Green & Healthy Homes Initiative®

Recommendations to Advance and Scale Healthy Housing in Maryland

Climate and Environment Executive Policy Committee Transition Team Memorandum for the Maryland Department of the Environment (MDE)

Executive Summary

The Green & Healthy Homes Initiative (GHHI) is providing recommendations for actions that can be undertaken by the Governor, the Maryland Department of the Environment (MDE), and key stakeholders to scale efforts that address healthy housing, a key social determinant of health, and reduces housing-related health hazards such as lead paint and asthma triggers. This Memorandum is organized around current problems observed by GHHI and our partners in Maryland and solutions for those identified problems.

Recommendations

Lead Poisoning Prevention

Problem: Lead paint in housing presents one of the largest threats to the health, safety, and future productivity of Maryland's children. More than 22 million homes (34 percent of the homes built before 1978) in the US have significant lead-based paint hazards.[i] In Maryland, there are 1.2 million homes constructed prior to 1980, according the DCHD Consolidated Plan, that may contain lead hazards. In Baltimore City alone, the Abell Foundation's research in its *Evaluating the Cost of Lead Hazard Control and Abatement in Baltimore City Report* indicates that it will cost $2.5-$4.2 billion to abate lead-based paint hazards in Baltimore City's housing stock alone.

There is broad, bipartisan support for the remediation of lead-based paint hazards in housing. However, the current level of investment is billions of dollars less than what it will take to effectively meet the scale of the Maryland's lead poisoning problem, and resources are not widely available to address the full spectrum of environmental sources of lead, including lead service lines in our drinking water infrastructure and lead hazards in soil, and are typically unavailable to rural communities where infrastructure has long been neglected.

- Addressing lead hazards in the state's 166,000 most at risk pre-1980 homes with young children present or the larger 1.2 million homes in Maryland built before 1980 that may contain lead hazards, requires $2.5 billion in expenditures annually per year over the next five years ($12.5 billion) along with lead in soil remediation at an average cost of about $11,360 per 'home[ii] to address Maryland's residential lead hazards.
- Addressing lead paint hazards in 23.2 million US households in pre-1978 housing likely to have at least one lead-based paint hazard[iii,iv] requires $264 billion ($26.4 billion/year over 10 years) at an average cost of about $11,360 per home.

- Replacing lead services lines in our drinking water infrastructure at an average cost of $6,000[v] per lead service line.

Solution: The state must substantially increase the amount of state funding available for lead hazard reduction grants, increase the utilization of federal funding sources to supplement state funding and increase the enforcement of the Maryland Reduction of Lead Risk in Housing Law and other lead related statutes and regulations. The state should develop a 10 Year Plan to Eradicate Lead from Maryland Housing and dramatically increase the amount of lead grant funding that is available for Maryland owners while also increasing lead hazard remediation loan and tax credit funding. Lead grant funding is needed at much higher levels to address lead hazards in the homes of young children if Maryland is to achieve its goal of ending childhood lead poisoning. Grant funding is needed for low income families who cannot afford even lower interest loans to provide leaded window and door replacement, paint stabilization, property lead dust clean-up and lead safe work practices utilizing lead certified contractors. The state also needs to increase private sector investments through increased lead related loan funds and the creation of a lead safe tax credit program to assist moderate income homeowners and rental property owners to undertake more permanent lead abatement measures in housing.

1. **Implement a 10-Year Plan to Eradicate Lead from Maryland Housing and other sources of exposure - Increase investments to address residential environmental lead hazards**

Problem: It is estimated that between six and ten million lead service lines exist in the US.[vi] Water in cities across the US remain unsafe to drink due to poisonous levels of lead and efforts to control lead levels and replace lead service lines have failed to adequately protect the nation's most vulnerable and most highly impacted communities, and research has showed that in 2015 5,363 community water systems serving over 18 million people were in violation of the regulations in the Lead and Copper Rule (LCR). [vii, viii] Maryland does not have an inventory of lead service lines nor a comprehensive plan to replace lead service lines in the state. Strategies need to be developed to address lead piping in more rural areas where private well water is the water source and lead exposure may be occurring.

Solution: Maryland must complete an inventory of the state's lead service lines and put in place a plan to utilize the substantial increase in federal Infrastructure funding to supplement existing funds and replace all lead service lines by 2030.

