 8, 2024 update to the EPA Lead and Copper Rule.[3] In addition, on October 24, 2024 the EPA amended the Lead-Based Paint Dust Rule to address lead dust hazard standards and clearance levels for lead in paint, dust and soil.[4] We will evaluate the implications for this in Delaware in greater detail next year.

Finalize the Statewide Screening Plan: We anticipate finalizing the state's first Statewide Screening Plan, which will be data-driven, based on the best available research, utilize successful strategies from other states, and will improve childhood blood lead screening and testing in the state.

[3] https://www.epa.gov/ground-water-and-drinking-water/lead-and-copper-rule-improvements

[4] https://www.epa.gov/lead/hazard-standards-and-clearance-levels-lead-paint-dust-and-soil-tsca-sections-402-and-403

# Intervention Activities

Early-life intervention activities “can mitigate and compensate for the deleterious effects of lead” and are documented to improve long-term educational and behavioral outcomes from childhood lead exposure, including substantial decreases in anti-social behaviors that impact school discipline and performance, and increases in educational outcomes (Billings and Schnepel, 2017:  18).

Delaware has several intervention programs available, though there is room for improvement. Existing intervention programs include the following:

| **Intervention Category** | **Description** | **Programs Available in Delaware** |
|---|---|---|
| Primary Prevention | Abate or remediate sources of exposure before a child becomes poisoned | DOE water testing and abatement in schools and childcare facilities |
| | | DNREC permits for sandblasting lead paint from water towers |
| | | Ban on the new application of lead paint on outdoor structures |
| Secondary Prevention | Abate or remediate sources of exposure after a child becomes poisoned | Delaware State Lead-Based Paint Program |
| | | LPPP Case Management |
| Medical Evaluation and Treatment | Provide for the unique medical needs of children who are exposed to lead | LPPP Case Managers perform outreach to healthcare providers |
| Nutritional Assessment | Provide nutritional supports to reduce absorption of lead into body tissues | Birth to Three Regional Programs |
| | | Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) |
| Developmental Surveillance | Assess the cognitive and behavioral development to identify needs | Birth to Three Regional Programs |
| | | Ages and Stages Questionnaire |
| Public Assistance Referrals | Customized services to meet the needs of children exposed to lead | Birth to Three Regional Programs |
| Special Education | Targeted education and behavioral development for children exposed to lead | 619 Program for children ages 3-5 |

| Intervention Category | Description | Programs Available in Delaware |
|---|---|---|
| Public Outreach | Education to raise awareness of lead poisoning prevention and the importance of screening | LPPP partnerships with Delaware Readiness Teams and Latin American Community Center initiated in 2024 |

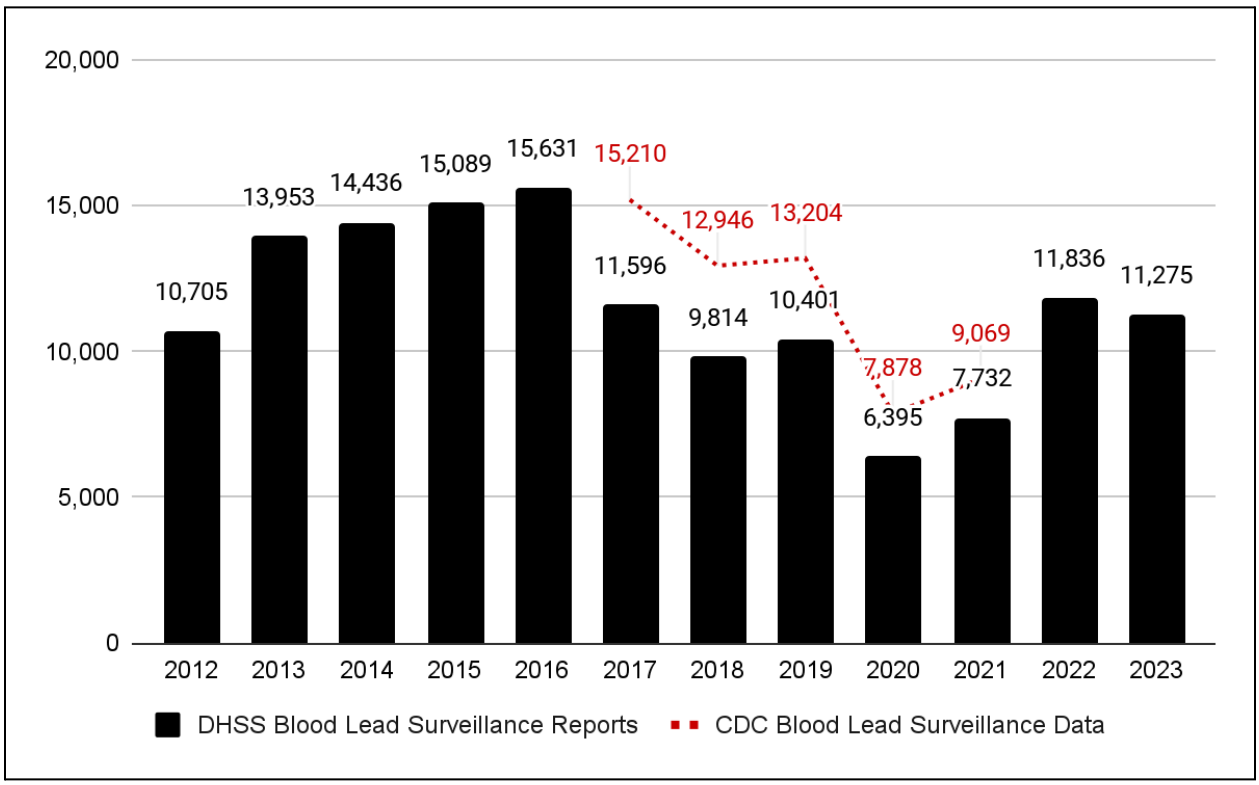
# Studies of Incidence

Based on information provided by the Lead Poisoning Prevention Program to date, we are unable to confidently report on the number of new childhood lead poisoning cases annually or endorse the incidence data that have been provided in the DHSS Blood Lead Surveillance Reports to date.

# Blood Lead Screening and Testing

Screening and testing data reported in DHSS's Blood Lead Surveillance Reports (DHSS 2022a, 2022b, and 2023) show that screening and testing peaked in 2016 with 15,631 children screened or tested. It is important to note that these screening and testing datasets may be impacted by the same data quality management issues that made incidence data problematic. As a result, these figures may change as data quality controls improve. As a reference, the data provided by CDC in their blood lead surveillance dataset for Delaware (2017-2021) are also included in the chart below.

**DHSS Blood Lead Surveillance Reports: Delaware Children who Received a Blood Lead Screening or Test, Birth to Age 6**




Data sources: DHSS Blood Lead Surveillance Reports, 2012 through 2017 (DHSS 2022b, Table 9) and 2019-2023 (DHSS 2023, Tables 1 and 7). Data from 2012 to 2022 represent calendar year totals. 2023 data represent Fiscal Year 2023, not calendar year 2023. CDC Blood Lead Surveillance Data, 2017-2021 (CDC 2024).

The significant decline in blood lead screening following the 2016 peak in screening (see chart above) resulted, in part, from the following challenges:

1. Lack of Program oversight due to the discontinuation of the Committee in 2012 (the Committee was restarted by HB 89 in 2019).

2. Need for funding for education of healthcare providers and parents about screening and testing.
3. The recent COVID-19 pandemic, where children were not attending well-care visits in person and therefore did not have access to point-of-care screening.
4. The Magellan recall of the LeadCare II Analyzer from July 2021 to February 2022, which is the principal method for capillary blood lead screening.
5. Temporary discontinuation of data access to school nurses that enabled them to verify screening in 2023.

The rebound in screening that began in 2022 and 2023 is believed to have benefitted from:

1. Expanded universal screening to all children at age 2, in addition to age one, in 2021 (HB 222).
2. Targeted approach by Delaware MCOs to improve blood lead screening rates for members receiving Medicaid services.
3. Updated regulations by the Office of Childcare Licensing in 2022 that tie screening verification to licensure.
4. The efforts of school nurses to verify screening upon kindergarten enrollment.

Considerable focus in the past five years since the restart of the CLPPAC by the General Assembly in 2019 (HB 89) has been on improving blood lead screening and testing. Screening and testing all Delaware children at the schedule prescribed has benefits. Screening and testing are:

Diagnostic: blood lead screening or testing is the most reliable mechanism to identify children who need help.

Age-Sensitive: early and repeated screening when children are mobile in the home and engage in hand-to-mouth behaviors is most effective for identifying exposure and improves the ability of the brain to recover some of the long term learning and behavioral effects of lead exposure.

Results in Prevention: screening and testing initiates the process where the source of exposure to lead can be identified and removed (secondary prevention), including services provided by the Lead Poisoning Prevention Program, such as case management and Lead Risk Assessment, and the Delaware State Lead-Based Paint Program.

Enables Help: children up to age three are eligible for early intervention services through the Birth to Three Regional Programs with a venous blood lead level 5 µg/dL or above.

Delaware's original Childhood Lead Poisoning Prevention Act, signed in 1994, required universal blood lead screening or testing for all children at 12-months of age. The Act was amended in 2010 (HB 300), which established screening by questionnaire at 24 months of age. Research by the American Academy of Pediatrics (AAP, 2016) and the US Preventive Services Task Force (USPSTF, 2019) determined that questionnaires were unable to capture all of the various areas of lead exposure risk, some of which may not even be known to the parent.

Questionnaires were discontinued in Delaware in 2021 (HB 222), and universal blood lead screening or testing for all Delaware children is now required at age 1, and again at age 2, irrespective of risk factors. These new requirements were incorporated into DHSS Regulations 4459A in 2023, which also identified the specific age ranges that qualify as a 12-month test and a 24-month test (Delaware Register, August 2023).

In addition, since 1989 all children receiving Medicaid services have been required to receive a blood lead screening or test at 12-months of age, and again at 24-months of age, as part of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program expansion in the Omnibus Budget Reconciliation Act of 1989.

**Universal Screening Requirements for Delaware Children**

| **Policy** | **First Screening or Test** | **Second Screening or Test** |
|---|---|---|
| Title 16 Delaware Code Ch 26: Childhood Lead Poisoning Prevention Act | 12 months of age | 24 months of age |
| DHSS 4459A Regulations Governing the Childhood Lead Poisoning Prevention Act | 9 to 15 months of age | 21 to 27 months of age |
| Medicaid EPSDT Requirements (Bright Futures Guidelines, 2017) | 12 months of age | 24 months of age |

The Childhood Lead Poisoning Prevention Act defines screening and testing as follows:

> Screening: A capillary blood lead test, including where a drop of blood is taken from a finger or heel of the foot.
>
> Testing: A venous blood lead test where blood is drawn from a vein.

