



A Municipal Guide to a Lead-Safe Community



About Sustainable Jersey

Sustainable Jersey is a network and movement of over 450 [municipalities](#) and 1,000 [schools](#) working collectively at the local level to achieve a sustainable future for New Jersey. Collaborating with state agencies, foundations, non-profit organizations, business and academia, Sustainable Jersey sets standards and supplies resources and guidance on recommended practices for what communities could and should do to contribute to a sustainable future. When municipalities and schools voluntarily document accomplishment of these practices to the satisfaction of expert reviewers, they accrue points towards progressive levels of sustainability certification.

The municipal certification program was established in 2009, followed by the schools program in 2014. As of March 2021, Sustainable Jersey had given out over \$6 million in grants to fund over 1,110 sustainability projects in public schools and municipalities across the state.

Sustainable Jersey is grateful to the New Jersey Department of Health and the Jersey City Health and Human Services Department for their generous support of the development of this guide.

Many thanks are also due to the entire team of experts on the Sustainable Jersey Health Task Force, and in particular the working groups, including:

Sharon Barker and Sarah Franzini (Housing and Community Development Network of New Jersey); Chris Hellwig (Hamilton Twp Department of Health, Recreation, Senior, and Veterans Services); Kevin McNally (Chair, Executive Board, New Jersey Public Health Association); Elyse Pivnick (Isles); Michael Richmond, J.D., (New Jersey Local Boards Of Health Association Counsel); Laura Rodgers (Jewish Family Service of Atlantic & Cape May Counties); Brenda Seals (The College of New Jersey); Kevin Sumner (Health Officer, Middlebrook Regional Health Commission); Julia Taylor (Trenton Health Team).

The comments of Kelly McLaughlin (Regional Coalition Coordinator at Southern New Jersey Perinatal Cooperative), Prof. Dan van Abs (Rutgers University) and Shequille Fearon (intern, TCNJ) are also gratefully acknowledged.

This document was prepared by Melanie H. McDermott, Ph.D., Senior Researcher, Sustainable Jersey/Sustainability Institute, The College of New Jersey.

For questions and comments please contact mcdermom@tcnj.edu.



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Preface

This guide presents 18 recommended strategies


that municipalities can implement to prevent lead poisoning. Nine of these strategies are also Sustainable Jersey “actions” that score points in the certification program. The guide goes beyond the traditional role of health departments to look at the full array of authorities available to municipalities reduce lead exposure and protect public health.

Lead is a potent toxin which is still pervasive in the places where we live, play, work and raise our families. This is especially true in New Jersey, with its legacy of housing stock, infrastructure, industry and traffic, all dating from an era before lead was banned from paint, gas, plumbing sources and other components of modern life. Exposure to this legacy of lead is damaging to everyone’s health, but it exerts the most severe and lasting effects on the most vulnerable, particularly children. With their growing bodies and minds, young children who absorb even small traces of lead from the environment suffer lifelong, pernicious effects — which are disproportionately experienced in communities of color and low-income communities.

Right now, somewhere in the town or city where you live, a toddler pauses to suck his fingers, then continues to crawl along the floor, where lead-tainted paint dust has fallen from the windowsill above. A home childcare provider turns on the tap and uses water that flows through lead pipes and fixtures to mix up formula for a baby. After a day on the job renovating Victorian houses, Mom brings lead dust in the door on her work-clothes, while Dad tracks lead in the door on the soles of his shoes. In the traditional manner of her culture, Grandma lovingly decorates her granddaughter’s face with black eyeliner, hangs a necklace with a charm around her neck, and soothes her colic with a remedy prepared from imported spices — little knowing that the make-up, charm and spices are all contaminated with lead.

With proper information and investment, each of these harms to children is preventable. How can we make that happen? What is to be done and who is going to do it?

Many parties have important roles to play to accelerate the progress that has already been made in eliminating lead from the environment, which began in the 1970s with landmark federal legislation. Within their sphere of action and authority, municipal governments provide critical leadership and can do a great deal to support healthy, lead-safe homes and a healthy, lead-safe environment for their residents. This guide provides ideas and resources on practical strategies that municipalities can implement, working together with their many essential partners, including local volunteers, school districts, non-profit and faith-based organizations, healthcare providers, hospital systems, and regional, county and state health and other governmental departments.



The fact that this guide is narrowly focused on municipal strategies does not in any way indicate that such strategies are sufficient to tackle the problem of lead in New Jersey. More robust Federal and state regulation and investment are urgently required and would greatly expand the capacity of municipalities and others to act locally. Local governments can join their voices to others in advocating for this crucial support.

There is a plethora of research, policy advocacy, and guidance materials available on the prevention of lead poisoning. This guide aims to make a contribution by compiling **evidence-based strategies** that (a) can be implemented by municipal governments and (b) focus on the upstream determinants of health, specifically the *primary prevention* of lead poisoning through the removal of lead hazards from the environment before anyone is exposed to them. Secondary prevention services, or case treatment for children who have already been exposed, receive less emphasis since they are primarily the province of county, regional and municipal health departments.

Nine of the eighteen strategies, or municipal recommended practices presented in this Guide are linked to longer, more detailed guidance documents that support municipal ‘actions’ in the [Sustainable Jersey](#) certification program. They can be found on the Sustainable Jersey website. ‘Actions’ are recommended municipal practices that earn participating towns and cities ‘points’ towards voluntary sustainability certification. They are continually being updated as new actions are added. In the future, additional strategies will be developed into actions, and at that time the Guide will be updated with links to the corresponding documentation on the Sustainable Jersey website. This guide will therefore be a living document, periodically refreshed by new content.

By simply cataloging strategies, the Guide risks under-emphasizing the crucial value of taking a holistic approach. Consequently, it is critical to note that no single strategy by itself captures the essence of perhaps the most important step that can be taken in every municipality, right now – and essentially for free, namely: to establish (or reinforce) a **culture of lead prevention** as part of the broader culture of health. A culture of lead prevention manifests an informed *awareness* of the threat from lead and a shared *commitment* to eliminating it towards the greater goal of holistic health. Along with this comes an expectation that everyone working in and with municipal government will do their part to contribute, directly or indirectly, towards achieving that goal. Key characteristics of this culture are a practice of information-sharing – among municipal departments, as well as with community partners – and a problem-solving mindset.

Using this Guide

The purpose of this Guide is to help municipalities identify and implement the most effective strategies enabling them to *do their part* in eliminating the scourge of lead poisoning from their communities. Use this Guide as a planning tool and reservoir of ideas and resources. The '**matrix**' provides a master list of impactful strategies for action and helps you take a first cut at selecting most suitable ones for your municipality to pursue. One way of using the guide is to move directly to the particular action strategies that seem most relevant to existing municipal priorities. We recommend that the matrix be used as a tool in a consultative process to develop a **comprehensive municipal lead risk prevention strategy**.

The approach to achieving the goal of primary lead prevention ultimately taken will differ in every municipality, based on its unique capacities and needs. Yet, in every case, a *culture of lead prevention and health* will support a successful strategy, and that culture will in turn be strengthened as the strategy is put into play.

We know that the effects of ingested and inhaled lead are cumulative, and every additional day a child in your town is exposed to that toxin is a day the problem deepens. The time to act is now!





Background

How prevalent is lead poisoning in New Jersey?

In 2018, around 4,500 New Jersey children were found for the first time to have blood lead levels (BLLs) above the threshold for action set by the federal Centers for Disease Control (at or above $5\mu\text{dL}$).¹ The good news is that this number has been declining in recent years. The bad news is this number is a significant underestimate, given that only 39.2% of children ages 6 to 26 months that year were tested as mandated by law. Particularly in urban areas of the state, the rate of screening is much lower, and the percentage of children known to be affected much higher.

The COVID-19 pandemic has set back progress and further endangered kids, as they spend more time indoors in what for many are unsafe homes. According to the New Jersey Department of Health (NJDOH), the pandemic has seen a 40% drop in testing of lead blood levels, a 4% increase in elevated BLLs, and a spike in hospitalizations for extreme lead poisoning cases.



What are the sources of lead exposure?

Lead is a highly toxic metal that remains in the environment decades after use. According to research-based national estimates, 60-70% of the risk posed by lead comes from lead-based paint in housing and other buildings occupied by children; drinking water accounts for as much as 15-20% of lead exposure (up to 60% for formula-fed infants).² However, it is important to understand that the relative causal contribution varies in individual cases of lead poisoning, and additional sources, such as soil, consumer products or cultural practices, may predominate.



Housing (Paint)

Many people, and most young children, spend most of their time in some form of housing — their own, or that of a family member or daycare. Although lead-based paint was banned for residential use in 1978, 80% percent of the state’s housing was built prior to that year. Much of the state’s housing is older still (e.g., 1942 is the *median* age of housing in Trenton)³ and, generally, the older the home, the higher the lead content in the original paint. Much of that older rental housing stock is deteriorating, with peeling paint, lead chips and dust lying about where children often crawl and play. Even in well-maintained homes, improperly contained renovation, or even the regular friction caused by opening and shutting doors and windows, can release lead dust from sub-surface paint layers into the interior environment.