2. **Prioritize the timely implementation of the lead service line components in the 2022 Conservation Finance Act and increase funding to achieve full lead service line replacement by 2030**
   a. Implement all aspects of the lead service lines replacement components of the 2022 Conservation Finance Act (HB653/SB348) including:
   1) Assess risks from water pipes made from lead in the state;
   2) Conduct an analysis and inspections across the state and create a detailed inventory of lead service lines by individual property in each jurisdiction;
   3) Implement a lead service line replacement program

b. Increase funding for lead service line replacement from all funding sources sufficient to replace all lead service lines in Maryland, including the privately owned portion of lead services lines, by 2030.

3. Increase equitable resources for water infrastructure improvements, including an increase in the utilization of Drinking Water State Revolving Funding (DWSRF), specifically in disadvantaged communities.

Maryland needs to hold water systems accountable for the equity impacts of lead service line replacements by requiring them to expeditiously utilize the new federal Infrastructure funding coming to Maryland and to use rate payer dollars to subsidize full lead service line replacement for low-income households, and increase funding for full lead service line replacement in EJ communities in order to avoid ongoing discriminatory impacts. According to Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, federal agencies are required to identify and address the way federal actions disproportionately impact human and environmental health for low income communities and communities of color and must support nondiscriminatory programs. EPA regulations require that federal funding recipients not carry out actions where people are excluded from participating or denied benefits on the basis of color,[ix] and Title VI of the Civil Rights Act of 1964 prohibits discrimination "on the ground of race, color, or national origin" in any "program or activity receiving Federal financial assistance." A case study of lead service line replacement from Washington DC illustrates how implementing lead service line replacement without adequate funding for low-income households to replace the privately owned portion of their service line increases disparate outcomes for low income communities and communities of color. [x]

In its most recent Drinking Water Infrastructure Needs Survey and Assessment, the EPA Office of Water estimated a $472.6 billion need between 2015-2034 for DWSRF-eligible capital improvements, which is equivalent to $23.6 billion per year.[xi] For FY 2021, the DWSRF is funded at $ 863,235,000, meaning it was grossly underfunded. The 2021 budget appropriations fills some of that gap through WIFIA funding ($25 million appropriated which is expected to generate up to $2 billion direct credit assistance) and $20 million in WIIN Act funding going toward reduction of lead in water. Furthermore, budget goals for large increases in monetary resources for water infrastructure rely heavily on leveraging non-federal funding sources.[xii] Yet for water infrastructure improvements such as lead service line replacement, analyses have demonstrated that rely on ability-to-pay will mean that low income communities will not benefit equally from service line replacement and will be left with worse health outcomes.[xiii] It is therefore important for meaningful federal investment in water infrastructure improvements to improve the safety and quality of drinking water in the state. Maryland should support the EPA in increasing DWSRF allocations to $20 billion to accurately reflect the need in communities not met by WIFIA or WIIN Act funding or remediated with the IBL lead service line replacement funding.

4. **Address rural drinking water needs**

Develop public guidance on water quality for private wells in Maryland which can be a lead exposure source for children. More than 42 million Americans live in households located in mostly rural communities that rely on private wells, which are not subject to the Lead and Copper Rule or other regulations that require regular testing for contaminants. Children in these rural households are 25 percent more likely to have elevated blood lead levels compared to other children.[xiv]

Problem: Despite a ban on lead-based paint in 1978, roughly 535,000 children today have blood lead levels above 5 µg/dL, in large part due to hazards in their home from lead-based paint, dust, and soil.[xv] 1,394 children were identified with elevated blood lead levels of 5 µg/dL or higher in Maryland in 2021. It is estimated that 800-1,100 additional children annually have elevated blood lead levels of 3.5-4.9 µg/dL in Maryland which is above the new CDC blood lead reference level.
Solution: Increase lead case management, environmental investigation and lead hazard remediation capacity and funding levels to provide increased primary prevention services and secondary prevention services at lower blood lead levels. Improve Maryland's lead related housing standards, work practices and compliance.