Confirmatory Testing: DHSS Regulations 4459A require confirmatory venous tests of all capillary screening results prior to receiving services by the Department of Public Health, which include case management, a lead risk assessment, eligibility for the Delaware State Lead-Based Paint Program, and Birth to Three early intervention services.

Verification of Screening: Since 1994, the Childhood Lead Poisoning Prevention Act has required that child care facilities and public and private nursery schools, preschools, and kindergartens shall require proof of screening for lead poisoning for admission or continued enrollment. In August 2022, the Department of Education updated Office of Childcare Licensing regulations and required proof of lead screening by their regulations to conform to the screening requirements of the Childhood Lead Poisoning Prevention Act (Title 14, 934 Regulations for Family and Large Family Child Care Homes, Delaware Register, August 2022). To assist school nurses with verifying screening, the General Assembly required the Lead Poisoning Prevention Program to share screening data with school nurses in 2023 (HB 227) and blood lead level results in 2024 (HB 401).

# Regulations

The CLPPAC monitors the implementation of regulations pertaining to childhood lead poisoning. Regulations in Title 7, 14, and 16 pertain to the elimination of childhood lead poisoning hazards and the screening and testing of children for lead poisoning. The table below represents the existing regulations that pertain to childhood lead poisoning and their most recent updates.

| Title | Chapter | Purpose | Last Updated |
|---|---|---|---|
| Title 16, Department of Health and Social Services | 4459 Lead-Based Paint Hazards | Standards for lead-based paint activities in target housing and child-occupied facilities, training, certification, and work standards | April 1, 2024 |
| | 4459A Regulations Governing the Childhood Lead Poisoning Prevention Act | Standards for blood lead screening and testing, including documentation and reporting from labs and providers, and proof of screening for child care and school enrollment | May 1, 2024 |
| | 4459B Residential Property Renovation, Repair, and Painting | Occupant protection, education, work practice standards, certification, record-keeping, and reporting for renovation activities where lead paint hazards are present | February 1, 2023 |
| Title 14, Education | 934 Regulations for Family and Large Family Child Care Homes | Documentation that licensed child care facilities are free of lead-based paint hazards; proof of blood lead screening for enrollment required | May 1, 2022 |
| | 935 DELACARE: Regulations for Residential Child Care Facilities and Day Treatment Programs | Documentation that licensed child care facilities are free of lead-based paint hazards | May 1, 2022 |
| | 811 School Health Recordkeeping Requirements | School nurse record-keeping requirements | March 1, 2023 |
| | 815 Health Examinations and Screening | Screening requirements for kindergarten enrollment | February 1, 2022 |
| Title 7, Natural Resources and Environmental Control | 1100 Division of Air Quality | §1101 and §1102 were amended to remove the exemption for the dry abrasive blasting of lead paint from water tanks, initiating the current permits for sandblasting lead paint from water towers | January 1, 2019 |

# Department of Health and Social Services Programs

The Department of Health and Social Services (DHSS) has several programs that contribute to the state's childhood lead poisoning prevention efforts. Our 2024 program review has examined some of these programs in the Division of Public Health and the Division of Medicaid and Medical Assistance.

## Division of Public Health

### Lead Poisoning Prevention Program (LPPP)

The Lead Poisoning Prevention Program (LPPP), formerly known as the Office of Lead Poisoning Prevention, was established within the Division of Public Health in 1994 with the passage of the Childhood Lead Poisoning Prevention Act. Until FY 2024, the LPPP operated exclusively on federal grants. Throughout its history, the LPPP has focused on surveillance, case management, and educational and community outreach.

Surveillance and Reporting: DHSS has maintained a universal reporting system for all blood lead level screening and testing results since Delaware's original Childhood Lead Poisoning Prevention Act (SB 78) which was signed into law in 1994. In addition to providing annual Blood Lead Surveillance Reports since 2021 (HB 222), DHSS provides data to the U.S. Centers for Disease Control and Prevention (CDC), Kids Count in Delaware, and My Healthy Community.

> Blood Lead Surveillance Report: Following HB 222 in 2021, DHSS now provides annual reports to the General Assembly, and has published reports for 2021, 2022, and 2023.
>
> Delaware Epi Lab Insight (DELI): Currently scheduled to launch on April 1, 2025, DELI is a new data management system that will replace the current Healthy Housing and Lead Poisoning Surveillance System (HHLPSS) that the LPPP has utilized to date. The greater functionality of the DELI system includes the complete migration of HHLPSS data, streamlined data mapping, usable and working data dictionary, data cleanup, deduplication of data, ability to develop and generate new reports, and streamlined reporting to My Healthy Community.
>
> My Healthy Community: This software platform provides public-access information on a variety of health topics, including downloadable data on childhood lead poisoning. Accessible data includes blood lead testing and screening rates and results for children with blood lead levels at or above 3.5 µg/dL and 5 µg/dL; lead poisoning risk factors, including percent of housing units built before 1970, percent of rental housing units, child poverty rates, health insurance coverage, and median household income; and an assessment of lead testing coverage based upon housing stock and in comparison to the Social Vulnerability Index.

Case Management: LPPP provides Case Management to all Delaware children under the age of 6 years who have had a venous blood lead test showing a blood lead level at or above 3.5 µg/dL. Before Case Management, the following occur:

1. Pre-Case Management: The parents of all children with a capillary blood lead screening at or above 3.5 µg/dL are sent educational information about lead poisoning by mail.

2. Confirmation of blood lead level: For those children who received a capillary screening at or above 3.5 µg/dL, a confirmatory venous blood lead test ≥ 3.5 µg/dL is required for enrollment in case management. For those children who did not receive a confirmatory venous test within 90 days, the healthcare provider and parent are contacted.

If a child is determined eligible for Case Management, because they are below six years of age and have had a venous blood lead test at or above 3.5 µg/dL, the following steps occur:

1. Coordinate with Healthcare Provider: Followup testing is coordinated with the Healthcare Provider to track the child's blood lead level over time.

2. Family Education: The family is contacted and educated on lead health concerns, exposure sources, actions to be taken to bring the blood lead level down, and follow-up blood lead testing. Referrals are also made to Birth to Three Early Intervention Services if the child is eligible (less than 3 years of age with a blood lead level at or above 5 µg/dL).

3. Followup and Support: DHSS staff stay in contact with the family to ensure follow-up testing. If levels are still elevated, re-education and encouragement is provided to bring lead levels down.

4. Closure: Once blood lead levels are below 3.5 µg/dL, a closure letter is provided to the family. Closure may also occur if requested by parents, if the family moves out of state, or if contact with the parents lapses for more than one year and the healthcare provider also cannot contact the family.

Outreach and Education: Renewed focus on education and outreach since 2023 has included the following partnerships and contracts.

Rodel (Delaware Readiness Teams): LPPP initiated a partnership with the Delaware Readiness Teams in 2024 to improve public outreach, particularly with early education providers. On September 25, 2024, Delaware Readiness Teams hosted the EPA to provide a Lead Awareness Train the Trainer Session, with the intention to certify

interested members of the public, as well as Delaware Institute for Early Childhood Trainers as part of their professional development system.

Latin American Community Center: Spanish-language presentations are provided on childhood lead poisoning prevention utilizing EPA-supplied curriculum. In addition, blood lead level screening is provided for children attending childcare at their two facilities.

Quality Insights: Virtual Training Session for Pediatricians on October 25, 2023 by Quality Insights to increase testing and completeness of reporting. In addition, Quality Insights has developed healthcare provider training videos that are available on YouTube. The analysis of deliverable results from this initiative on blood lead screening and testing is not yet determined.

**Current Contracts with the Childhood Lead Poisoning Prevention Program**

| Contractor | Services | Amount |
|---|---|---|
| Rodel (Delaware Readiness Teams) | Outreach and coordination with DOE, childcare providers, Child Find, and the general public | $150,000 |
| Latin American Community Center | Outreach and presentations to Spanish-speaking communities: lead screening for children in their two childcare facilities | $145,000 |

Data Sharing: sharing lead poisoning information with healthcare providers is an area of particular need. While progress has been made with data sharing with school nurses, healthcare providers and Medicaid Managed Care Organizations (MCOs) continue to be unable to access blood lead level data that is collected by the state.

School Nurse Verification of Screening: Since the original Childhood Lead Poisoning Prevention Act was adopted in 1994, all children are required to have documentation that they have received a lead screening or test for enrollment in kindergarten, and school nurses are tasked with verifying each student's medical record. Because the lead screening is often left off the child's medical record, school nurses have directly contacted the Department of Public Health for this information. In January 2023 this practice was discontinued. HB 227 (2023) restored school nurse access to lead screening information directly from the Department of Public Health, enabling school nurses to verify lead screening occurred for kindergarten enrollment. Direct data transfers into the DOE health portal have not yet begun.

School Nurse Blood Lead Results: HB 401 (2024) requires the data sharing of lead screening and testing results with school nurses, as lead exposure produces profound behavioral and cognitive impacts that impacts child performance in school. Knowledge about lead exposure is essential to a school nurse's ability to provide appropriate care in

the school environment, including supplementary dietary and educational resources. Data transfers are expected to begin in January 2025.

Data Transfers to Delaware Health Information Network (DHIN): The LPPP does not currently provide data transfers to DHIN. Due to the lifelong effects of childhood lead poisoning, patient care would benefit from healthcare provider-access to blood lead results throughout a patient's lifetime. DHSS has been collecting lead poisoning data in its universal reporting system since the original Childhood Lead Poisoning Prevention Act went into effect in 1995. Making this blood lead level information available to primary healthcare providers is especially valuable when individuals change healthcare providers or are considering pregnancy or the decision to breastfeed, have broken bones or osteoporosis, or when treating the cardiovascular and physiological effects of lead exposure later in life, which may require followup lead testing in adults.

## Delaware State Lead-Based Paint Program (DSLBPP)

Delaware's Delaware State Lead-Based Paint Program (DSLBPP) was established by SB 9 in 2023 and requires DHSS to investigate the source of exposure for children up to 18 years of age with a confirmed (venous) blood lead level at or above the BLRV (3.5 µg/dL) who live in housing constructed prior to January 1, 1979. If the source of exposure is determined to result from a lead-paint hazard, the DSLBPP will remediate the lead paint hazard if the property owner does not. Household occupants are provided with alternative lodging during the remediation work, and the cost of rent is controlled for 3-years for those tenant-occupied housing units where the DSLBPP pays the cost of remediation.