Many of the causes behind the high morbidity and costs of childhood lead poisoning are the direct consequence of housing-related issues. Poorly maintained lead-based paint tends to occur together with other features of sub-standard, unhealthy housing: for example, leaky roofs and flooding leading to the growth of mold. Together with dust, allergens, and/or chemical contaminants, mold (which may trap lead from paint) gets inhaled by residents and can trigger asthma attacks. These interactive and compounding risks disproportionately burden low-income families with children, many of whom are black and brown.

Water

Lead in drinking water has no color, taste or smell. In New Jersey’s drinking water, lead primarily comes from lead service lines (LSLs). (Service lines, which are often co-owned by homeowner and water purveyor, carry water from the water main into buildings.). LSLs were most commonly installed before 1940. Lead from indoor plumbing, fixtures and lead solder also leaches into drinking water. Lead pipe and solder were not outlawed by Congress until 1986. Thus, once again, the older the home, the higher the level of concern.

In some parts of the state, lead may also be found in water coming from the private wells that supply drinking water to nearly 10% of New Jersey’s residents. Lead may be introduced by corrosive water acting on lead plumbing or may originate in groundwater contaminated by a nearby landfill or industrial waste site.





Soil

Paint chips, dust and rain runoff from lead-based painted exteriors of buildings deposit lead in the soil. Vacant houses and lots and improper demolition practices add to the toxic burden. Soil in previously heavy trafficked areas contains legacy lead deposited as residues of vehicle exhaust from the leaded gasoline used prior to 1980. Similarly, concentrations of lead can be found in the soil in and around contaminated industrial and commercial sites, such as those associated with car repair, old gas stations and battery manufacture or recycling. Soil in portions of New Jersey's agricultural areas (e.g., apple orchards) may be contaminated with lead-tainted pesticide residues.

Contaminated soil puts children at risk both when they play outside in areas with exposed soil and when the soil is tracked into homes.

Occupations and Hobbies

People whose occupations involve certain activities such as work with batteries, auto repair, or home renovation and remodeling receive damaging levels of exposure to lead. Similarly, DIY remodeling and hobbies can create risks from lead. Risky hobbies include fishing, hunting, and crafts, such as making jewelry and stained glass, as well as restoring old furniture, homes and cars. After engaging in these types of work and leisure activities, people may bring lead residue on their skin, clothes and shoes into their living spaces, thereby exposing children and others in the household.

Consumer Products and Cultural Practices

Many people have objects lying around the house that they have no idea contain harmful levels of lead. In addition to batteries, solder, ammunition, fishing weights and other hobby-related items, these objects may include older jewelry, glass and collectibles, as well dolls, toy cars and other playthings that endanger children. A number of imported products may contain lead, such as spices, ceramics, candies, cosmetics and, again, jewelry and toys. Lead has been found in products used in traditional medicines, religious ceremonies and customary practices, such as putting cosmetics, jewelry and amulets on children to confer spiritual protection.





How does lead get into the body?

If lead dust is disturbed, adults and children may *inhale* it. Young children can *ingest* lead by swallowing lead dust that is picked up on their hands, by sucking it off toys or other objects, or by eating the sweet-tasting leaded paint chips. Lead may also be ingested through lead-contaminated tap water and baby formula or food, drink, health remedies or other preparations made with tap water or other lead-contaminated ingredients, such as spices. Traces of lead may also be inadvertently consumed through food or drink served in ceramic or glass containers that contain lead.



What are the health impacts of lead poisoning?

Decades of research have established that there is no safe level of lead in the human body. Except at very high levels of exposure – which can cause coma, seizures and death, the detrimental effects of lead poisoning take time to develop and may be difficult to diagnose. There are no treatments to reverse its many adverse effects. Lead poisoning damages the nervous, cardiovascular and reproductive systems and can lead to an array of ailments such as hearing impairment, hypertension, stroke, kidney malfunction, elevated blood pressure, anemia and osteoporosis.

Children are especially vulnerable to harm when exposed early in life. Not only are they more exposed to lead for behavioral reasons, but young children’s lungs and digestive tracts absorb lead more rapidly compared to older age groups. Current or past lead exposure in pregnant women harms the developing fetus and can lead to premature and underweight births. Even very low amounts of lead in a child have been shown to damage brain and nervous system development in irreversible ways, leading to lowered I.Q. scores, difficulties learning and paying attention, behavioral issues, lowered academic achievement and a host of ensuing **social and economic disadvantages.**



Who is at (higher) risk?

In New Jersey and across the country, lead exposure and its toxic impacts disproportionately affect the most vulnerable members of society. As we’ve discussed, the single biggest variable signaling physiological vulnerability to lead is age. Risk is a function of both exposure (how much lead) and physiological vulnerability (sensitivity damage to health). Poor children get the worst of it both ways. They are more likely to have poor nutritional status, which leads to more rapid uptake of lead in their bones and thus greater damage. And low-income children and children of color are generally vastly more exposed to lead in their homes and neighborhoods.

Statistics bear this out. A national study published in 2019 found that, “Non-Hispanic Black children are close to three times as likely, and Latino children two times as likely, to have elevated BLLs as compared to Caucasian children.”⁴ Although, unfortunately, New Jersey does not disaggregate these data by race, the recent [NJDOH annual report](#) on childhood lead exposure shows that in 2017, 58% of children with blood lead levels above the CDC action threshold were concentrated in four counties in the urbanized northern part of the state, where communities of color are concentrated (Essex, Hudson, Passaic, and Union). The cities with the top five highest percentages of affected children – Irvington (6.4%), Trenton (6.4%), East Orange (5.0%), Atlantic City (4.8%) and Newark (4.4%) – also have high percentages of Black and Latinx residents. Though lead exposure harms children statewide, the burden clearly falls more heavily on some communities than others.

Other characteristics that these heavily impacted urban centers have in common include older housing stock and a high proportion of people living in rental housing. In sum, “renter-occupied, pre-1978 households with young children living at or below federal poverty level represent the highest risk category for lead exposure both in New Jersey and nationally.”⁵ This fact is explained by several factors relating to the intersection of (poor) housing and (low) income. Not only is older housing likely to have lead-

based paint hazards, it is more expensive to maintain. Low-cost rental housing is more likely to be poorly maintained by landlords, and low-income households more likely to struggle with the cost of upkeep. Furthermore, older neighborhoods are at higher risk of lead in their plumbing and legacy lead in their soil.

These same conditions can threaten the healthy development of babies even before birth. Girls and women of childbearing age who are exposed to lead are at risk of damaging the healthy development of babies they may be carrying now or in the future (since lead can be stored in bones and later released).

It is important to keep in mind, however, that children in even relatively affluent families may be made vulnerable to lead poisoning due to lack of information and understanding on the part of their parents (e.g., regarding hazards from home remodeling or hobbies) and, perhaps, attitude (e.g., “that’s not a problem in *my* neighborhood”). Regardless of family income levels, linguistic barriers, cultural practices and use of imported goods also render the children of some immigrant families vulnerable to excessive lead exposure.



What are the social and economic impacts of lead poisoning – and lead prevention?

The cognitive, learning and behavior defects inflicted on children by lead poisoning show up in a lifetime of diminished possibility. Elevated blood lead levels increase a child’s risk of impulsive and poor decision-making, aggressive behavior, diminished academic achievement, which in turn can lead to dropping out of school, juvenile delinquency and incarceration.

Lead is part of a cycle that interferes with children’s ability to achieve their full potential. The behavior issues that result from lead poisoning diminish academic success and lead to discipline issues that help feed the school to prison pipeline.⁶



Long-term studies have established a strong association between preschool blood lead levels, decreased graduation rates, lower lifetime earnings and increased crime.⁷ For a host of correlated reasons, these prejudicial outcomes are more common among black and brown children in New Jersey. Lead poisoning is both a cause and a deepening consequence of structural racism in the United States and New Jersey.

Along with state and federal government and the rest of society, municipalities feel the economic impact of these and other consequences of lead poisoning. It drives up the expenditures for education, special education, social services and crime prevention, to name a few key areas, while depressing tax revenues.

So substantial are these added expenditures, that one dollar invested in avoiding them by prevention through lead paint hazard control alone has been estimated to return \$17 to \$221 to society.⁸ By implementing the strategies outlined in this guide, therefore, municipalities will save money over time. The resulting improvements in public health will pay dividends in reduced costs in health and social services. In particular, improving and maintaining the stock of healthy housing will promote strong local economies along with reduced abandonment and increased neighborhood stability, property values and tax revenues.

By taking aggressive steps to ‘get the lead out,’ municipalities would support many other community goals – from a healthy population, to improved and equitable educational outcomes, to a productive workforce, to environmental justice. Crucially, preventing lead poisoning would eliminate a major driver of racial and socioeconomic disparities in health and life prospects.



The Roles of Government

The recommendations in this guide address the role of municipal government.