5. **The Department must adequately increase inspection staffing and funding levels to fully and effectively implement the Maryland Healthy Children Act now in effect and implement the provisions of HB1110 by January 1, 2024.**

In 2012, the Centers for Disease Control (CDC) determined that there was no safe level of lead in a child's body and lowered the blood lead reference level from 10 µg/dl to 5 µg/dl for children. In 2020, there were 901 children in Maryland with blood lead levels of 5-9 µg/dl. Increased inspection staffing is needed for MDE and local health departments to be able to provide environmental investigation for both rental properties and owner-occupied homes and to meet the requirements of the Maryland Healthy Children Act (HB1233) that was passed in 2019 which lowered the blood lead action level. Maryland must implement the federal guidelines to direct public efforts toward prevention by responding to the lower threshold for action that is now in place.

In addition, MDE must plan for and increase inspection staff further by January 1, 2024 to be prepared for the lowering of the blood lead action level for environmental investigation in Maryland to 3.5 µg/dl on that date as mandated by HB1110 which passed the legislature in 2022. On October 28, 2021, the CDC reviewed all the available blood lead data in the United States and the scientific research and lowered the blood lead reference level accordingly to 3.5 µg/dl. Earlier notification and protection to rental property owners at lead levels of 3.5 µg/dl allows them to respond sooner to prevent higher level lead poisonings of the EBL child and the possible poisonings of siblings in the home as well as reducing their potential liability. Children in owner occupied homes need greater protections than they receive today and lowering the blood lead reference level and providing increased inspections will provide: prevention education, identification of lead hazards, and case management to link parents and families to prevention resources at lower lead levels. MDE must allocate and include additional funding in its budgets for these additional

inspector (sanitarian) positions that are needed now as well as by January 2024. Further, Medicaid reimbursement can serve as an offset for environmental investigation and medical case management costs by providing a sustainable funding source to supplement the costs for MDE and local health department personnel to provide for many of these services.

6. **Create stronger, health-protective lead hazard and lead clearance standards for dust**

Reduce lead dust hazard and clearance levels to health-protective standards. A recent study has shown that the risk of blood lead levels above 5 µg/dL is 45% higher in cases with floor dust-lead levels of 10 µg/ft^2 compared to cases with floor dust-lead levels of 5 µg/ft^2. Additional studies have indicated lower clearance levels on floors are feasible, with one HUD study showing achieved floor dust-lead clearance levels of 5 µg/ft^2 in 72% of units and one HOME study showing lead remediation interventions that were able to achieve floor dust-lead clearance levels at in 100% of units.[xvi] EPA has been charged with establishing new hazard and clearance levels that reflect the most health-protective standards.

Update COMAR regulations for lead dust hazards and lead dust clearance levels as well as sampling requirements for porch floors. In 2017, HUD's Office of Lead Hazard Control and Healthy Homes began requiring that all HUD funded lead grant programs meet a clearance standard of 40 µg/ft^2 for lead painted porch floors that receive federal lead grant assistance. GHHI recommends that MDE establish a lead dust clearance level of 40 µg/ft^2 or lower for painted porch floors. Research has shown that in cases where interior lead abatement work was completed with no exterior abatement or paint stabilization on the porch, dust lead levels significantly increased right after interior abatement work was finished, likely tracked from the inside of the home by lead abatement workers.[xvii]

7. **Maryland Should Become an Authorized State to Oversee the EPA Renovation, Repair and Painting Rule (RRP Rule) and Enhance RRP Rule Standards in Maryland**

a. EPA State Authorization - MDE was previously in the process of obtaining authorization from the EPA to administer and enforce the Renovation, Repair and Painting Rule in Maryland. The State of Maryland should move more expeditiously with the EPA to become an RRP Rule authorized state and have the Department take on the responsibility to certify lead-safe firms and workers and enforce the RRP Rule in Maryland.

A study examining the impact of lead protective measures on a 2018 cohort of children estimated that strict enforcement of RRP standards would help to protect 211,000 children (per cohort of young children) from lead poisoning in the US.[xviii]

b. Lead Safety Standards - MDE should improve lead safety standards for owner occupied properties and other non-affected rental properties by revising its regulations to include lead dust clearance testing following covered EPA RRP Rule renovation activities that disturb paint in pre-1978 properties in the state. The Department, in its COMAR implementing regulations released in January

2015, failed to include mandatory lead dust clearance testing as required by HB644 and as intended by the legislature. Maryland must continue to maintain its position as a national leader on lead poisoning prevention best practices.