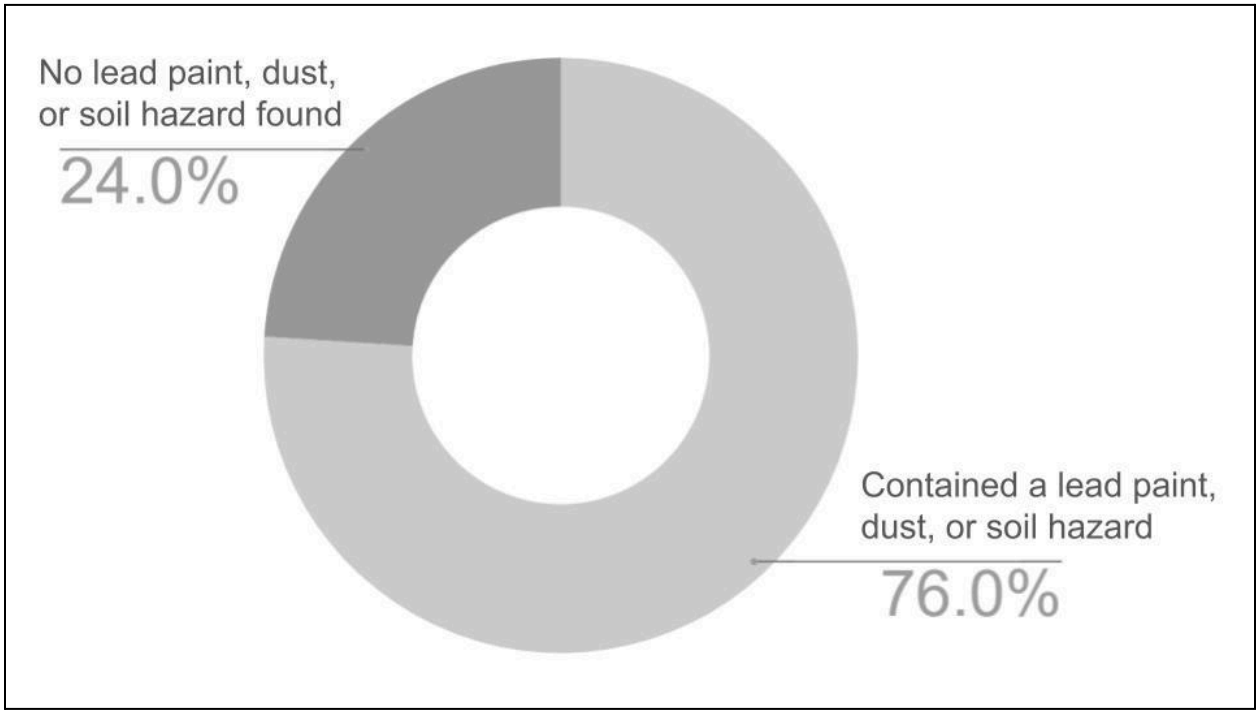
Lead Risk Assessments (LRA): The LRA is an on-site investigation to determine the presence, type, severity, and location of lead-based paint hazards (including lead hazards in paint, dust, and soil), and provides suggestions for ways to control identified hazards. LRAs are performed by certified risk assessors, and performs the following:

1. Visual inspection on the components being tested and notes whether the components are in an "intact" or "deteriorated" condition.
2. Interior and exterior painted-surface scans with an X-Ray Fluorescence (XRF) analyzer.
3. Dust-wipe samples taken in rooms children access, including floor and windowsill samples.
4. Soil samples taken in areas where soil is exposed.
5. LRA results are detailed in the LRA Report, which is emailed to DPH and the property owner.

Of the 125 homes that underwent a lead risk assessment in the past five years, lead hazards were identified in 95 homes. Of these, 90 contained lead paint hazards, 69 contained lead dust hazards, and 14 contained lead soil hazards. 30 homes, constituting 24% of all LRAs, did not have a lead paint, dust, or soil hazard identified, meaning that the lead exposure occurred

through other means. During this time period, the action level that triggered a LRA was lowered from a starting level of 10 µg/dL to 7.5 µg/dL in 2022, and then to 3.5 µg/dL in 2023 (SB 9).

**Percentage of Delaware housing units with a lead paint, dust, and soil hazard identified during the Lead Risk Assessment (1999-2024).**




New Water Sampling: Beginning on July 1, 2024, LRAs have included water sampling. Three samples are taken from those taps identified as used for water consumed by the child to identify any lead hazard. Water samples are sent to the laboratory and included in each LRA Report, and taps with water samples above 1 ppb are targeted for remediation. Water sampling is funded separately from the funds reserved for the DSLBPP.

Selection of Contractors: In 2024 the DSLBPP initiated the contractor RFP selection processes and four contractors were selected through the competitive bid process. Each of these contractors have certifications in Renovation, Repair, and Painting (RRP) and Lead Abatement, and are able to provide services statewide.

Funding Transfer to New Castle County No Lead Program: To provide lead remediation services to households in New Castle County as the program started, the DSLBPP partnered with the New Castle County No Lead Program.

The New Castle County No Lead Program launched in 2019 with HUD Funding, as well as supplemental funding from the New Castle County Community Block Grant and the City of Wilmington, to perform lead paint hazard abatement in income-eligible housing constructed prior

to 1978. The No Lead Program originally provided services in target zip codes, but now addresses housing units across New Castle County. It has admirably performed the bulk of the lead hazard control work for the DSLBPP in 2024, as that program develops.

In July 2024, the DSLBPP announced the transfer of $1 Million to the New Castle County No Lead Program for households in New Castle County that are referred for lead hazard remediation. These funds will assist in lead paint hazard controls in those households that are not eligible for HUD funding through the Lead Hazard Control and Healthy Homes grant that New Castle County previously was awarded. The scope of this agreement ensures that the state requirements for timelines, communication, provision of alternative housing during work that are required by Title 16 Chapter 26 are followed.

Program Launch: The DSLBPP has been built from scratch since the program was initiated by SB 9 in 2023, and we anticipate that the DSLBPP will be fully-operational in 2025. Through quarterly reports, we have monitored the challenges to the launch of the program; these include the execution of legal agreements for use with landlords, the RFP timeline to select certified contractors, and the heavy reliance on referrals to the New Castle County No Lead Program.

In its first year since being signed into law, the DSLBPP expended $72,000 and resulted in the remediation of 5 households, all of which were executed by the New Castle County No Lead Program via referral. No households in Kent or Sussex County were remediated. Lead paint hazards were identified in 71.4% of households investigated with a risk assessment, and the completion rate for eligible households in FY 2024 is 10%. Landlords also directly funded some abatement, completing 3 units statewide.

The DSLBPP will have to remediate many more homes in 2025 and beyond if it is to have a substantial impact on the lead poisoning problem in Delaware.

**Delaware State Delaware State Lead-Based Paint Program Metrics, Fiscal Year 2024**

| | New Castle County | Kent County | Sussex County | Total |
|---|---|---|---|---|
| Households eligible for a risk assessment | 24 | 11 | 24 | 70 |
| Households with a lead paint hazard | 19 | 9 | 18 | 50 |
| Abatement completed by the Delaware State Lead-Based Paint Program | 0 | 0 | 0 | 0 |
| Referrals to the New Castle County No Lead Program | 105 | | | 105 |
| Abatement Completed by the New Castle County No Lead Program | 5 | | | 5 |
| Abatement Completed by Landlords | 2 | 0 | 1 | 3 |
| Total Expenditures by the Delaware State Lead-Based Paint Program | $26,400 | $19,200 | $26,400 | $72,000 |

Data presented at quarterly program updates to CLPPAC.

## Renovation, Repair and Painting Program (RRP)

Delaware receives $340,000/year through the EPA-funded Renovation, Repair, and Painting Program (RRP) for the training, certification, and enforcement of renovation, repair, and painting contractors. Contractors that perform work that disturbs lead-based paint, including the replacement of windows or other home repairs, must be certified by DPH.

The RRP Program maintains a list of certified contractors, which is posted on the DHSS website. The list was most recently updated on June 10, 2024 and includes 155 Delaware-based contractors, which are comprised of RRP contracting firms, lead-based paint contracting firms, and environmental testing firms. In addition, the RRP certified contractors list includes contractors in surrounding states and across the country.

Regulations governing the RRP program can be found in Title 16 Admin Code 4459B Residential Property, Repair, and Painting. These regulations were most recently updated in the February 1, 2023 *Delaware Register*.

## Birth to Three Early Intervention Program (B23)

The Birth to Three Early Intervention Program (B23), which receives funding through a federal grant of the Individuals with Disabilities Act (IDEA Part C), provides early intervention services

and support for infants and toddlers who have a developmental delay, a birth mandate disability, or an established medical condition, and their families.

Delaware's Interagency Coordinating Council (ICC) advises and assists the B23 Program to help determine established medical conditions. Effective May 1, 2021, the ICC supported the decision of B23 to lower the eligibility for children with a lead exposure documented in a venous blood lead test from 10 µg/dL to 5 µg/dL. Children are directly referred to the B23 by the LPPP, and can also be referred by other programs, including child cares, hospitals, parents, the Division of Family Services, or early intervention service providers.

To improve tracking of children with lead exposures, on October 31, 2023 B23 added a mandatory field to their referral form and data system that requires collecting the child's blood lead level to better identify children eligible for the IDEA Part C based on established conditions when referrals are made from other programs.

For children who are not automatically eligible based on an established medical condition, following referral, the B23 performs an evaluation at a location convenient for the family, such as their home, a child care center, or another site. Once eligibility is determined either via evaluation or established medical condition, the child is assessed for needs and strengths, an Individualized Family Service Plan (IFSP) is developed that outlines outcomes and early intervention services, and the program continues to work with the family to achieve the outcomes identified in the IFSP.

As part of the LPPP's collaborative outreach efforts with the Interagency Coordinating Council (ICC) Outreach Committee, B23 is working on an extensive physician outreach campaign to engage pediatricians on the importance of early intervention and the pathways to make a referral to the B23 program. This includes the distribution of an infographic and brochure at community outreach events.

Once children are no longer eligible due to age, the B23 Program prepares families for transition to the IDEA Part B 619 Programs, and provides other resources to families. With parental consent, a transition meeting is held with the school districts with the documentation that they need to determine eligibility for each child.

Program Improvements: B23 staff have worked to ensure that all children with a qualifying blood lead level are determined eligible at referral, and have been successful in that effort in FFY 2023. The number of families who decline services from the LPPP was also reduced in FFY 2023.

Program Challenges: B23 continues to struggle with sufficient service providers, particularly speech therapists. As a result, all of the children who are eligible for services are placed in the referral system, making them available for a provider to accept the referral.

**Referrals made to the Birth to Three Program by Federal Fiscal Year from the Lead Poisoning Prevention Program (LPPP) and Other Programs by Blood Lead Level**

| Federal Fiscal Year | Blood Lead Level | Referrals from the LPPP | Referrals from Other Programs | Total Number of Referrals |
|---|---|---|---|---|
| **2022** | **0-4.9 µg/dL** | 5 | 57 | **62** |
| | **5.0+** | 47 | 50 | **97** |
| | **2022 Total** | **52** | **107** | **159** |
| **2023** | **0-4.9 µg/dL** | 5 | 54 | **59** |
| | **5.0+ µg/dL** | 42 | 30 | **72** |
| | **2023 Total** | **47** | **84** | **131** |

Data presented to CLPPAC on August 13, 2024 by Hope Sanson, Birth to Three Early Intervention – Administration, Part C Data Manager.