However, municipal governments operate within a federal system in which each level of government exercises certain authorities, including the power to legislate and tax. Funding tends to flow from the federal level down the hierarchy. Directly or via state programs, federal funding is made available through competitive grants or first-come-first-served channels; it behooves municipalities to prepare themselves and their residents to avail of these limited resources, and to advocate for their expansion.

The following section gives a brief, introductory account of some of the principal responsibilities, authorities and administration pertaining to lead poisoning prevention operating at each level. Our focus is on 'upstream' determinants, or primary prevention (such as the provision of healthy housing), rather than on secondary treatment and health services.



Federal

The federal government plays a central role in regulating against lead exposure and in funding and administering programs to control and eliminate it. Among the numerous government statutes and implementing regulations that regulate lead poisoning and lead hazard reduction the following are fundamental: the **Lead-Based Paint Poisoning Prevention Act**; the **Lead Contamination Control Act**; the **Residential Lead-Based Paint Hazard Reduction Act (Title X)**, the **Clean Water Act** and the **Safe Drinking Water Act**, implemented through the **Lead and Copper Rule**. Similarly, many federal agencies are involved, with leading roles played by the **Consumer Product Safety Commission (CPSC)**, the **Environmental Protection Agency (EPA)**, the **Department of Housing and Urban Development (HUD)**, and the **Department of Health and Human Services (HHS)**, which also oversees the **Centers for Disease Control (CDC)**.

State

Key state agencies and divisions responsible for lead prevention include:

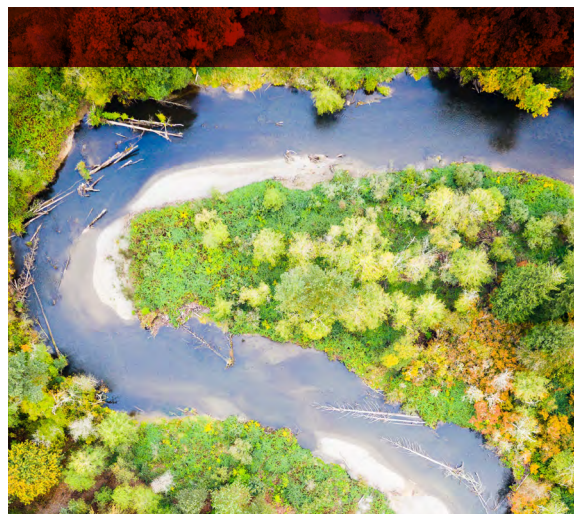
New Jersey Department of Health (NJDOH):

- ▶ **The Childhood Lead Program** oversees environmental investigations throughout the state for childhood elevated blood lead cases and the universal lead screening program.

- ▶ **Office of Local Public Health (OLPH)** provides communication and coordination to local health departments and facilitates the provision of resources and technical assistance to local public health partners. In addition, the OLPH licenses public health professionals, including health officers and registered environmental health specialists, and enforces certain regulations specific to local health departments.
- ▶ The Office of Population Health oversees important data collection and analysis and coordinates the Department's Healthy New Jersey initiatives, including the State Health Assessment and State Health Improvement Plan.
- ▶ Consumer, Environmental and Occupational Health Service services include childcare center health assessments, hazardous site health evaluation, food and drug safety and lead training and certification for inspectors/risk assessors and training agencies.

New Jersey Department of Environmental Protection (NJDEP)

- ▶ The NJDEP has responsibilities for prevention, regulation, monitoring and disposal of lead in water, soil, air and toxic waste (including lead paint), as well as for enforcement of lead violations.





Municipalities interface with several divisions of the NJDEP, including:

- ▶ The Bureau of Safe Drinking Water (under the Division of Water Supply & Geoscience) handles monitoring and compliance with drinking water safety standards, including the Lead and Copper Rule.
- ▶ The Division of Solid and Hazardous Waste Management runs the Site Remediation Program, which deals with lead paint disposal and enforces soil remediation standards.

The New Jersey Department of Consumer Affairs handles consumer product safety and many forms of licensing, including for sub code and construction officials, as well as private housing inspectors.

The New Jersey Department of Community Affairs is in charge of many aspects of housing in the state:

- ▶ The Department manages **state and federal (HUD) lead remediation programs**, targeting housing units occupied by children under age six in certain, heavily impacted parts of the state.
- ▶ **The Lead Hazard Abatement Program** provides for the certification of companies performing lead-based paint evaluation and abatement.
 - ▷ *Note: Firms performing renovation, repair, and painting projects that disturb lead-based paint must be certified through the regional office of the federal EPA.*
- ▶ The Bureau of Housing Inspection is responsible for ensuring that multiple-family buildings of three or more dwelling units are properly maintained and is charged with conduction inspections of those properties every five years.

- ▷ *(Note: lead prevention in public housing is addressed by additional governmental bodies and authorities at the state and local levels. Although some municipalities have responsibilities in this area, authority often lies with a municipal housing authority, which may not be under the direct control of the elected government. Aspects of lead prevention that apply only to public housing fall outside the scope of this guide.)*

County

There is a county-wide health department, division or office in every county. It is generally responsible for enforcement of environmental health activities and coordinates emergency management. Counties also administer various housing and human services functions, particularly concerning Section 8 vouchers and other programs serving low-income and vulnerable residents.

Local Health Departments

Local health departments are the community-based public health service providers responsible for essential public health services. The responsibility for childhood lead poisoning prevention resides with the local health department. There are 94 local health departments in New Jersey. Some cover a single municipality, some cover multiple municipalities, others are county departments, while still others are Regional Health Commissions. Municipalities that do not have their own health departments enter into contracts, or shared services agreements, with one of these other entities, which then functions as the “local health department.” To add further complexity to the mix, some municipal health departments contract out certain functions, such as lead inspections and case management, to other health departments.

Local Boards of Health

Local boards of health have the fundamental responsibility for addressing essential public health issues at the local level. They are an oversight body comprised of local elected or appointed officials – as distinct from the local health **department**, which is an implementing body. Certain forms of government allow for another municipal body to perform the function of a local board of health (e.g., the governing body). Municipalities that operate under county or regional board of health via a shared services agreement are required to establish their own advisory board of health, although in practice this does not always occur. When health services are outsourced, a local board of health can negotiate the terms of the contract for specific services or programs, contract with more than one entity to get the right mix of services, and/or provide additional supplementary programs through the municipality.

Local boards of health ensure the two-way flow of public health-relevant information between the municipality and residents, as well as the provision of essential public health services –which include lead prevention, detection and treatment. Coordinating the development of a comprehensive municipal lead prevention strategy would be a natural role for a well-functioning local board of health.



Water

Drinking water systems in New Jersey may be publicly owned, investor-owned or privately held, and any one municipality may have more than one system covering different service areas; some areas may have no service. The publicly owned systems are generally municipal departments or are controlled by municipal, regional or county utility authorities/commissions. The source of water, the water treatment facility and the delivery of water may be the responsibility of one system or of multiple systems. For example, a municipal system responsible for water delivery to customers (through local water pipes) may buy treated drinking water from a regional system, or it can have its own water supply source and both treat and deliver water.

The degree of authority and responsibility a municipality will have for monitoring and addressing the occurrence of lead in the drinking water supply will range from strong (own and control of drinking water system) to weak (no system ownership, must negotiate with owners). In all cases, the municipality has a role to play in understanding the water supply situation and educating residents about how to protect themselves from risks posed by lead (and other contaminants) in drinking water – from the source to the system to the tap in their homes.

Municipal Scope

What do municipal governments do – and what more could they do - to prevent lead poisoning as part of creating and sustaining the conditions for all community members to live healthy lives? As explained above, municipalities are only one of the players in this field and, moreover, they are inevitably heavily resource-constrained. Given these realities, what is the municipal scope for influence and action that can make a difference in this critical space? Describing practical strategies that respond to these questions is the purpose of this Guide.