Problem: Environmental health hazards and lead poisoning continue to disproportionately impact underserved low-income communities and communities of color (EJ communities) in Maryland.

Solution: Increase lead case management, environmental investigation and lead hazard remediation capacity and funding levels to provide increased primary prevention services and secondary prevention services at lower blood lead levels. Improve Maryland's lead related housing standards, work practices and compliance rates including with the Maryland Reduction of Lead Risk in Housing Law as detailed in the 2022 Maryland General Assembly's Office of Legislative Audits report.

8. **Reinstate direct Department funding for Preventive Services to Increase Compliance with the Maryland Reduction of Lead Risk in Housing Law**

Reinstate direct funding support by MDE for Legal Services Attorney, Family Advocate and Maryland Client Resource Coordinator positions with a non-profit service provider organization to provide direct prevention services, outreach and education, resource linkage and training on the Maryland Reduction of Lead Risk in Housing Law including: tenant's rights education and case management, rental property owner compliance assistance, operation of 800 Hotline and website/email information response line, and legal representation of tenant's in District Court Rent Court for the repair of lead hazards in non-compliant affected properties where the rental property owner is unresponsive to Notices of Defect and Notices of Elevated Blood Lead Levels. $750,000 in annual funding for outreach and education and preventive services was directed to be spent in the original HB760 legislation in 1994 and the intent of the legislature was for those services to continue to be annually funded to support compliance and lead poisoning prevention efforts. MDE funded these critical prevention services from 1997 to 2021 and which collectively contributed to the 99% decline in childhood lead poisoning in Maryland.

9. **Establish a Maryland Office of Environmental Justice**

Increase the authority of the Commission on Environmental Justice and Sustainable Communities by establishing it as a Maryland Office of Environmental Justice to have greater influence over policy development and the equitable allocation of resources by state agencies to better serve underrepresented communities. In the alternative, strengthen the Commission on Environmental Justice and Sustainable Communities by providing it with greater authority. The Commission's work in Maryland can be enhanced through coordination with other commissions, including the Maryland Lead Poisoning Prevention Commission. Formalized joint commission meetings should be conducted that incorporate all of Maryland's health and environmental justice commissions and advocates across all sectors.

Interagency Coordination and Improved Service Delivery

10. Maximize impact of MDE programs and resources through enhanced interagency coordination

Make program resources more accessible through coordinated and simplified application processes. Grants and resources that can target EJ communities are often difficult for residents to access due to complex application processes and disparate income requirements across government programs and agencies. MDE should partner with other key agencies like DHCD, MDH, and MEA to develop universal qualifications so that a family that qualifies for one program targeting people who are low-income (WIC, Medicaid, CHIP, DSS, HUD grants), will qualify for MDE program resources automatically where applicable. This simplified process can make it easier for localities to administer grants and programs and reduces a barrier to service utilization for low income target populations.

Help MDE dollars go farther and have more of an impact through interagency coordination on enforcement and with grant programs that target the same populations. MDE's efforts that target EJ communities can have more of an impact for the people they serve if they are coordinated with other programs. For example, a low-income family living in older housing that has a lead service line being replaced through MDE's planned lead service lines replacement program will have better outcomes if their house can also receive upgrades through MDDHCD's Lead Hazard Reduction programs, and MDDCHD or MEA's weatherization/energy efficiency program funding. Through coordination of funding streams, state programs can have the greatest impact on the health of the people they serve.

Climate Change Mitigation

Problem: One in three households in the US face energy insecurity (the inability to meet basic household energy needs), and energy costs and fossil fuel pollution disproportionately impact EJ communities. Greenhouse gas emissions continue to contribute to climate change. The largest source of GHG emissions in the United States is the burning of fossil fuels for electricity, heating, and transportation. Maryland does not adequately provide energy efficiency programs to meet the demand in low income communities as well as assisting disadvantaged communities and homes in reducing their carbon emissions.

Solution: Address energy burdens and climate mitigation by allocating a greater percentage of existing energy efficiency/weatherization resources and secure additional energy efficiency, renewable energy and climate mitigation resources in Maryland that are specifically targeted to low income residential households in disadvantaged communities. Reducing carbon emissions will also improve indoor and outdoor air quality resulting in improve health outcomes for Marylanders.