**Results of Referrals made to the Birth to Three Program by Federal Fiscal Year from the Lead Poisoning Prevention Program (LPPP) by Blood Lead Level**

| Federal Fiscal Year | Blood Lead Level | Received Services | Declined Services at Referral | Determined Ineligible at Evaluation | Declined Services After Referral |
|---|---|---|---|---|---|
| **2022** | **0-4.9 µg/dL** | 1 | 4 | 0 | **0** |
| | **5.0+** | 11 | 22 | 6 | **1** |
| | **Total** | **12** | **26** | **6** | **1** |
| **2023** | **0-4.9 µg/dL** | 1 | 3 | **0** | **0** |
| | **5.0+ µg/dL** | 6 | 11 | **0** | **4** |
| | **Total** | **7** | **14** | **0** | **4** |

Data presented to CLPPAC on August 13, 2024 by Hope Sanson, Birth to Three Early Intervention – Administration, Part C Data Manager.

**Results of Referrals made to the Birth to Three Program by Federal Fiscal Year from the Other Programs by Blood Lead Level**

| Federal Fiscal Year | Blood Lead Level | Received Services | Declined Services at Referral | Determined Ineligible at Evaluation | Declined Services After Referral | Other |
|---|---|---|---|---|---|---|
| 2022 | 0-4.9 µg/dL | 30 | 2 | 5 | 7 | 4 |
| | 5.0+ | 26 | 1 | 5 | 5 | 1 |
| | Total | 56 | 3 | 10 | 12 | 5 |
| 2023 | 0-4.9 µg/dL | 42 | 1 | 0 | 3 | 0 |
| | 5.0+ µg/dL | 21 | 2 | 0 | 1 | 0 |
| | Total | 63 | 3 | 0 | 4 | 0 |

Data presented to CLPPAC on August 13, 2024 by Hope Sanson, Birth to Three Early Intervention – Administration, Part C Data Manager.

## Public Health Clinics and Mobile Unit

DHSS provides capillary blood lead screening through two programs, at Public Health Clinics located in six State Service Centers, two of which are in each county, and through Mobile Units deployed in October 2022 in all three counties. While the Mobile Unit is only able to do capillary blood lead screening using the Magellan LeadCareII analyzers, the Public Health Clinics are also able to refer to LabCorp for a venous blood lead test.

**DHSS Public Health Clinics**

| New Castle County | Kent County | Sussex County |
|---|---|---|
| Hudson State Service Center<br>501 Ogletown Rd., Newark<br>302-283-7587 | Williams State Service Center<br>805 River Rd., Dover<br>302-857-5140 | Thurman Adams State Service Center<br>544 S. Bedford St., Georgetown<br>302-515-3174 |
| Porter State Service Center<br>509 W. 8th St., Wilmington<br>302-777-2860 | Milford State Service Center at the Riverwalk<br>253 NE Front St., Milford<br>302-424-7140 | Anna C. Shipley State Service Center<br>530 Virginia Ave., Seaford<br>302-628-6772 |

In the five year period from 2019-2023, 722 blood lead screenings were performed at five of the six Public Health Clinics that offer blood lead screening, with dramatic increases in 2023 over prior years. [Note: Complete data was not provided for the Porter State Service Center Public Health Clinic]. The months of September, October, and November are busier than the rest of

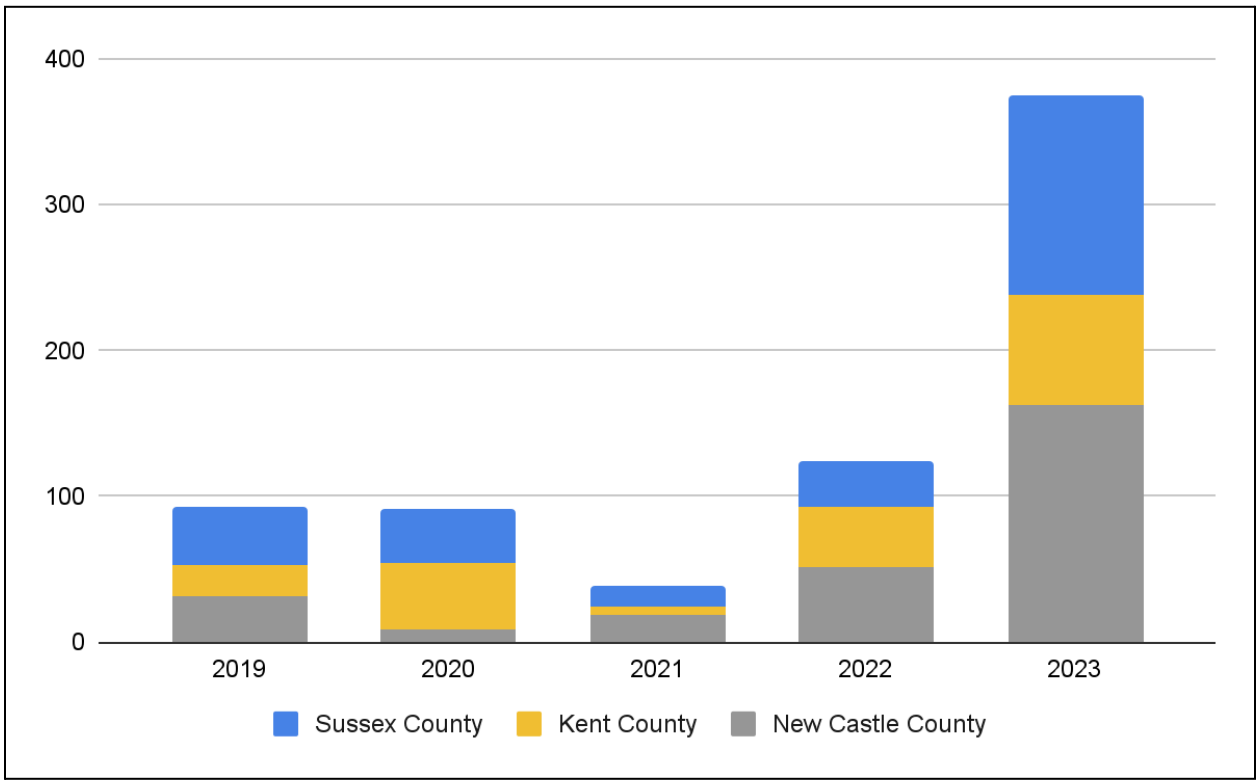
the year, likely reflecting a need for a blood lead screening for child care or kindergarten enrollment.

**Blood Lead Screening Performed at Public Health Clinics, 2019-2023**

| | New Castle County | | Kent County | | Sussex County | | |
|---|---|---|---|---|---|---|---|
| | Hudson | Porter | Williams | Milford | Adams | Shipley | Total |
| 2019 | 31 | NA | 22 | 0 | 40 | 0 | 93 |
| 2020 | 9 | NA | 7 | 38 | 29 | 9 | 92 |
| 2021 | 18 | NA | 5 | 1 | 11 | 3 | 38 |
| 2022 | 36 | 16 | 29 | 12 | 3 | 28 | 124 |
| 2023 | 128 | 34 | 48 | 28 | 51 | 86 | 375 |
| **Total** | **222** | **50** | **111** | **79** | **134** | **126** | **722** |

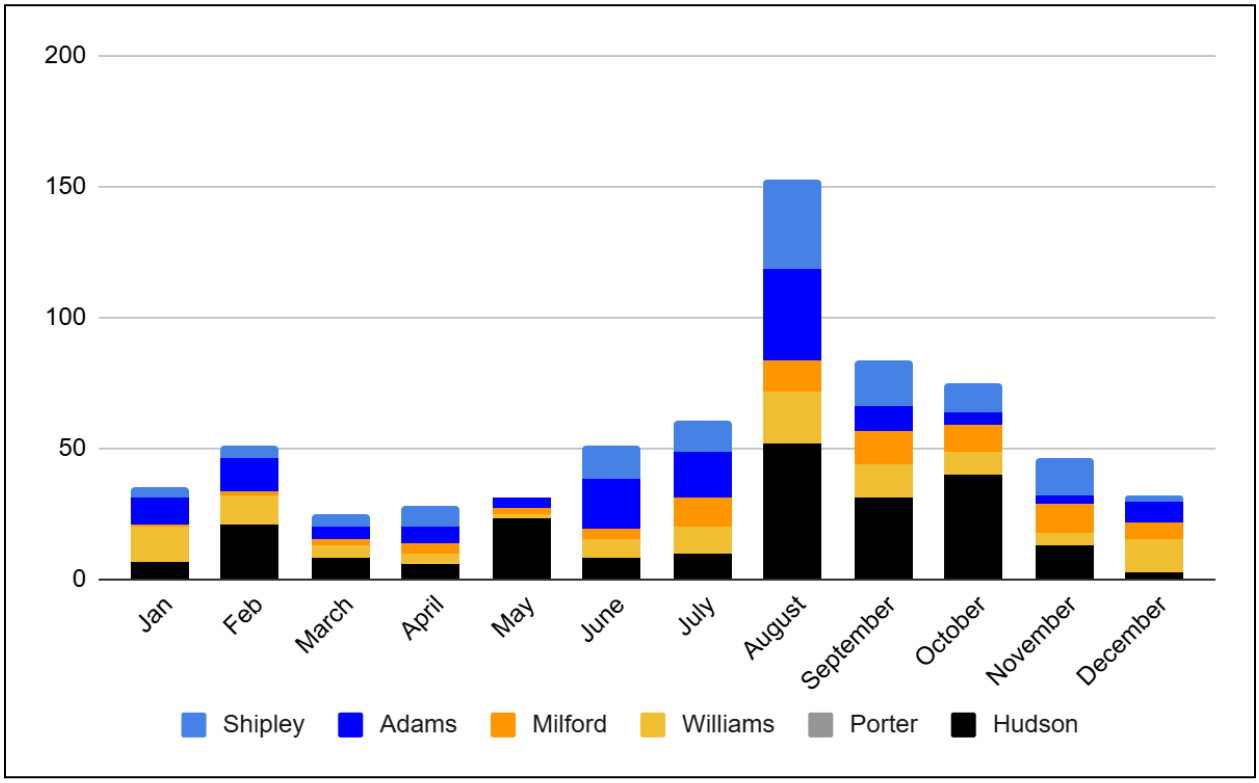
Data extracted from HHLPSS, October 24, 2024. NA = Not Available (data was not provided for the Porter State Service Center Public Health Clinic and is therefore excluded).

**Blood Lead Screening Performed at Public Health Clinics by County, 2019-2023**




Data extracted from HHLPSS, October 24, 2024. Data was not provided for the Porter State Service Center Public Health Clinic for 2019-2021.