In general, beyond the scope of the local health department (which as we have seen may or may not be municipal), municipal governments have a tremendous impact on the upstream determinants of lead exposure through their functions in public education and engagement, housing, land-use planning and zoning, infrastructure investments, water system management, pollution remediation, hazardous waste disposal and environmental management. In implementing the primary lead prevention strategies enumerated in this guide, municipalities may exercise the following authorities and functions, among others:

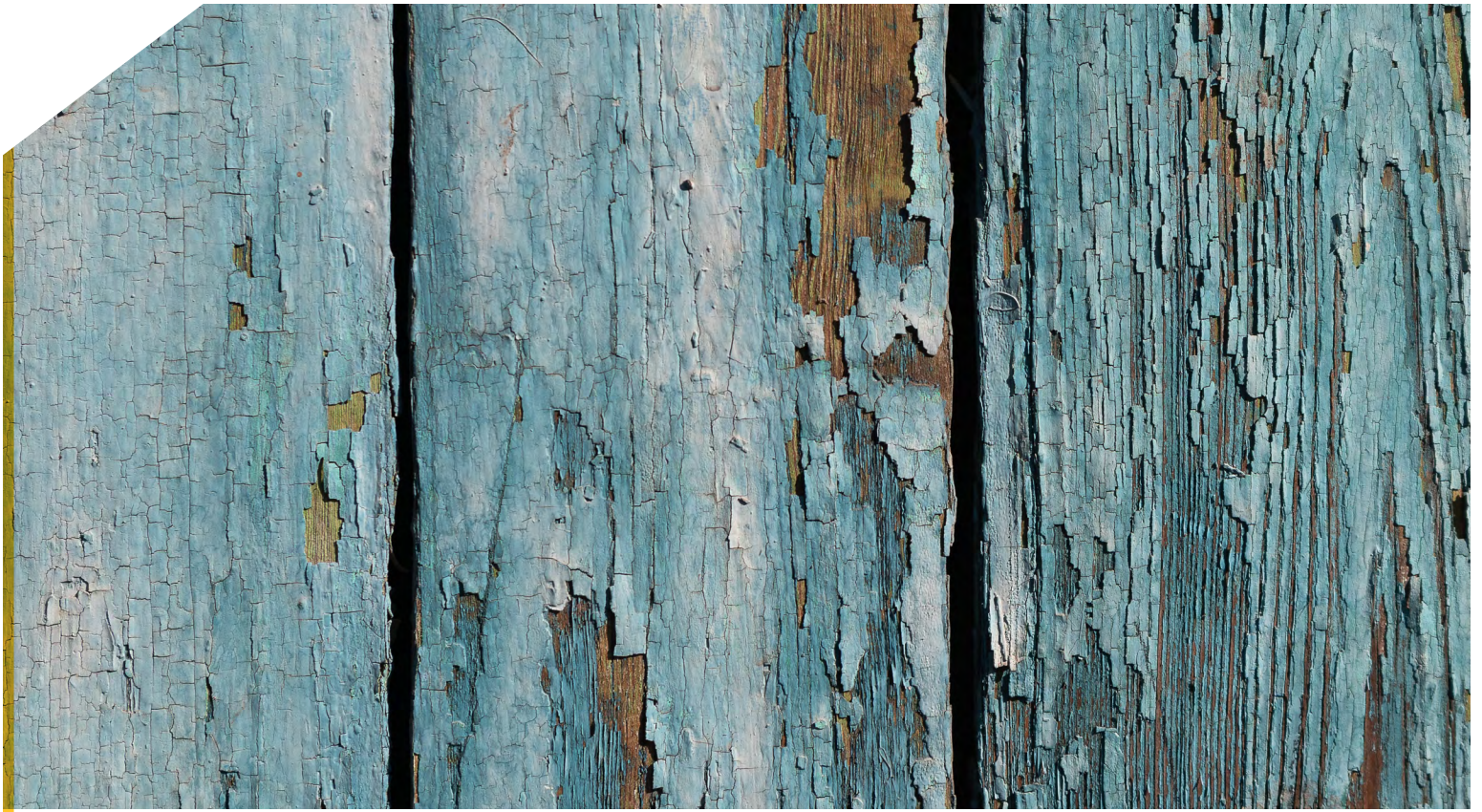
- ▶ Adopt ordinances, i.e., local laws and regulations;
- ▶ Enact resolutions that establish policies and procedures;
- ▶ Conduct inspections and enforce housing, property maintenance, building and construction and other codes;
- ▶ Enter into shared services agreements (including for contracting out enforcement roles);
- ▶ Adopt and periodically “re-examine” the municipal master plan to guide land use and integrate it with other municipal functions in order to promote public health and welfare.

Municipalities may elect to take a **Health in All Policies** approach that integrates health considerations into the master plan and policy-making across all sectors to improve the health of communities and people. This approach is a key element in establishing a ‘culture of health,’ which goes beyond the mechanics of policies and content of programs to reflect municipal values, attitudes and expectations about what is possible. A *culture of lead poisoning prevention* should be integral to the broader *culture of health*, since one would not be possible without the other, and lead poisoning prevention activities cross many sectors.



A note on non-governmental partners:

There are many non-governmental partners which assist municipalities in supporting healthy housing and other aspects of lead poisoning prevention, education and advocacy. Many receive funds from the federal or state government to offer key services and support. Notably, lead prevention programming is provided by three regional non-profit partners that work with NJDOH in the area of child and maternal health: [Southern New Jersey Perinatal Cooperative](#), [Partnership of Maternal and Child Health of Northern New Jersey](#), and the [Central Jersey Family Health Consortium](#). Additional lead-related resources offered by non-profits are cited throughout this guide and in the **Reference section**.



Getting Started

Using the Guide to Develop a Strategy (or jumping right in)

Some municipalities and green teams may already have a lead prevention campaign or initiatives underway, with clear priorities established. They may be ready to select directly from the list of **strategies** in the Guide the one or more they wish to pursue. If not already in place, the recommended practice would be to develop a **comprehensive municipal lead risk prevention strategy**. Municipalities embarking on this path will find the **matrix** a valuable tool for investigating strategic options and locating additional, more in-depth supportive resources.

Still, others may take the middle way. Understanding that high-impact actions often require a greater investment of time, resources and political will, some municipalities may choose to get started by first taking on the ‘low-hanging fruit’ – a few shorter-term strategies that appear to be easier, lower cost and/ or supported by existing political buy-in. In this way, they can build support for heavier-lift actions in the future, including strategic planning.

Whatever path your municipality chooses to follow, the matrix will help you get started. It provides the key for using this Guide to select and prioritize among specific strategies that will be impactful, appropriate and feasible in your town or city.

All the strategies in the matrix are supported by research-informed literature. While individual reports and case studies provide valuable illustrations and lessons-learned for individual strategies, it is the exception rather than the rule to find a rigorous

evidence-base for the impact of a particular strategy (see [Robert Wood Johnson Foundation County Road Maps What Works for Health](#)). Moreover, research results and case examples must always be applied with caution in specific municipalities where the same conditions don’t apply, and the complex of local factors is necessarily different.

Half of the strategies presented in this guide (9 out of 18) are also [Sustainable Jersey actions](#), with more in the pipeline for future development. Sustainable Jersey actions have been collaboratively developed with an expert Task Force that brings to bear professional knowledge and practical experience on the ground in New Jersey municipalities. For those strategies which are also Sustainable Jersey actions, the Guide gives a brief summary and provides an embedded link to action as it appears on the Sustainable Jersey website where the more complete and proscriptive guidance, resources and examples can be found.

Visit SustainableJersey.com/actions



Using the Strategy Matrix

The first step in using the matrix is to assemble some basic facts about the municipality. The necessary data are easily located from public sources, and often can be found in existing municipal records and documents (e.g., the Master Plan). These key municipal characteristics correspond to columns in the matrix. Each column asks a binary question about the prevalence of that characteristic: High/Low or Present/Absent. High vs. low can be determined either qualitatively, based on self-knowledge regarding these well-known features of the municipality, or by comparing the quantitative value of the characteristic for your municipality to the state median or other threshold. Thus, for example, if a large municipality looks down the population column, all the ✓s in that column would be recommended as promising strategies for cities to consider. The rows of the matrix correspond to the primary lead prevention strategies that municipalities can take. The ✓s along a particular row indicate the characteristics of municipalities for which that strategy is likely to be a good fit.









A ✓ indicates whether or not there is currently a Sustainable Jersey action corresponding to that strategy.

Municipal lead teams are encouraged to explore and consider all the strategies listed, most of which will provide some value to any type of municipality. The matrix is simply a tool to suggest promising strategy options for deliberation and to point to informational resources to support each strategy of interest. Ultimately, there are many factors that go into the decision to implement a given strategy, such as local priorities, political support, staff demands and cost. Often, the question of ‘how are we going to pay for this?’ dominates. For pointers in addressing this pressing question, see the Appendix on **funding**.

A very important proviso: Although the matrix is useful as a starting place for sorting out priority options, it is essential to keep in mind that the ‘municipal characteristics’ columns are based on *municipality-wide* statistics. As such the matrix may paint a misleading portrait since it averages out pockets of high risk and high need. For example, your town may appear to be a comparatively low risk on key indicators, such as older housing or poverty, while in certain neighborhoods deteriorating pre-1978 housing is poisoning vulnerable children. An equitable strategy will place a high priority on addressing the needs of vulnerable residents as a matter of social justice. Interventions *targeting* vulnerable populations are also likely to be most effective in bringing down the rate of elevated blood lead levels – and thereby protecting children. Data indicating locations with a high incidence of elevated blood lead levels indicate the necessity of taking action to address issues in those specific “hot spots,” regardless of municipal averages.

All this points to the value of developing a **comprehensive municipal lead strategy**. The guidance given for that process goes into some detail on how to identify, locate and prioritize vulnerable populations and neighborhoods. The larger the municipality, the more important it is to conduct granular and spatially explicit analysis in order to inform the development, and monitor the implementation, of an equitable and effective comprehensive municipal lead strategy (see also **data-sharing strategy** as well as **lead education and outreach programs**). Equally important is the equitable participation of community groups, particularly those representing areas of high vulnerability and exposure to risk (see also the **comprehensive lead strategy** and **outreach and education** strategies).