11. Strengthen MDE resources that support energy efficiency in housing and decrease the inequitable impacts of climate change

- Establish a State of Maryland Office of Climate to oversee and implement climate mitigation strategies and programs and conduct climate science monitoring, education and research in Maryland.

- Increase tax credits and incentives for ENERGY STAR upgrades should be expanded to make more energy efficient housing accessible for lower income residents and collaborate with the ENERGY STAR program to create more affordable energy efficient appliances.
- Work with MEA, PSC, and utilities to prioritize investments in the electrical distribution system to ensure reliability and affordability including accessing federal funds from the Inflation Reduction Act and Infrastructure Investment and Jobs Act including the $4.3 billion Hope for Homes Program.
- Identify opportunities to pair health-based investments with climate and environment based funds to create holistic housing programs that cover health and safety, energy efficiency, and decarbonization interventions without adding cost burdens to low-income residents.

About the Green & Healthy Homes Initiative (GHHI)

GHHI was founded in 1986 in Baltimore City as Parents Against Lead and is today the nation's leading organization dedicated to healthy housing. GHHI's leadership and voice for creating healthy and energy efficient homes for families living in low income communities has led to changes in federal policy and increased public and private investments in the integration of energy, lead hazard reduction and safety in housing. GHHI has helped lead Maryland's 99% reduction in childhood lead poisoning as well as the nation's reduction in childhood lead poisoning and the expansion of more holistic healthy housing models to improve social determinants of health, economic and social outcomes. In Maryland, GHHI provides direct services that include: in-home resident education, case management, environmental assessments, energy audits and housing inspections, housing interventions (lead and safety hazard remediation, asthma trigger reduction, Aging in Place, energy efficiency and housing rehabilitation), legal services, outreach and training, and advocacy. GHHI works in and provides technical assistance in over 75 cities, counties states and healthcare systems in the US. GHHI is dedicated to addressing the social determinants of health, opportunity and equity through the creation of healthy, safe and energy efficient homes. By delivering a standard of excellence in its work, GHHI aims to eradicate the negative health impacts of unhealthy housing and unjust policies for children, seniors and families to ensure better health, economic and social outcomes in historically disinvested communities - with an emphasis on communities of color.

Ruth Ann Norton serves as President & CEO of the Green & Healthy Homes Initiative and has led its development into one of the nation's most effective organizations and foremost authorities on healthy housing and its impact on the social determinants of health and racial equity. An expert on lead poisoning prevention, healthy homes and the intersection of climate, energy and health, Ruth Ann directs GHHI's national strategy, policy framework and services to integrate climate, healthcare and healthy housing as a platform for improved health, economic, educational and social outcomes for low-income communities. Among other memberships, Ms. Norton serves as: Chair of the Maryland Lead Poisoning Prevention Commission, a federally appointed liaison to the CDC's Advisory Committee on Childhood Lead Poisoning Prevention, a member of the EPA's Children's Health Protection Advisory Committee, the National Leadership Academy for the Public's Health, the National Council of State Housing Agencies' National Advisory Group,

the Ohio Asthma Council, and the Johns Hopkins Bloomberg School of Public Health Center For Population Health Information Technology Advisory Board.

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[i] As determined by OLHCHH's American Healthy Homes Survey I (Dewalt FG et al. Prevalence of Lead Hazards and Soil Arsenic in U.S. Housing. J. Env. Health. 78(5):22-29 (2015))
[ii] Includes $8,000 for lead hazard remediation in lead-based paint, dust and soil, and an average of $6,000 for lead service line replacement (not every home will require LSL replacement, so the average cost per home is $3,360).
[iii] US Office of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, *American Healthy Homes Survey, Lead and Arsenic Findings*, April 2011.
[iv] The 23.2 million homes estimated to have at least one lead-based paint hazard includes lower and higher income households.
[v] Robert Wood Johnson Foundation, Pew Charitable Trusts, *10 Policies to Prevent and Respond to Childhood Lead Exposure*. August, 2017
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[xv] Childhood Lead Poisoning Prevention Projects, State and Local Childhood Lead Poisoning Prevention and Surveillance of Blood Lead Levels in Children. (2018). Retrieved from: https://www.cdc.gov/nceh/lead/docs/LeadNOFO-EH18-1806-Informational-Call_17-Jul-2018-508.pdf

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