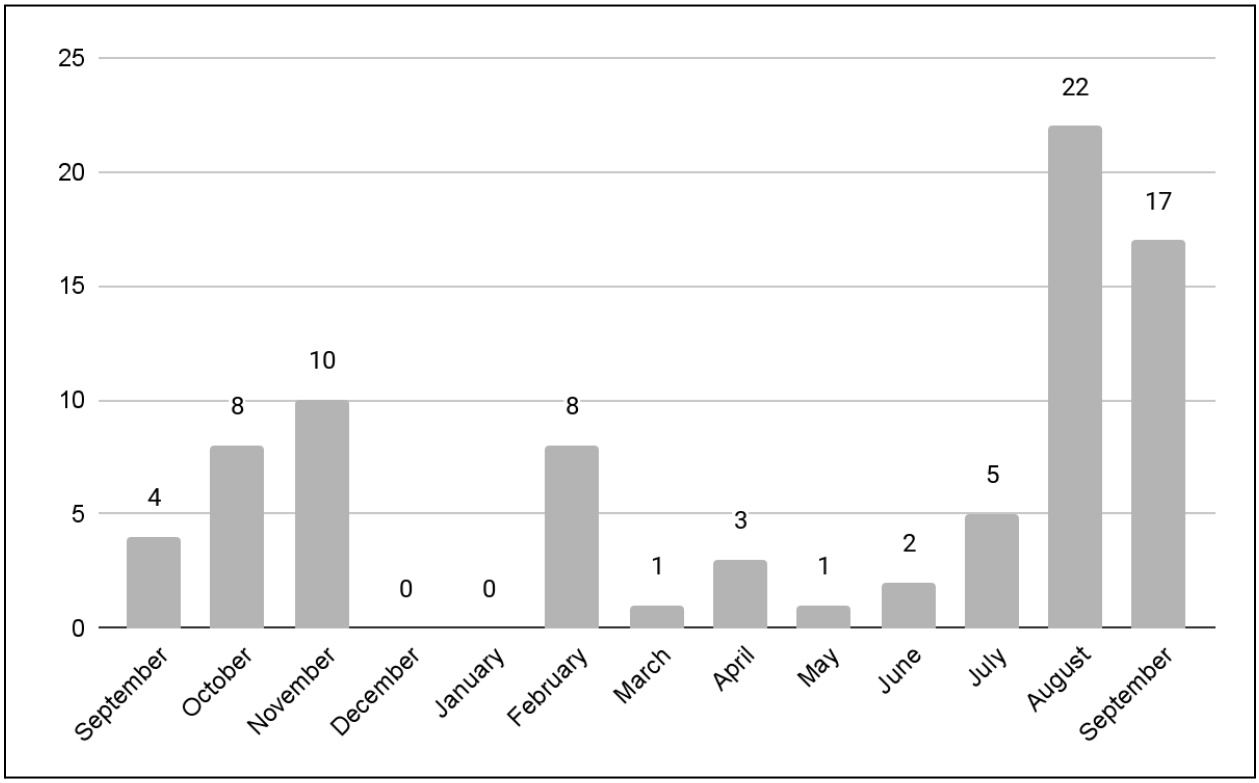
**Blood Lead Screening Performed at Public Health Clinics by Month, 2023**




Data extracted from HHLPSS, October 24, 2024. Monthly data was not provided for the Porter State Service Center Public Health Clinic and is therefore excluded.

Blood lead screenings by DHSS Mobile Units began in October 2022 in all three counties. In the 12-month period between September 23, 2023 and September 24, 2024, 81 blood lead screenings were performed by the Mobile Unit.

**Blood Lead Screening Performed by Mobile Units by Month, September 23, 2023 to September 24, 2024, for all three counties**




Statewide Services Performed Report, December 2, 2024.

## Division of Medicaid and Medical Assistance (DMMA)

All children receiving Medicaid services are required to be screened or tested for lead at 12-months of age, and again at 24-months of age, as part of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program. Delaware's Division of Medicaid and Medical Assistance (DMMA) tracks blood lead screening for children receiving Medicaid services. Lead screening has been included in the National Committee for Quality Assurance (NCQA) Health-Care Effectiveness Data and Information Set (HEDIS) performance measures since 2008 (Wengrovitz and Brown, 2009).

Screening rates in Delaware for children who receive Medicaid services are on par with the national average. Screening rates in Sussex County exceed those of Kent and New Castle County by approximately 10%. Delaware's three Managed Care Organizations (MCOs) each have programs to improve blood lead screening for members.

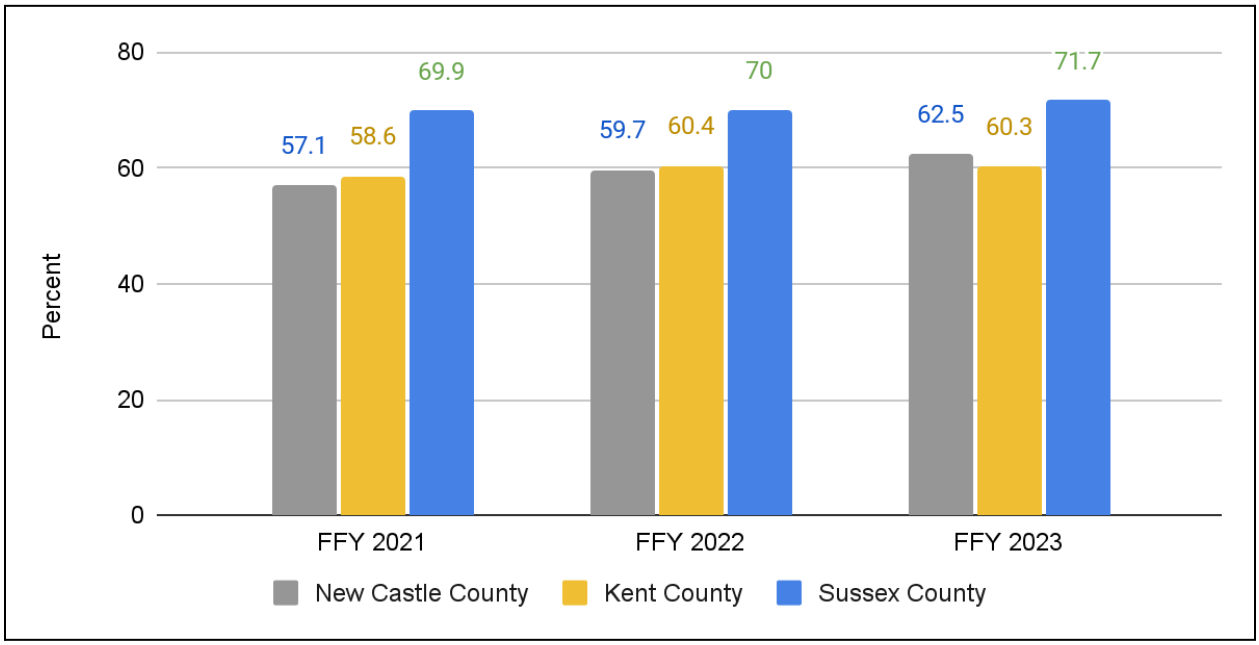
While we were able to acquire blood lead screening data from the DMMA program, the LPPP has not been able to establish the proportion of these screenings and tests in comparison to state totals.

**Blood Lead Screenings Performed for Children Receiving Medicaid Services by County and Federal Fiscal Year (FFY) 2021-2024.**

| Federal Fiscal Year (FFY) | New Castle County | Kent County | Sussex County | Total |
|---|---|---|---|---|
| FFY 2021 | 2909 | 1108 | 1453 | 5470 |
| FFY 2022 | 2940 | 1168 | 1516 | 5624 |
| FFY 2023 | 3200 | 1098 | 1350 | 5618 |
| FFY 2024 | 3683 | 1331 | 1194 | 6208 |

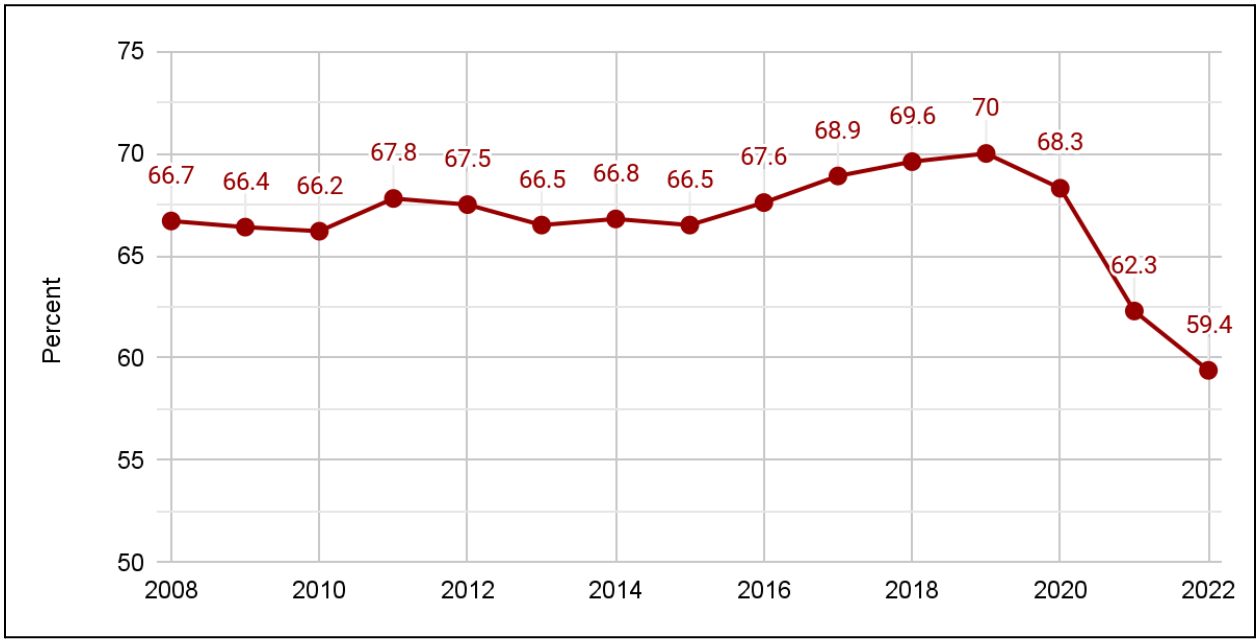
Data provided by the Division of Medicaid and Medical Assistance, August 20, 2024.

**Blood Lead Screening Rate (Percent) for Children Receiving Medicaid Services by County and Federal Fiscal Year (FFY) 2021-2023.**




New Castle, Kent, and Sussex County data: Health-Care Effectiveness Data and Information Set (HEDIS); provided by the Division of Medicaid and Medical Assistance, August 20, 2024.

**National Average Lead Screening Rate for Children Receiving Medicaid Services (2008-2022)**




National average data represents the percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday; provided by National Committee for Quality Assurance (NCQA), available online at https://www.ncqa.org/hedis/measures/lead-screening-in-children/

Managed Care Organizations (MCOs); The following MCOs presented their lead screening programs at the CLPPAC Meeting in March 2024:

Amerihealth Caritas: To improve blood lead screening, Amerihealth Caritas performs outreach to all members, including special outreach to those members who are overdue for lead screening. Targeted outreach is performed for those members who have a positive lead screening, which includes information on the home remediation services that are available by the New Castle County No Lead Program.