Municipal Lead Strategy Matrix

Sustainable Jersey Action		Low Screen Rate	High eBLL* Rate	Large Population	Municipal Health Dept.	High % Older Housing	High % Renter	High % Poverty	High % Immigrant	Limited English	Lead in Water System	Lead in Private Wells
Municipal Strategies:												
Comprehensive Lead Strategy 		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lead and Housing Hazard Data-sharing 		✓	✓	✓	✓	✓				✓		
Outreach & Education 		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Screening Campaign 		✓	✓	✓	✓					✓	✓	
Drinking Water 			✓							✓		
Well Testing 			✓								✓	
Tobacco Free 			✓			✓						
Healthy Housing Training & Inspection 			✓	✓	✓	✓	✓					
Disclosure at Sale/Turnover			✓		✓	✓						
Rental Registry			✓	✓	✓	✓						
Proactive Rental Inspection			✓		✓	✓						
Rental Licensing			✓		✓	✓						
Open Housing Data Portal			✓		✓	✓						
Construction & Demolition			✓		✓							
Soil Fill Testing & Regulation			✓		✓							
Testing Soil			✓		✓							
Consumer Product Sale Regulations			✓					✓	✓			
Collaboration & Coalition-building		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*eBLL stands for elevated Blood Lead Level, which means a screening blood test found a concentration lead at or above 5µ/dL, the threshold for action set by the federal Centers for Disease Control.

Note "high" and "low" are relative terms. Municipalities may subjectively decide whether they fall into the "high" or "not-high," "low" or "not-low" categories based on local knowledge and perception. Alternatively, or additionally, they may consult the U.S. Census for quantitative values and compare them to the state median for a given variable. Above means "high" and at or below means "low."

The first nine strategies, or recommended practices, have been instituted as ‘actions’ in the Sustainable Jersey municipal certification program. This means they were first selected, and then developed, by task forces comprised of subject-matter and field-based experts. Strategies are selected on the basis of (a) evidence of projected impact and (b) their suitability to the legal authorities, capacities, constraints and influence characteristics of municipalities in New Jersey. However, all of the strategies on this list are evidence-based and supported by the literature. Since municipal conditions and priorities vary widely across the state – any one of these strategies (Sustainable Jersey action or not) may be appropriate and effective for your municipality to embark upon today.

Sustainable Jersey actions are only briefly summarized in this Guide. The links take readers to the Sustainable Jersey website, where more detailed guidance, resources and model examples are provided for each action. Municipalities registered

in the Sustainable Jersey program that have implemented and documented policies and practices which meet the criteria laid down for these ‘actions,’ may earn ‘points’ towards the Sustainable Jersey certification.

Existing Sustainable Jersey actions are often improved and updated, based on new research and practical experience and innovation by implementing municipalities. New actions are continuously being researched and developed. Strategies listed below that have not yet been developed into Sustainable Jersey actions may be added to the program in the future. This Guide will be updated to provide those links as they become available. Keep checking our website for these new developments!

For the strategies below that are not currently Sustainable Jersey actions, web links and references are provided to sources that go into greater depth and also provide additional references to explore.





Lead Poisoning Prevention Strategies

Lead Data and Strategy

Comprehensive Lead Strategy [View the full Sustainable Jersey action](#)

A comprehensive strategy that coordinates all municipal departments and bodies, as well as external partners, in the implementation of a targeted, risk-based lead poisoning prevention program is the best way to marshal limited resources and leverage municipal authority to maximum effect towards the primary prevention of lead exposure. A comprehensive strategy that uses a systematic, risk-based approach to prioritize interventions will yield the greatest quantitative reduction in lead poisoning cases and, thereby, in health disparities. A comprehensive strategy addresses comprehensive policy changes and funding challenges.



The first step – valuable in and of itself - is to convene an interdepartmental and cross-sectoral lead advisory committee, which will hold regular meetings and report annually to the local board of health and the governing body. If the timing is conducive, this group should work in tandem with any other public health assessment or planning process that may be currently underway, such as a county or hospital system’s Community Health Needs Assessment, or the Local Health Assessment and Action Plan in the Sustainable Jersey program.

Who should be on the Lead-safe Advisory Committee?

The Lead Advisory Committee or equivalent should include representatives from the Local Board of Health, the local Department of Health (municipal, county and/or regional), the Environmental Commission, the housing department and municipal Housing Authority, if any, as well as elected officials and the municipal attorney. It would also ideally include representation from property owner, tenant or neighborhood associations, as well as from non-profit organizations directly involved in lead risk assessment/remediation or that work with groups most affected by lead. When it’s not feasible for the committee itself to include members belonging to these groups, it should proactively consult them.

As a starting place, the Committee should investigate and identify:

- ▶ the most prevalent causes of lead poisoning in the municipality;
- ▶ chief obstacles to the delivery of services by municipal or contracted departments;
- ▶ opportunities and mechanisms for better coordination among these departments;
- ▶ sources of additional funding and technical capacity.

The Committee should identify the most vulnerable populations and map geographic lead “hot spots,” prioritized on the basis of risk of lead exposure. Risk can be assessed based on prior elevated Blood Lead Level (e BLL) prevalence, socioeconomic and housing factors, and community consultation. Implementing the [data-sharing strategy](#) as well as the [rental registry](#) and [proactive inspection strategies](#) would generate valuable data for this purpose.

The Committee then selects specific strategies that address the needs of the municipality, with a focus on vulnerable populations, and that also match its particular characteristics and capacities. The [matrix](#) provided in this Guide will be a useful tool in this exercise. A comprehensive lead strategy should include a timeline, responsible parties, budget and sources of funding. The strategy should be adopted by the governing body and communicated to the public. Presenting the strategy to the public and elected officials provides an important opportunity to communicate data that highlight disparities and the need for action.

For municipalities without their own health departments, the strategy will detail how municipal priorities will be followed up with the external parties with whom they have contracted, typically county or regional health departments. Where appropriate, elements of the strategy may be built into shared services contracts (see, for example, the [health homes training and inspection strategy](#)).

Lead and Housing Hazard Data-sharing

[View the full Sustainable Jersey action](#)

The Lead and Housing Hazard Data-sharing strategy involves adopting and implementing one or more of the following policies:

- mandating regular interdepartmental staff meetings on lead risks in housing;
- establishing a shared data platform integrating health and housing data related to lead and other housing hazards;
- mandating annual presentation to the municipal governing body on the trends and implications of these integrated data;
- making the lead and housing hazard database public (hiding any sensitive health data) through a regularly updated municipal website or open data portal.

In New Jersey, all too often it is only the discovery of a lead-poisoned child that serves as an indicator of a problem and a trigger for action and the investment of governmental resources. In many cases, municipalities learn of a lead hazard in a building only when a child who lives there tests positive with an elevated blood lead level. That information generally stays with the public health department and is not shared with housing or inspections departments. Often municipal public health departments deal with

landlords whose properties are poisoning residents solely through the state-mandated lead abatement process for the one particular property in question, and they do this without knowledge of other properties owned by that landlord and other housing or code violations that may have occurred there. Ensuring that health departments and other relevant departments are able to routinely access the same data on identified or likely lead concerns, and to see how those concerns link to other municipal concerns and initiatives, will help to inform broader, more proactive strategies related to public health, landlord regulation, property management, and revitalization/development.

Regular meetings among top staff in the housing, health and related departments to exchange information, review data and coordinate action is a first, cost-free step in implementing this strategy. The next, critical move is for municipalities to develop a comprehensive, interdepartmental database of key information *linked by property/address*, including inspection dates and findings, code violations, complaints, building ownership, tax status and dates and issuance of certificates of occupancy or habitability. It is highly recommended that the municipality incorporate data on *all* housing-related hazards in one comprehensive, shared database that supports an integrated, efficient approach to achieving the end goal: healthy homes for healthy kids and families.



Non-profit organizations that play a key role in housing and/or lead and other related health services should also provide and have access to pertinent data. Once municipalities share information about lead risks in this way, they can develop a plan for proactively testing and documenting the status of likely lead-impacted buildings.

This strategy would be beneficially undertaken by all municipalities, although the complexity of the data-sharing system should be proportionate to the size of the municipality and the technical capacity of its staff. A relatively simple shared, the property-linked spreadsheet may be adequate for smaller municipalities. Larger municipalities may contract with a data consultant or may be able to rely on staff with database skills. They may elect to purchase expensive third-party sophisticated property management software, such as GovPilot. However, municipalities may not be using such tools to full capacity. Fully utilizing such tools would involve, at a minimum, holding regular interdepartmental meetings to review and reflect on the data and presenting the findings to municipal decision-makers.

As noted by the Green and Healthy Homes Initiative's [New Jersey Lead Poisoning Prevention Action Plan](#) (2018), such an address-linked, searchable database "could assist health officials, tenants, advocates, researchers and others in enforcing codes, coordinating housing rehabilitation initiatives or providing individual tenant advocacy assistance, ... allow[ing] for the evaluation of success based on community-level outcomes...[and] evidence-based and strategic funding decisions."