Delaware First Health: Analysis of the lead screening data analyzed by Delaware First Health revealed that those members who were not getting their lead screenings were also disengaged in general and not attending well visits. Outreach targets both members and providers.

Highmark Health Options: Using an EPSDT dashboard, Highmark Health Options developed a Lead Screening Care Gap Strategy that includes community partnerships and an incentive program. This has increased lead screening rates from 67% in 2018 to 79% in 2022.

# Department of Education Programs

While the Department of Education (DOE) and school districts include a number of programs that impact children with lead poisoning, including the water sampling of public schools, the new Facility Evaluation Tool and Standard of Good Repair initiated by SB 270 (2022), the 619 Programs (IDEA Part B), and special education programs, our time constraints meant that we were only able to evaluate drinking water sampling at state-funded child care centers. In future reports, we hope to document DOE programs more extensively.

## Drinking Water Sampling in Schools

In 2020, the DOE was awarded a $209,000 grant from the U.S. Environmental Protection Agency (EPA) for testing lead in drinking water in schools. In 2022, as results began to show concerning levels of lead, and with the encouragement of Committee members and the public, the Department of Education initiated a resampling program using state funds. The EPA advised Delaware to use an action level of 7.5 ppb. Sampling was completed in 2023, and the results of those samples are available on a public data dashboard[5] and are summarized in the DOE Summary Report.[6]

## Drinking Water Sampling at State-Funded Child Care Centers

In December 2024, DOE began voluntary water sampling for lead in state-funded child care centers using Water Infrastructure Improvements for the Nation Act (WIIN) grant funds administered by the Environmental Protection Agency (EPA). DOE is working to engage state-funded centers in the sampling effort and will continue outreach. If necessary, DOE will expand the scope of target centers to fully leverage the federal funding.

As with the 2022-2023 water sampling in public schools, samples will follow the EPA's 3Ts protocols, which require stagnation times of 8-18 hours. Fixtures with results at or above 5 ppb will be immediately shut off and subject to remediation. Remediation options include removal and/or replacement of the fixture or installation of appropriate filtration, and fixtures used for consumption will not be returned to service until additional sampling confirms levels below the 5 ppb action level.

[5] https://data.delaware.gov/stories/s/2023-Lead-in-Drinking-Water-Sampling-Results-Dashb/pc3b-a6j3

[6] https://publichealthalerts.delaware.gov/wp-content/blogs.dir/203/files/sites/203/2023/09/Lead-Sampling-Report-w-attachment-1-REV.pdf

# Funding Sources

## State of Delaware Budget

Delaware first allocated state funds for the Lead Poisoning Prevention Program (LPPP) in FY 2024. Previously, the program operated exclusively on federal grants. Residential Lead Remediation funds have also been allocated, beginning in FY 2024, to support the Delaware State Lead-Based Paint Program (DSLBPP) established by SB 9 in 2023. Budget requests for FY 2024 and FY 2025 were made as “one-time items”, indicating a need for a more sustainable, long-term approach to funding.

**Budget Allocations by the General Assembly**

| Fiscal Year | Childhood Lead Poisoning Prevention | Residential Lead Remediation |
|---|---|---|
| FY 2024 | $924,700 | $2,000,000 |
| FY 2025 | $1,100,000 | $2,500,000 |

## Federal Funding

**Funding Received through Federal Grants**

| Program | Funding |
|---|---|
| CDC Childhood Lead Poisoning Prevention and Surveillance of Blood Lead Levels in Children | $540,000/year |
| CDC Lead Capacity Building Grant | $1,500,000 over 3 years |
| EPA Renovation, Repair, and Painting Program | $340,000/year |
| ARPA, American Rescue Plan Act | $3,000,000 for 2025 |

CDC Childhood Lead Poisoning Prevention and Surveillance of Blood Lead Levels in Children: provides grant funds for Childhood Lead Poisoning Prevention and Surveillance of Blood Lead Levels in Children for the monitoring of screening of children for lead poisoning. DHSS has been a grant recipient of these funds since the DHSS Lead Poisoning Prevention Program, originally named Office of Lead Poisoning Prevention, was established in 1995.

The current performance period for these funds extends from Fall 2021-2026 with an annual budget of $540,000 and focuses on three strategies: 1) ensure blood lead testing and reporting, 2) ensure blood lead surveillance, and 3) improve linkages of lead-exposed children to recommended sites or services.

Recent efforts have included:

1. Virtual Training Session for Pediatricians on October 25, 2023 by Quality Insights to increase testing and completeness of reporting.
2. Participation in WIC Quality Improvement Programs to ensure children are recommended to state service centers for blood lead screening.
3. Improve data collection and data sharing with Kids Count, School Nurses, and Birth to Three. DHSS currently uses the HHLPSS data management program provided by the CDC and has received a proposal by Birth to Three to connect this data to Child Find.

Children's Health Insurance Program (CHIP): provides funds for lead-abatement activities with an eligible Health Services Initiative (HSI). Nineteen states already have HSI programs approved under CHIP, which are available for lead hazard abatement work under Title XXI of the Social Security Act. Delaware has not yet determined whether it is eligible for these funds.

HUD Lead Hazard Control and Healthy Homes: provides funding for the remediation of lead paint hazards in homes. The last successful DHSS application was for $3,288,728 for the 2014-2017 grant cycle. Using these funds, DHSS completed lead abatement in 952 housing units.

**Housing Units Abated for Lead Hazards by the State of Delaware Using HUD Lead Hazard Control and Healthy Homes Grant Funds**

| Grant Years | Housing Units Completed | Location |
|---|---|---|
| 1999-2010 | 779 | Wilmington |
| 2014-2017 | 173 | Kent and Sussex Counties |

DHSS applied on May 5, 2023 but funds were not awarded. DHSS intends to apply again in 2027, following completion of the HUD Lead Hazard Reduction and Capacity-Building Grant. Currently, New Castle County is Delaware's sole grantee.

On October 8, 2024 HUD announced $420 Million in grant funds to eliminate lead hazard exposure in homes, including $6.5 Million to Washington D.C., $5.85 Million to the City of Baltimore, $4 Million to the State of Maryland Department of Housing and Community Development, $16.8 Million to three municipalities in New Jersey, and $43.5 Million to eight municipalities and counties in Pennsylvania.[7] Because the State of Delaware did not apply, we are not able to access these funds to support our lead hazard remediation goals.

HUD Lead Hazard Reduction and Capacity-Building Grant: provides funding for applicants to develop and expand the infrastructure necessary to undertake comprehensive programs to

[7] https://www.hud.gov/press/press_releases_media_advisories/HUD_No_24_265

identify and control lead-based paint hazards in eligible privately owned rental or owner-occupied housing. DHSS's 2024 application was approved and grant funds are expected to be awarded later this year.

HUD Healthy Homes and Weatherization Cooperation Demonstration: provides housing interventions in lower-income households by improving collaboration between Lead Poisoning Prevention Programs and Weatherization Assistance Programs, and requires applicants to be recipients of Lead Hazard Control and Healthy Homes Grants. Because the State has not been awarded a HUD Lead Hazard Control and Healthy Homes Grant, Delaware is not yet eligible to apply.

EPA Renovation, Repair, and Painting Program: provides funding for the training, certification, and enforcement of renovation, repair, and painting contractors. Contractors that perform work that disturbs lead-based paint, including the replacement of windows or other home repairs, must be certified by the Division of Public Health.

ARPA, American Rescue Plan Act: In November 2024, The State of Delaware announced that it has allocated $3,000,000 in ARPA funds for the Lead-Based Paint Program for 2025.

# New Topics

## Cinnamon Applesauce Recall

On October 28, 2023, the U.S. Food and Drug Administration issued a nationwide recall of certain single-serving applesauce pouches, including WanaBana, Weis, and Schnucks Apple Cinnamon Fruit Purée Pouches and Cinnamon Apple Sauce due to elevated lead levels. These applesauce brands were primarily available in dollar stores or from online retailers, such as Amazon.com. Because the contaminated applesauce was not promptly removed from store shelves, on June 11, 2024 FDA sent a warning letter to Dollar Tree.

The applesauce pouches were first identified by the North Carolina Department of Health and Human Services during their home risk assessment of a child with lead poisoning. Upon investigation, the FDA found the source of lead to be cinnamon processed in Ecuador, which resulted in lead levels up to 5,110 ppm. As a point of comparison, the FDA updated Interim Reference Levels for dietary lead, which were revised in 2022, determined that dietary intake of 0.022 ppm/day was associated with the CDC's Blood Lead Reference Value of 3.5 µg/dL in young children up to age 6, and .088 ppm in females of childbearing age (Flannery and Middletown, 2022).

Cases of lead poisoning resulting from consumption of the contaminated applesauce have been tracked by the CDC. As of March 22, 2024, the CDC has tracked 519 total cases (136 confirmed, 345 probable, 38 suspected) from 44 states. Delaware is one of the six states that has not documented an applesauce-associated case of lead poisoning. Other states without a documented case are Alaska, Arkansas, Hawaii, Maryland, and Nevada.

## Lead Paint on Delmarva Power Utility Towers Slated for Demolition

Delmarva Power is in the process of removing high transmission utility towers in northern New Castle County. These towers, which are thought to be over 80 years old, contain lead paint. The communities of Ardencroft and Ardentown have been sharing concerns about dispersal of lead during demolition and removal, as well as lead dust and chips contaminating soil in the areas under and around the towers. The project includes the replacement of 48 structures on the Naamans to Darley and Silverside Transmission Line. Utility towers in Green Acres have already been removed, so the project is not isolated to one community.

The Trustees of Ardentown collected soil samples which were analyzed by the University of Delaware Soil Testing Laboratory. Soil concentrations reported from the laboratory showed cause for concern.