Towards this end, municipalities are highly encouraged to use these data to inform the development and implementation of a



comprehensive, evidence-based lead **strategy**. Even prior to the development of such a strategy, the requirement to present regular reports to the governing body and the Local Board of Health will promote accountability, coordination and lay the foundation for a comprehensive strategy.

Municipalities that chose to complete the most advanced tier of this strategy would make the lead and housing hazard database public (hiding any protected health data) through a regularly updated municipal website or open data portal. This would give residents the information they need to make positive health and housing decisions.

In sum, this strategy addresses key upstream determinants of health by making buildings - and their inhabitants - healthier and safer.



Outreach

Lead Outreach and Education Campaign [View the full Sustainable Jersey action](#)

The goal of this strategy is to prevent lead exposure through community outreach and education led, coordinated or assisted by municipal government. Although the methods of outreach may vary based on local needs, undertaking this strategy is highly recommended as beneficial to all municipalities.

Only by knowing about the severity of the risks from lead, the sources of lead exposure and how those sources can be eliminated or interrupted can people act to protect themselves and their children. Municipalities can and should team up with partners to conduct outreach and education campaigns to empower residents with information about the practical steps that can be taken immediately to protect children from lead by fixing homes, changing behaviors, and obtaining the full services to which they are entitled.

If they do not already have a Lead Advisory Committee or equivalent (see [comprehensive lead strategy](#)), municipalities are encouraged to form a Lead Education Team that includes similar representation.

The outreach and education campaigns should address the lead exposure pathways most relevant in that municipality: housing, water, soil, occupations and hobbies, consumer products and cultural practices. They should also provide information on where parents and guardians can get their children's blood screened for lead – and why it is so crucially important to do so (see [lead screening campaign strategy](#)).

Lead outreach and education initiatives will be most effective in reducing exposure and harm if they are targeted at the most at-risk and vulnerable families and neighborhoods. This means the initiatives should be designed for, and where possible with, the intended audience, should address their concerns, and should be communicated in a culturally and linguistically appropriate manner through familiar and accessible channels (for example, through trusted local institutions, such as schools and houses of worship; in-person meetings held at accessible times and places).

Priority groups for lead outreach could include:

- ▶ **High-risk families** who could benefit from immediate assessment and risk-reduction services to prevent further childhood lead exposure.
- ▶ Underserved groups and those who are hard to reach through the usual channels, due for example, to language barriers, immigration status, or other communication gaps.

In identifying priority groups to target, the Lead Team can draw on any existing sources compiled by the municipality that contain census-based information about the demographic composition of the town by such factors as household income, presence of children, race, ethnicity, language proficiency, as well locations of pre-1978 and older housing stock. (See [comprehensive lead strategy](#)).

Team members should also draw on their knowledge of the community and consult with other community leaders to identify vulnerable populations, such as recent immigrants of all income-brackets, who may be at higher risk of lead exposure due to cultural practices and use of imported products.



Examples of outreach strategies:

- ▶ Host a town hall or series of neighborhood meetings on lead prevention
- ▶ Develop a web page on lead prevention hosted by the municipality or a municipal agency
- ▶ Give presentations on lead prevention to relevant local social/civic groups or houses of worship
- ▶ Obtain translated materials or translate the materials into appropriate languages and distribute in a manner effective at reaching speakers of those languages
- ▶ Conduct an active social media campaign using a regularly maintained Facebook, Instagram or Twitter account for the green team or municipality containing in-depth guidance on lead prevention information and strategies
- ▶ Distribution of subsidies or materials for home lead remediation, supported by grant funds or donations (e.g., lead-free paint)

Outreach and education initiatives are not ‘one and done.’ Ideally, they would be continuously offered, shifting methods, locations and audiences over time. Otherwise, they should be repeated on a periodic basis. It is important to evaluate effectiveness of the different initiatives in order to improve impact.

Lead Screening Campaign

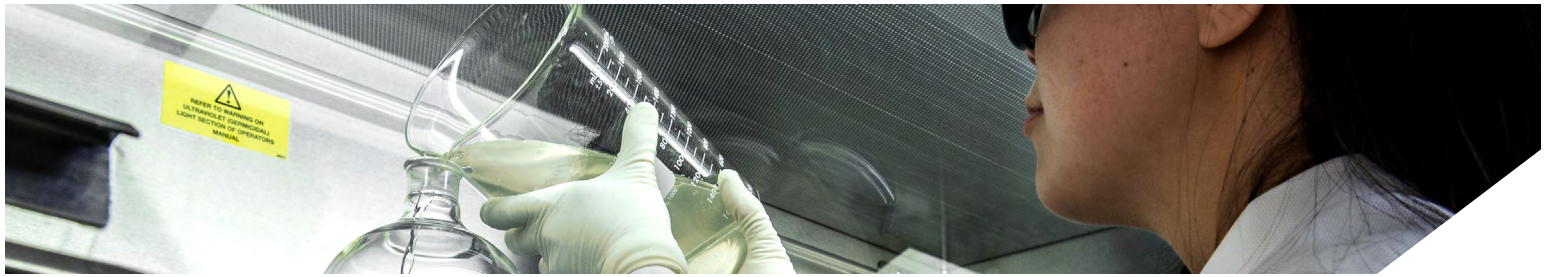
[View the full Sustainable Jersey action](#)

The purpose of this strategy is to prevent childhood lead exposure by conducting a coordinated outreach campaign that will drive up the percentage of children living in the municipality who receive state-mandated blood lead level (BLL) screening tests.

By New Jersey state law, every doctor, nurse practitioner, and health care facility in the state must screen for lead poisoning all children at both 12 and 24 months of age, as well as any children under the age of 6 who have not already been screened. Despite steady improvement (until interrupted by the COVID-19 pandemic), the levels of testing in New Jersey have remained stubbornly low, particularly in urban areas. An effective outreach campaign to improve screening rates could include some or all of the following elements:

- ▶ sponsor free BLL screenings, or proactively collaborate in holding screenings;
- ▶ identify high-risk populations and the barriers they face to accessing BLL screenings; implement targeted outreach to overcome those barriers and improve access, e.g., mobile lead screening services;
- ▶ conduct outreach to inform and motivate pediatricians and other healthcare providers;
- ▶ calculate and prominently report the municipal BLL screening rate(s).

Municipalities can play a significant and proactive role in co-sponsoring BLL screenings and other forms of outreach in collaboration with a school district; county, regional or other contractual local health departments; hospital system and/or non-profit organization. Schools make great partners since school nurses are in direct contact with local families — many with younger siblings — including families that are hard to reach due to undocumented immigration status and other factors.



Water and Air Quality

Removing Lead from Drinking Water

[View the full Sustainable Jersey action](#)

Because of the scale and cost of fixing the problem, municipalities must lobby for action and investment by federal and state government and by corporate owners of water systems to deal with the primary source of lead in New Jersey's drinking water, namely the lead service lines (LSLs). Lead from indoor plumbing, fixtures and lead solder also leaches into drinking water and municipalities can play an important role in reducing those risks.

In addition to conducting outreach and education, municipalities can implement these effective local strategies:

- Offer a free or reduced-cost voluntary testing program that informs residents of the concentration of lead (if any) found in their drinking water and provides guidance on how to mitigate it. The program can be run directly through a municipal department, a utility that services the community, or through a partnership with a non-governmental agency.
- Pass and enact an ordinance mandating testing and disclosure for the presence of lead in drinking water lines as a requirement for approving transfer of real property, change in the use or change in tenancy of a property for residential use.
- Mandate testing, disclosure and remediation of lead in drinking water upon property sale or occupant turnover. After remediation (by, e.g., installation of filters at the tap, removal LSLs), the level of lead would need to meet current New Jersey Department of Environmental Protection standards in order for transfers or changes in tenancy to be approved.

Private Well Outreach and Testing

[View the full Sustainable Jersey action](#)

To counteract the risk from lead coming from the private wells that supply drinking water to nearly 10% of New Jersey's residents, municipalities may implement strategies including the following:

- Conduct an outreach program that identifies and informs the community about any clusters of wells that exceed one or more of the state's thresholds for lead or other contaminants.
- Offer free to at-cost distribution of well-testing kits.
- Adopt a well-testing ordinance that (a) requires all private wells be tested for lead prior to the transfer of property and change in use or tenancy of a property, and (b) requires whole house, point of entry remediation of any well that does not meet state standards.

Tobacco-Free Community

[View the full Sustainable Jersey action](#)

Tobacco smoke is a source of exposure to thousands of toxic chemicals including lead, and exposure to secondhand tobacco smoke has been demonstrated to increase blood lead levels in children.⁹ Thus, municipal strategies to discourage the use of tobacco products will help reduce lead, such as:

- point-of-sale ordinances (e.g., regulating the density of retail stores);
- ordinance instituting 100% smoke and/or tobacco-free outdoor spaces;
- smoke-free housing policies;
- youth tobacco/vaping education and outreach programs.

Housing

While presented as separate strategies below, these recommended practices for ensuring healthy housing overlap in productive ways and are most effective when implemented as a complementary suite of interventions. These housing-based strategies are crucial tools for municipalities' primary lead poisoning prevention (and public health) arsenal. These strategies not only stop lead exposure before it happens, but also by taking preemptive action to preserve housing stock, they sustain the supply of healthy housing, protect property values, and thereby preserve the local tax base. *(Note: Public housing is beyond the scope of this guide).*

Lead and Healthy Housing Training and Inspection

 [View the full Sustainable Jersey action](#)

By implementing consistent healthy homes training and home inspection protocols as a matter of policy, municipalities can promote a culture, expectation and practice of healthy homes and lead poisoning prevention. This strategy will enable municipalities to improve the health of their residents as well as the quality of their housing stock. It will build municipal capacity to identify health hazards in the home, which is a first step to addressing them.

Our ultimate goal is the health of children and families. Once identified, lead hazards often signal the need to attend to other health-threatening hazards in a home. Interactive effects with other hazards (e.g., mold) can amplify lead exposure and its toxic effects. A 'culture of healthy homes' is a 'culture of lead prevention' and vice versa. This means establishing the commitment among municipal officials, staff and partners that, regardless of position, 'in our municipality, we work together to support healthy homes for all by identifying and removing hazards to health in housing.' This means that when inspectors enter a home for any purpose, they scan for and act on any significant hazard to health.

Healthy housing is housing that is:

- ▶ free of lead hazards;
- ▶ safe from chemical and physical dangers (fire and falls);
- ▶ clean, dry, pest and chemical-free;
- ▶ energy efficient;
- ▶ economically sustainable.

This strategy has three, complementary components: training, housing inspection protocol and voluntary home evaluation programs and provides several options for each that municipalities can adopt and adapt to their particular circumstances and needs.

Training

- ▶ Municipalities can make it a regular practice to send municipal officers, appointees, staff or others to trainings on the principles of a healthy home and how to identify and reduce hazards, with emphasis on reducing lead exposure.
- ▶ Municipalities can pass and enact a resolution or ordinance that establishes a policy that all housing and health inspectors employed or contracted by the municipality receive training on the principles of a healthy home and how to identify and address home health risks, with emphasis on reducing lead exposure.

Inspection Protocol

- ▶ A municipality can pass and enact a resolution or ordinance that establishes a comprehensive health inspection protocol instructing all housing and health inspectors to use a healthy homes checklist to identify significant lead and other health hazards in every residence they visit. (The policy may provide a partial exception for lead inspector/risk assessors investigating cases triggered by elevated blood lead level findings).

The protocol must stipulate that, if significant hazards or health-threatening issues are encountered, residents will be provided by the inspector with advice and/or informational materials (handouts) on what they can do to eliminate or reduce those hazards. Where needed, the inspector must refer the case to another appropriate department (e.g., code enforcement, social work, county or regional health). Identification of lead hazards should be followed by free inspection of housing unit by a certified lead inspector.

In municipalities where some or all of these services are contracted out, the training and/or inspection protocol requirements may be covered in annual municipal shared services agreements.

Voluntary Home Evaluation Programs

- ▶ Municipalities may run (or co-sponsor) voluntary programs that involve promoting and conducting (a) free testing of homes for lead and/or (b) free healthy homes inspections upon tenant's or homeowner's request.

Municipalities may pursue and co-sponsor these programs in collaboration with a non-profit organization, hospital system and/or county, regional or other local health departments.



Note: The following strategies have not yet been developed into Sustainable Jersey actions.

In addition to the key external resources cited under each strategy, refer to the Reference List below for additional sources to learn more and to support implementing these strategies in your jurisdiction.

Lead Inspection and Disclosure at Property Sale or Turnover

A municipality can pass and enact an ordinance mandating that all pre-1978 rental and owner-occupied housing pass a lead paint inspection prior to the issuance of Certificates of Occupancy or Habitability permitting home purchases and tenant turnover. A 'passing grade' would indicate that the paint in the property is visibly intact, and the property has passed a lead dust clearance wipe inspection administered by a certified lead dust wipe technician or similar, accredited inspector. For rental units, a lead-safe certificate could then be issued and recorded, for example, in a [rental registry](#).

[Legislation](#) that would mandate similar action for all municipalities has been pending in the New Jersey State Legislature for several years.

* Green & Healthy Homes Initiative (GHHI). [New Jersey Lead Poisoning Prevention Action Plan](#). (2018).

* Housing and Community Development Network of New Jersey, [Thriving Cities: A New Urban Agenda](#). (2019)

Rental Registry and Licensing

Municipalities should maintain a registry of all residential rental dwellings, including minimally the address, property owner and number of units. Many New Jersey municipalities currently require registration only of residential rental dwellings containing three or more units and compliance is often spotty. This simple inventory would form the necessary foundation for rental housing data management. As detailed in the [data-sharing strategy](#), this basic information can be built into an essential database used to track inspections, results, certificates of occupancy, complaints and compliance, tax/fee payment status and the like.

When effectively implemented and paired with a cycle of mandated inspections, the rental registry effectively serves as a licensing arrangement. A municipality could go further and pass a *licensing* ordinance that would require registration and a regular health and safety inspection; it would give the municipality the power to revoke the landlord's ability to own and operate a rental business/rental property within the municipality.*

Proactive Rental Inspections

Most municipal housing code enforcement programs are complaint-based, and, when triggered, enforcement proceedings are time-consuming; corrections, if and when they are made, occur only *after* a child may have been exposed or poisoned. Under a Proactive Rental Inspection (PRI) program, rental units are inspected on a regular cycle – and often on change of tenancy as well - to ensure that they are safe and that property values are maintained. By requiring landlords to have their rental units inspected before receiving rental registration and the authority to lease their units, proactive rental inspection entails a form of [rental licensing](#). A municipality might choose to phase in the policy. The registration requirement can be implemented first, with systematic inspections starting subsequently. These periodic inspections can be focused initially on units in high-risk neighborhoods, ideally identified as part of the development of a [comprehensive lead strategy](#).

Such an inspection system can be paid for by establishing a dedicated fund to collect registration fees as well as fines and penalties.**

* [Advancing City-Level Healthy Housing: Policies, Programs and Practices in Asthma and Lead: Strategies for Progress](#). Prepared for the National League of Cities by The George Washington University School of Public Health.

** Center for Community Progress, [Building American Cities Toolkit](#).

* Mallach, Alan (2015) [Raising the Bar: Linking Incentives and Rental Property Regulation: A short guide for South Cook County local government](#). Center for Community Progress.

** [Advancing City-Level Healthy Housing: Policies, Programs and Practices in Asthma and Lead: Strategies for Progress](#). Prepared for the National League of Cities by The George Washington University School of Public Health.

** Center for Community Progress, [Building American Cities Toolkit](#).

** ChangeLab Solutions 2014. [Model Proactive Rental Inspection Ordinance](#).

** ChangeLab Solutions, "[A Guide to Proactive Rental Housing Inspection Programs](#)."

** Mallach, Alan (2015) [Raising the Bar: Linking Incentives and Rental Property Regulation: A short guide for South Cook County local government](#). Center for Community Progress.



Current New Jersey state law requires regular inspection of only rental buildings of three or more dwelling units. A municipality can pass and enact an ordinance mandating (for a fee) the inspection of every single-family and two-family rental dwelling located within the municipality for lead-based paint hazards at least once every five years. [Legislation](#) that would mandate similar action for all municipalities has been pending in the New Jersey State Legislature for a few years.

Performance-based Rental Licensing

Several New Jersey cities have elements of landlord registration, licensing and/or proactive inspections currently on the books, however, they have struggled to achieve full implementation and compliance. Performance-based rental licensing and other incentive systems can help address this, often at low cost.

A type of targeted [rental licensing](#) and [proactive inspection](#), performance-based rental licensing enables city officials to vary registration and inspection requirements for rental units based on how well a landlord has abided by health and housing codes. Landlords can be categorized based on factors such as housing code violations, nuisance and other complaints (bad) and tax compliance and lead-safe inspection results (good). Once property owners have established a record of compliance, then their properties could be subject to less frequent inspections or they might receive fast-track approval or cost breaks on permits.

A complementary strategy, compliance-oriented fee structures get better results for less investment than those primarily oriented at generating revenue.

Since most owners of rental properties in most communities are responsible landlords, an important selling point of a *performance-based licensing system* ... is that it does not treat rental properties and landlords in a 'one size fits all' fashion, but rewards responsible landlords, while focusing enforcement on chronic offenders.¹⁰

Whenever external [funding](#) can be secured, a very effective strategy for achieving housing improvements is for the municipality (and/or partners) to provide financial incentives for landlords and homeowners to investigate and remediate lead hazards specifically, and to maintain older housing generally. Grants, loans, and/or materials (e.g., paint) can be made available preferentially to compliant and/or low-income property owners.*

* [Advancing City-Level Healthy Housing: Policies, Programs and Practices in Asthma and Lead: Strategies for Progress](#). Prepared for the National League of Cities by The George Washington University School of Public Health.

* Mallach, Alan (2015) [Raising the Bar: Linking Incentives and Rental Property Regulation: A short guide for South Cook County local government](#). Center for Community Progress.