**Map of the Naamans to Darley and Silverside Transmission Line and the Utility Towers**

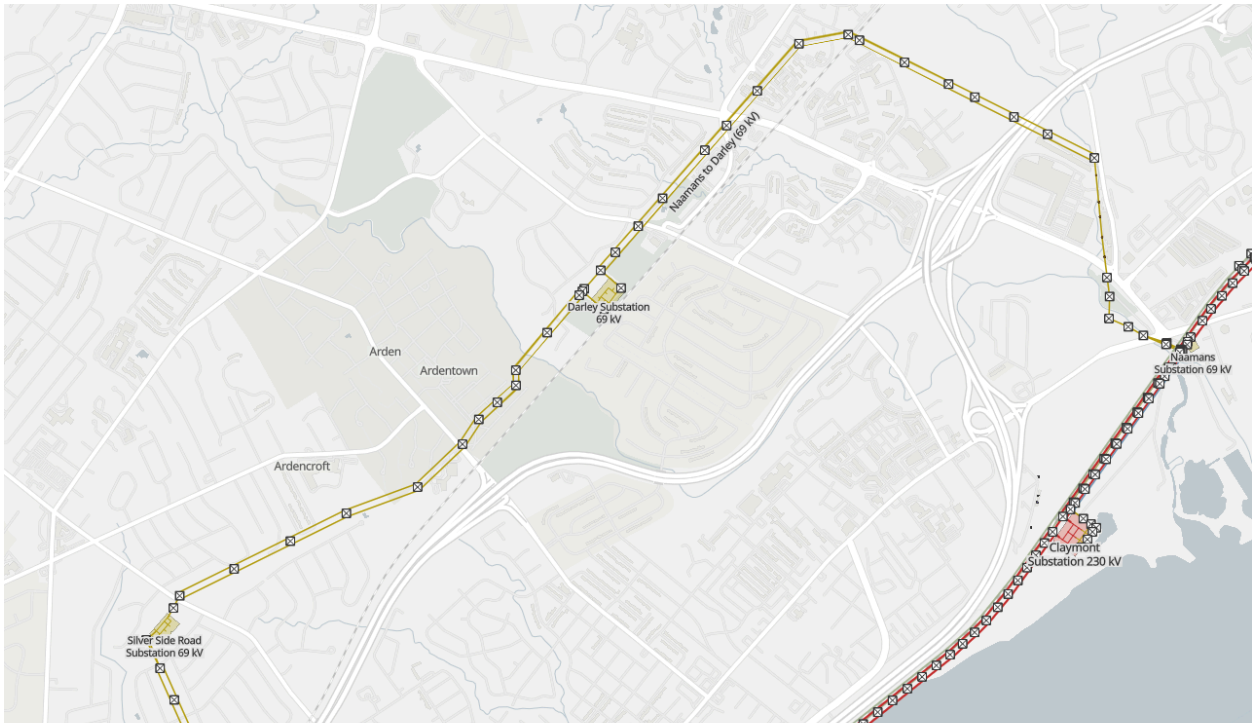



Image extracted from Open Infrastructure Map on August 14, 2024.
https://openinframap.org/#13.16/39.79972/-75.48031

In 2021 the CLPPAC Annual Report recommended that the State of Delaware Department of Natural Resources and Environmental Control prepare environmental- and health-protective procedures for the demolition of lead-painted outdoor structures, including bridges and utility towers, as well as the demolition of commercial and industrial buildings that contain lead or lead paint. Standards should be developed for structures that present an environmental risk due to peeling paint, and a mechanism should be established to address abandoned structures that pose a health risk. These recommendations should include best practices, including community notification, dust monitoring, soil sampling, and should apply to the removal of lead paint by any means, not just via dry abrasive blasting.

# Appendix A. CLPPAC 2024 State Agency Program Review

| Agency | Program | | 2024 |
|---|---|---|---|
| DHSS | Childhood Lead Poisoning Prevention Program | Incidence Updates | |
| | | Case Management | ✔ |
| | | Medical Management | |
| | Delaware State Lead-Based Paint Program | Template | ✔ |
| | | Lead Risk Assessments | ✔ |
| | | RFP and Certified Contractors | ✔ |
| | | Referrals to New Castle County (and MOU) | ✔ |
| | | Lead-Based Paint Abatement Fund (Title 16 § 2613) | |
| | Annual Reports | Annual Blood Lead Surveillance Report (Title 16 § 2606) | ✔ |
| | | Delaware State Lead-Based Paint Program Report (Title 16 § 2612 (a) (3) c.) | |
| | | School Enrollment Report (Title 16 § 2603) | ✔ |
| | Federal Funding | CDC Grant Funding | ✔ |
| | | EPA Grant Funding | ✔ |
| | | HUD Grant Funding | ✔ |
| | | CHIP | |
| | Data Management and Data Sharing | Delaware Epi Lab Insight (DELI) | ✔ |
| | | School Nurses | ✔ |
| | | DHIN | |
| | | My Healthy Community | ✔ |
| | Birth to Three Programs Data Update | | ✔ |

| Agency | Program | 2024 |
|---|---|---|
| | Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) | |
| | Screening at Public Health Clinics and Mobile Unit | ✔ |
| | Health Alert Notifications | ✔ |
| | Medicaid EPSDT Data Update | ✔ |
| | Office of Drinking Water | |
| | Renovation, Repair, and Painting Program | ✔ |
| DOE | Water Sampling in State-Funded Child Care Centers | ✔ |
| | Water Sampling in Schools | |
| | Facility Evaluation Tool and Standards of Good Repair (SB 270, 2022) | |
| | Office of Child Care Licensing, verification of screening and inspections of licensed child care facilities | |
| | Child Find and 619 Program Referrals and Services for Children with Lead Poisoning | |
| DNREC | Demolition of Utility Towers | ✔ |
| | Dry Abrasive Blasting of Water Towers | |

# Appendix B. Update On Past Recommendations

The status of past CLPPAC recommendations include those from the 2021 Annual Report and the 2023 Lead-Safe Rental Housing Plan.

| Responsible Party | Recommended Action | Status |
|---|---|---|
| General Assembly | Expand CLPPAC membership to include expertise from the maternal health and obstetrics community. | No progress. |
| | Mandate universal blood lead testing around 2 years of age. | Completed, HB 222 (2022) |
| | Discontinue use of questionnaire for blood lead screening. | Completed, HB 222 (2022) |
| | Provide school nurses with blood lead results in a format accessible to them. | Completed, HB 401 (2024) |
| | Create lead-safe rental housing requirements in the Landlord Tenant Code, as described in the Lead-Safe Rental Housing Plan (CLPPAC, 2023), and establish financial assistance programs. | HB 450 and 452 were introduced in 2024 but did not advance. |
| | Establish a task force to evaluate standards for the remediation of playgrounds and park spaces. | No progress. |
| | Establish a task force to design a strategy and enforcement framework to lower state thresholds for blood lead levels below current OSHA levels to align with health-based standards. | No progress. |
| | Sportsmen's Caucus should evaluate the potential for lead exposure through marksmanship, hunting, and fishing. | No progress. |
| Department of Natural Resources and Environmental Control | Lead dust testing as part of the Weatherization Assistance Program | No progress. |
| | Standards and a permit structure for the removal of lead paint and demolition of all outdoor structures, including bridges and utility towers | May require enabling legislation. |
| | Lead safe demolition, renovation and repair practices shall be followed by independent, accredited contractors for commercial properties | May require enabling legislation. |

| Responsible Party | Recommended Action | Status |
|---|---|---|
| | Adopt an environmental justice approach and incorporate cumulative environmental risk and to account for the proximity of contaminated properties to at-risk communities | Unknown; may require enabling legislation. |
| | Lead poisoning prevention in fishing and hunting manuals and training programs. | No progress; may require enabling legislation. |
| Department of Education | Lead safe demolition, renovation and repair practice by accredited contractors for school properties. | May require enabling legislation. |
| | Conduct routine water testing in schools. | Initiated in 2022. |
| | Ensure findings of water sampling in schools are presented in an appropriate format, easily understood, and shared with the public. | Initiated in 2023. |
| | Appoint a member of the CLPPAC to the oversight committee for water testing in schools. | No progress. |
| | Office of Childcare Licensing shall require child care providers to include routine lead testing of potable water in child care centers and home based care environments as part of the lead-risk assessment. | May require enabling legislation. |
| Department of Health and Social Services | Improve data collection during blood lead screening and tests to include address where child spends time and owner/rental status | This information is now being collected. |
| | Offer incentive to health care providers to ensure that blood lead testing is completed, not only ordered. | Unknown. |
| | Lower the Department of Public Health's threshold for home visits and intervention by a public health nurse to match the CDC BLRV. | Use of nurses for home visits was discontinued in 2019. |
| | Begin case management for all children with a blood lead level at or above the CDC BLRV. | Case management requires a venous confirmatory test; now aligns with the BLRV. |
| | Lower eligibility for early intervention services with IDEA Part C to match the BLRV. | Lowered to 5 µg/dL in June 2021; subsequently the CDC lowered the BLRV to 3.5 µg/dL in October 2021 |

| Responsible Party | Recommended Action | | Status |
|---|---|---|---|
| | Enroll Delaware in the CDC Adult Blood Lead Epidemiology and Surveillance (ABLES) Program. | | No progress |
| | Develop a scorecard on the state's progress on lead poisoning prevention, reduction, remediation, and reporting efforts that address key indicators | | No progress |
| | Provide point of care screening machines | State Service Centers | In 6 state service centers and 3 mobile units |
| | | Community centers | Unknown |
| | | Primary care offices | Unknown |
| | | Elementary schools | 30 machines distributed to school nurses in 2023 |
| | Ease administrative burden and punitive measures directed toward school nurses and childcares to verify screening. | | The administrative burden and punitive measures for childcares has increased. In July 2022 the Office of Childcare Licensing updated their regulations places the license of childcares at risk if they are unable to document proof of screening. |
| | Conduct outreach and targeted education through cultural and religious organizations, and in at-risk neighborhoods. | | Initiated in 2024. |
| | Improve education for providers and caregivers/parents regarding follow-up and connection to services should a child receive an elevated blood lead test. | | Initiated in 2023. |
| | Lead hazard mapping that uses state and local data on lead exposure risk indicators and reports to inform policy makers, families, and advocates of lead hazards in communities. | | No progress |
| | Incorporate lead poisoning prevention and education in all contracts and programs where there is outreach in homes, including in The Low Income Home Energy Assistance Program (LIHEAP). | | Unknown |

| Responsible Party | Recommended Action | Status |
|---|---|---|
| | Develop regulations with standards and an enforcement mechanism to eliminate lead in consumer products | No progress; may require enabling legislation |
| | Conduct an epidemiological study; a retrospective, case controlled analysis using data that has been collected by the LPPP to identify priority areas of high exposure and for potential future enhanced environmental contaminant surveillance. | No progress |
| Federal Agencies: EPA | Improve soil contamination standards and remediation from industrial sites (battery factories, etc.) | Unknown |
| | Reduce lead emissions in air, including aviation gas, lead smelting, and battery recycling. | Unknown |
| | Replace lead service lines | Lead and Copper Rule Improvements, announced in October 2024, require lead service line replacement within 10 years. |

# Appendix C. Funding Request Submitted to the Joint Legislative Oversight and Sunset Committee

The budget allocated in FY 2024 and FY 2025 are insufficient to meet the basic needs of the Childhood Lead Poisoning Prevention Program and the Lead Based Paint Program. Because of improvements in screening rates, and anticipated changes to confirmatory testing, the number of children requiring services is expected to increase. The danger of a waiting list that will backlog programs and overwhelm capacity has the potential to bury the Program in the near future.