Open Housing Data Portal

Another strategy for incentivizing property owners to maintain lead-safe and healthy housing is to provide online public access to an open data portal or regularly updated municipal web page displaying the municipal rental registry (see [data-sharing strategy](#)). By listing landlord demerits, such code violations, as well as positives, such as lead-safe inspection certificates, municipalities can provide rental owners free incentives to comply with registration requirements and, at the same time provide prospective tenants with information critical for choosing safe housing for their families.

(See [Data-sharing](#), [PRI](#) and [rental licensing](#) strategies for references).

Soil

Construction and Demolition

This best practice entails the enactment of a municipal ordinance requiring lead hazard assessments before the issuance of demolition permits for pre-1978 structures, and the implementation of safety measures whenever lead is found.*

Soil Fill Testing

In New Jersey, soil and fill is sometimes offered free of charge to residents and builders by unscrupulous parties wishing to ‘dump’ material contaminated with lead and other toxins. Municipalities can protect residents by enacting an ordinance that requires a clean test result before a permit can be issued allowing soil and fill to be imported and placed on any property within its boundaries.**

Testing Soil Around Residences and Vacant Properties

This best practice entails the enactment of a municipal ordinance mandating soil testing and reporting for lead (and potentially other contaminants) prior to the sale of a home (or turnover of rental housing). If the municipality has a vacant property ordinance/registration system, or equivalent, then a soil testing and reporting requirement could be built on to that.***



* Green & Healthy Homes Initiative (2018). [New Jersey Lead Poisoning Prevention Action Plan](#).

** New Jersey Department of Environmental Protection. [Guard Your Backyard](#).

*** Green & Healthy Homes Initiative (2018). [New Jersey Lead Poisoning Prevention Action Plan](#).



Consumer and Cultural Products

Sale of Consumer Products Containing Lead

Despite its known toxicity and regulated status, lead is still ubiquitous in our environment, including in a wide array of consumer and cultural products. These include imported candies, spices, medical preparations, cosmetics, jewelry, toys and lead-glazed pottery, as well as materials used in various hobbies. Immigrant families, particularly coming from parts of Asia, Central America and the Middle East/North Africa, are often exposed to higher levels of risk, due to their greater use of imported products, especially in traditional remedies and cosmetics administered to young children.

Municipalities have a role in enforcing regulations intended to prevent the sale of these products in local premises, such as bodegas and corner stores. They may pass ordinances with additional restrictions to protect public health.

Municipalities also have an important role in raising awareness regarding these risks through multiple channels of outreach and education to residents and business ([see lead outreach and education strategy](#)).

* National Center for Healthy Housing. [Lead-safe Toolkit: Lead in consumer products](#).

** NCSEA. (2016). [Using Culturally Competent Outreach](#)

Culturally Competent Outreach

It is critically important to use culturally and linguistically appropriate methods in all forms of outreach and education on lead poisoning prevention, or any other public health measure. However, the importance of cultural competence is worth particular mention in the context of cultural practices, and of interaction with immigrant communities in particular.

Trust is most readily established with a community health worker, other provider or regulatory agent, such as a housing inspector, with a similar cultural, religious, and/or ethnic background. Whenever possible, outreach and education should be delivered in the primary language of the beneficiary, either by a fluent inspector, with the aid of a translator or by using translated materials. All housing and environmental health inspectors, as well as caseworkers, should take the effort to learn about the customs and concerns of the diverse communities living in their municipalities. An attitude of respect and not-knowing goes a long way towards crossing cultural barriers.**

Collaboration, Coalition-building and Change at Multiple Scales

Collaboration and Coalition-building

In New Jersey and around the world, the accumulation of lead in our environment and the crisis of lead poisoning in our children has been the result of the interplay of many factors, acting over a long period of time and at many scales. As this guide has demonstrated, municipalities can do a great deal to combat the problem — but they cannot do it alone. As the origins of the problem operate at multiple scales, so too will effective solutions.



At a sub-municipal level, mobilization among community leadership and participation among residents can go a long way to develop neighborhood-based solutions. Rental property owners, pediatricians, contractors, schools, and social service and faith-based organizations all have roles to play. Organizing can develop the buy-in and political will to push for action and secure needed resources from government.

In turn, municipal governments play important roles in the primary prevention of lead poisoning, roles that can be made more effective and efficient through collaboration. They can work with local health departments, school districts and others to conduct outreach and education campaigns on lead poisoning prevention. They can build stakeholder engagement with not only local parties, but also with others in the health service ecosystem, including public health departments at all levels, health (hospital) systems, health-focused community groups, and insurers.¹¹ They can engage with community interests in education, housing, and other areas of community development and partner at the regional and state levels.¹² They can build governmental support for primary lead prevention through healthy housing by engaging with policymakers and key staff in relevant agencies to promote collaboration with other agencies and levels of government.¹³

While they have many responsibilities and opportunities to act upon, municipalities are constrained by lack of financial, staff and technical resources. The private sector and philanthropic organizations have provided crucial assistance in filling gaps in funding and services in public health and lead poisoning prevention, and municipalities

should strive to build on this support (see [Appendix on Funding](#)). Nonetheless, there is still the need for intervention and policy change at state and federal levels of government. Key solutions, such as mandating and funding replacement of lead service lines at scale, require major federal financing, along with coordination of private sector finance. State legislation is much more efficient than municipal action at bringing about many needed policy reforms uniformly and fairly across the state, such as requiring lead-safe inspections at time of property or tenancy turnover. Although it is generally the role of child, health and housing advocacy and political organizations to push for state and national policy reforms, municipal governments, too, can speak up in Trenton and Washington, D.C., through such alliances as the New Jersey League of Municipalities, the National League of Cities and the State and New Jersey Association of County and City Health Officers.

While Sustainable Jersey is not an advocacy organization, it represents a network of officials, staff, volunteers and others serving on green teams representing over 450 municipalities and nearly a thousand schools across the State of New Jersey. The power of peer-to-peer learning and networking builds on and enhances the resources and research-based, practical guidance Sustainable Jersey supplies to support municipal action in a common movement for change. The change we seek will bring about a future in which every community in New Jersey enjoys the conditions which sustain health. That future will ensure that every child and family has the opportunity to reach their full potential and to thrive. In that future, no one will be exposed to the toxic effects of lead in their homes or environment.

Appendix

Funding Sources

To a large degree, federal funding will remain essential for municipalities to pay for housing-related lead prevention policies and programs. In particular, lead remediation and abatement work on housing relies on federal dollars, either directly or channeled through the states. This appendix briefly considers non-governmental sources of funding, rather than state and federal lead poisoning prevention programs.

Strategies on how to fund the removal of lead from the state's water infrastructure have been put forward in a recent publication entitled [Lead in Drinking Water: A Permanent Solution for New Jersey](#), by Jersey Water Works, a statewide coalition.

In pursuing any type of funding or technical assistance, having a [comprehensive lead prevention strategy](#) and a robust data-tracking and management system will put a municipality in a strong position. The Resources section in the action guidance documents linked to every Sustainable Jersey action provides a listing of potential funding sources for those specific strategies. The Green and Healthy Homes Initiative (GHHI) [Lead Funding Tool Kit](#) is worth singling out as an excellent and comprehensive resource guide for municipalities seeking funding.

Another GHHI publication, [New Jersey Lead Poisoning Prevention Action Plan](#), delves into

higher-level strategies to fund lead prevention and remediation in the state, some of which may be pursued by individual municipalities. Another good reference for municipalities on how to build stakeholder engagement, which can provide avenues to funding, is a [series of briefing papers](#) focused on healthy housing recently released by the National League of Cities in 2021. These references go beyond state and federal programs to examine private sources and public-private partnerships as potential sources of support for municipalities. While some of the recommendations made would require political change at higher scales to be implementable, others are currently accessible to municipalities, including:

► Hospital Systems

Nonprofit hospital organizations are required by federal tax law to spend some of their surplus on "community benefits," which are goods and services that address a community need. Through community health needs assessments and improvement plans (CHNAs and CHIPs), hospitals work with local partners to identify local priorities on which they can invest these dollars. Municipalities that have developed [comprehensive lead prevention strategies](#) can make a strong case to health system stakeholders for funding elements of those strategies. Hospital systems may invest directly in funding healthy homes renovations or affordable housing construction.¹⁴

► **Philanthropy**

National, state and local organizations that support goals such as improved child welfare, education, social equity, and economic development can be important partners in supporting local initiatives in healthy housing and lead prevention. One key type of local philanthropic organization are health foundations that have been formed as the result of hospitals converting from non-profit to for-profit or by merger. These foundations are mission-driven to support community health improvement, sometimes embracing broader social determinants, such as housing (e.g., [RWJ Barnabas Health Foundation](#)).¹⁵

► **Small Grants**

[Sustainable Jersey](#) runs a series of small grant programs that can be used to support innovative community outreach and education efforts to advance lead poisoning prevention and healthy housing.

► **Self-Sustaining Municipal Sources**

Municipalities should identify inspection and licensing fees, penalties, and other revenue sources that can support their lead prevention and healthy housing programs on an ongoing basis.¹⁶



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