In addition to maintaining the existing funding allocated for FY 2024 and 2025, we propose the following as sustainable program funding to meet the program needs:

| **Program** | **Funding Request** |
|---|---:|
| Case Management | $535,500 |
| Lead Risk Assessments | $542,500 |
| Lead Paint Hazard Control and Abatement | $5,827,500 |
| Filter First in Homes | $35,000 |
| Interim Controls | $188,500 |
| Public Education and Outreach | $250,000 |
| Total | $7,379,000 |

Case Management: The Program's ability to perform case management is currently underfunded, which has limited its impact. Case managers work with families to bring blood lead levels down, coordinate with healthcare providers for follow-up testing, and make referrals to the Birth to Three Regional Program. Case managers only initiate their involvement when a venous blood lead test confirms a blood lead level at or above the CDC BLRV (3.5 µg/dL). Case managers are not public health nurses, even though they provide health guidance to families with confirmed cases of lead poisoning. Bringing case managers to a higher standard with the use of public health nurses, and expanding case management to all children with a blood lead level result at or above the BLRV, irrespective of confirmatory test, is recommended to ensure that families are receiving appropriate health advice from a healthcare professional, are aware of the health risks of lead poisoning, understand the need for followup screening or testing, and are able to take the steps necessary to bring blood lead levels down, as well as coordinate efforts between the Program and the family and to be a point of contact. Expanding case management to an estimated 700 children per year at **$765 per child** (15 hours/child at a

public health nurse's average wage of $51/hour) suggests Delaware should budget **$535,500** for case management.

Lead Risk Assessments (LRA): LRAs cost the program **$1200 each** for the Lead Based Paint Hazard Assessment and **$300 to $400** for water sampling, depending on which contractor is used. Identifying the source of exposure is critical to preventing longer-term damage to the child and other members of the household, and the Program is required by SB 9 (2023) to perform a LRA for all children with a blood lead level at or above the CDC's BLRV (3.5 µg/dL) that live in housing built prior to 1978. Because screening and testing rates are improving, and the State is taking steps to adopt the CDC Case Definition for confirmation of results, the number of households identified who may need a LRA may also increase. The State of Delaware should prepare for the need to perform 350 LRAs per year in the near future, and should therefore budget **$542,500**.

Lead Paint Hazard Control and Abatement: Delaware does not yet have baseline information on the cost of lead hazard control and abatement, making it difficult to predict how much is needed. Costs from nearby Baltimore show that "per unit cost for lead hazard control work is between $10,000 and $17,000, and the per-unit cost of abatement is between $30,000 and $50,000 (Scrivener, 2022: 10). Delaware should prepare for a conservative estimate of **$17,000 per unit** for an approximate 315 units, as well as an additional **$1500 per unit** for relocation during abatement required by SB 9 (2023), and should therefore budget **$5,827,500**.

Filter First in Homes: The Program has identified the health-based standard of 1 ppb recommended by the American Academy of Pediatrics (AAP 2016) as the target for lead in water when performing LRAs, which began in July 2024. We have no comparable reference for the level of need for the removal of lead hazards in water in Delaware, and also understand that water could be contaminated in premise plumbing that would need to be replaced, or also in lead service lines.

Improving the safety of drinking water has become a federal priority due to its profound impacts on lead poisoning. On May 2, 2024, the Environmental Protection Agency announced that Delaware would receive $28,650,000 for lead pipe replacement, as part of President Biden's Bipartisan Infrastructure Law, which is investing $15 Billion in lead service line replacement nationwide (EPA, 2024).

The "Filter First" approach to addressing lead in water is considered an affordable best practice that protects drinking water at the point of consumption while acknowledging that testing at the tap is an imperfect method due to variability of water chemistry and temperature, pipe condition, vibrations from nearby roads and construction, and intermittent water flow from one day to the next (Masters et al., 2016; Triantafyllidou et al, 2007). Filter First makes the drinking water safe immediately, instead of waiting for extensive testing and repairs.

Pitcher filters are recommended in homes, as many modern kitchen faucets are not suited for traditional faucet-mounted filters, and lead is removed prior to consumption. The National Sanitation Foundation (NSF) oversees certifications for water filters, and NSF/ANSI 53 water filters are certified to remove 99% of lead (NSF, 2024; ANSI 2024). Pour-through water filters have been demonstrated to perform as designed (Tully et al., 2024).

Delaware should distribute NSF/ANSI 53 pour-through water pitchers with a one-year supply of filters for each household with a child with a blood lead level at or above the CDC BLRV (3.5 µg/dL), irrespective of the type of screening or test. At **$50 per household** for NSF/ANSI 53-certified pour-through water filtration, Delaware should budget **$35,000** to provide safe drinking water to each lead-poisoned child.

Interim Controls: Interim controls are "a set of measures designed to reduce temporarily human exposure or likely exposure to lead-based paint hazards, including specialized cleaning, repairs, maintenance, painting, temporarily containment, ongoing monitoring of lead-based paint hazards or potential hazards, and the establishment and operation of management and resident education programs" (Title X, quoted in HUD, 2012: 1-12).

While specialized cleaning alone is not sufficient to reduce lead paint and dust hazards in a home, and cleaning interventions need to be repeated frequently, they can serve an immediate need of addressing lead hazards while abatement is scheduled, though the benefits are "short-lived" (Ettinger et al., 20002). Improper cleaning raises the risk that lead dust and particles can be spread over a greater surface area, and from one room to another, increasing the lead hazard.

Estimates of expected costs for Interim Controls include a total of **$188,500** for the following:

> Professional cleaning services: Professional cleaning services are documented to immediately reduce lead dust levels in children's homes, but dust levels return to pre-cleaning levels after three to six months, indicating that frequent, repeated cleanings are required to maintain lead dust hazards (Campbell et al., 2003). For those children with blood lead levels at or above **10 µg/dL**, professional cleaning services should be procured for each household every three months until the Lead Based Paint Program is able to complete its work.
>
> We estimate professional cleaning services for an estimated **31 households** with a child with a blood lead level at or above 10 µg/dL, using the 6-year average from 2016-2021 reported in Table 2 of the 2021 Blood Lead Surveillance Report (DHSS 2022a). The Lead-Safe Cleveland Coalition (2024) reports that Interim Controls cost between $500 and $5,000 based on property condition. Using a conservative estimate of **$1500 per household**, Delaware should budget **$46,500** for Interim Controls for households with children with blood lead levels at or above 10 µg/dL.

Cleaning education and supplies: To facilitate immediate temporary reduction in lead hazards during the interim period between identifying lead-poisoned children and more permanent measures undertaken through the Lead Based Paint Program, we suggest that the Program proactively educate families on interim controls and distribute appropriate cleaning materials in sufficient quantities for repeat use. This includes cleaning supplies, such as those that contain trisodium phosphate (TSP), and proper instruction on how to use them. We estimate the need for cleaning instruction consultation estimated at **$400 each** and supplies at **$100 each** for **284 households**,[8] leading to a total budget need of **$142,000**.

Education and Outreach: Public education and outreach for prevention of lead poisoning and response for those who are exposed have largely been driven by federal grants. While greater focus on educating healthcare providers has been initiated, Delaware needs a holistic public education and outreach program that can provide general education and targeted information.

Public education is an area of particular need, especially in raising general awareness that childhood lead poisoning remains a public health risk that is also preventable. In 2019 DHSS launched a billboard campaign, but the messaging was somewhat confusing. Public education should be well thought-out with clear messaging and actionable steps that families can take to protect their children, including a focus on screening all children twice by age two, the importance of primary prevention, product recalls and emergency health alerts, follow up steps for children who are exposed, and the resources that are available. Messaging delivery should include public libraries, schools, child cares, community partners, as well as social media and the press.

[8] See Lead Paint Hazard Control and Abatement above for justification of the estimated number of households, which is 315. Subtracting the 31 estimated to require professional cleaning leads to a total of 284 households requiring cleaning education and supplies.

# Appendix D. Legislative History of Childhood Lead Poisoning

| Year | Bill | Topic | Status |
|---|---|---|---|
| 1994 | SB 78 | Establishes the Childhood Lead Poisoning Prevention Act, requires blood lead screening prior to kindergarten enrollment | Signed |
| 2001 | SB 155 | Delays mandatory blood lead screening requirement for kindergarten enrollment, establishes the Childhood Lead Poisoning Advisory Committee | Signed |
| 2003 | SB 74 | Permits kindergarten enrollment without a blood lead screening, so long as it is performed within 60 days | Signed |
| 2010 | HB 300 | Establishes screening by questionnaire at 24 months of age | Signed |
| 2018 | HB 456 w/ HA 1 and HA 2 | Bans the new application of lead paint from outdoor structures | Signed |
| 2018 | HB 424 | Mandates universal blood lead screening for all children at 2 years of age | Stalled in House |
| 2019 | HB 89 | Restarts the Childhood Lead Poisoning Prevention Advisory Committee | Signed |
| 2019 | HB 166 | Mandates universal blood lead screening for all children at 2 years of age | Stalled in House |
| 2021 | HB 63 | Requires DHSS to provide staff support for the Childhood Lead Poisoning Prevention Advisory Committee | Signed |
| 2021 | HB 222 w/ HA 1 | Mandates universal blood lead screening for all children at 2 years of age | Signed |
| 2022 | HB 485 | Requires data sharing with school nurses and childcare facilities | Stalled in House Appropriations due to fiscal note |
| 2023 | SB 9 w/ SA 1 and HA 1 | Establishes Delaware State Lead-Based Paint Program | Signed |
| 2023 | HB 227 w/ HA 2 | Reinstates sharing screening/testing data with school nurses | Signed |

| Year | Bill | Topic | Status |
|---|---|---|---|
| 2024 | HB 401 | Requires sharing results with school nurses | Signed |
| 2024 | HB 450 | Establishes a rental housing registry | Introduced |
| 2024 | HB 452 | Establishes lead-safe rental housing | Introduced |

# Appendix E.  About the CLPPAC

The CLPPAC has fourteen available seats, with two seats appointed by the Governor currently vacant.  Current membership is as follows:

1. Dr. Amy Roe, Committee chair, appointed by the Speaker of the House
2. William Bowser, Committee vice-chair, appointed by the Governor
3. Dr. Terri Hodges, appointed by the Senate Pro Tem
4. Dr. Jessica Rhode, pediatrician, appointed by the Governor
5. Sandy Spence, Sussex County public member, appointed by the Governor
6. Matt Jones, appointed by the Governor
7. Stephen Blessing, Department of Health and Social Services
8. Kimberly Klein, Department of Education
9. Caitlin Del Collo, Delaware State Housing Authority
10. Meredith Seitz, Dept of Services for children, Youth, and their Families
11. Adriane Gallagher, Delaware Association of Realtors
12. Dr. Tammy Croce, Delaware Association of School Administrators

The CLPPAC meets virtually, and after some modifications to the meeting schedule to accommodate member schedules, has settled on the second Tuesday of each month from 3:00 pm to 5:00 pm.

Since September 2023, administrative support for the Committee has been provided by Social Contract.

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